**SLCC COURSE DESCRIPTIONS**

**COURSE ABBREVIATIONS**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACCT</td>
<td>Accounting</td>
</tr>
<tr>
<td>ACR</td>
<td>Automotive and Related Technologies</td>
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<tr>
<td>AERO</td>
<td>Aerospace (Air Force ROTC)</td>
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<td>AMTT</td>
<td>Aerospace/Aviation Maintenance</td>
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<td>American Sign Language</td>
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<td>Brick Mason JATC Technology</td>
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<td>Transition to Teaching (CE)</td>
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<td>CDL Tester Training (CE)</td>
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<td>CECA</td>
<td>Careers</td>
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<td>Energy Management (CE)</td>
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<tr>
<td>CEWB</td>
<td>Women in Business (CE)</td>
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</table>

**Course Numbering Information:**

Courses at SLCC are identified by an alphabetic prefix (two to four letters) followed by a four-digit number. Numbers beginning with a "1" generally indicate a course designed primarily for freshmen (such as ENGL 1010); numbers beginning with a "2" generally indicate courses designed primarily for sophomores (such as MATH 2010); numbers beginning with a "0" generally indicate preparatory courses that are non-transferable (such as WRTG 0990).
<table>
<thead>
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<th>Course Name</th>
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<td>Culinary Arts</td>
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<td>Chemistry</td>
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<td>Chinese</td>
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<td>CIS</td>
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<td>CJ</td>
<td>Criminal Justice</td>
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<td>CMA</td>
<td>Cement Mason JATC Technology</td>
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<tr>
<td>CMGT</td>
<td>Construction Mgt / Sustainable Building</td>
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<td>Dental Hygiene</td>
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ACCT 1110 – Financial Accounting I  
An introduction to the concepts and methods underlying the preparation of financial statements using generally accepted accounting principles. Topics covered include the accounting cycle, cash and inventories.

ACCT 1115 – Financial Acctg I Workshop  
Coreq: ACCT 1110. An optional supplement to ACCT 1110. It will review topics covered in ACCT 1110 including the accounting cycle, cash, and inventories.

ACCT 1120 – Financial Accounting II  

ACCT 1125 – Financial Acctg II Workshop  
Coreq: ACCT 1120. An optional supplement to ACCT 1120. It will review topics covered in ACCT 1120 including receivables, plant and equipment, liabilities and business entities.

ACCT 1280 – Acctg. Information Systems I  
Prereq: ACCT 1110 and CIS 2410, or both concurrently. An applications approach to classifying, recording, summarizing and reporting transactions encountered in a typical business. Payroll and payroll tax reporting will also be emphasized using both manual and computerized systems.

ACCT 1290 – Accounting Information Systems  
Prereq: ACCT 1110 or ACCT 2010. An applications approach to classifying, recording, summarizing, & reporting transactions encountered in a typical business. Payroll & payroll tax reporting will also be emphasized using both manual & computerized systems.

ACCT 2000 – Accounting CO-OP Education  
Prereq: Complete 2 semesters in the Accounting program. Offers supervised work experience in an industrial or governmental environment related to accounting. Credit is awarded for successful completion of specific learning objectives that provide new learning related to accounting.

ACCT 2010 – Survey of Financial Accounting  
A broad view of accounting’s role in providing information to external users of financial information. This primary focus is the use of financial statements by investors, creditors, and other entities outside of the organization.
ACCT 2015 – Survey Fin Acctg Workshop 1 cr
Coreq: ACCT 2010. An optional supplement to ACCT 2010. It will review topics covered in ACCT 2010 with a primary focus on the use of financial statements by investors, creditors, and other entities outside of the organization.

ACCT 2020 – Managerial Accounting 3 cr
Prereq: ACCT 1110 or ACCT 2010. Recommended Prereq: CSIS 2010. Management accounting is the study of developing and using accounting information essential for management decisions. Topics covered are job costing, activity based costing, inventory management, cost-volume-profit relationships, operating budgets, relevant costs for non-routine decisions, and capital investment decisions.

ACCT 2025 – Managerial Accounting Workshop 1 cr
Coreq: ACCT 2020. This course is an optional supplement to ACCT 2020. It will review topics covered in ACCT 2020.

ACCT 2050 – Governmental Accounting 3 cr
Prereq: ACCT 1110 or ACCT 2010. Covers the essentials of fund accounting, the structure used by governments. Governmental fund types, proprietary fund types, and fiduciary fund types and preparation of financial statements are covered, also not-for-profit Accounting.

ACCT 2310 – Intermediate Accounting I 4 cr
Prereq: ACCT 1120; or ACCT 2010 with instructor approval. Provides an in-depth study of financial theory and practice. Topics include the accounting cycle, financial statement preparation, revenue recognition and income determination, current assets, current liabilities and time value of money.

ACCT 2410 – Intermediate Accounting II 4 cr
Prereq: ACCT 2310. A continuation of ACCT 2310. Topics include property, plant and equipment, other long-term assets, investments, debt securities, leases, deferred taxes, stockholders equity, and financial statement analysis.

ACCT 2510 – Acctg. Information Systems II 3 cr
Prereq: ACCT 1280. A continuation of ACCT 1280 using a second fully integrated accounting package. The use of electronic spreadsheets in the accounting discipline will also be emphasized.

ACCT 2520 – Federal Income Tax 3 cr
Prereq: ACCT 1120 or ACCT 2010. Introduction to federal and state income taxation for individuals, corporations and partnerships. The student will become familiar with current income tax laws and preparation of returns for the majority of taxpayers.
ACCT 2530 – Cost Accounting  
Prereq: ACCT 2020. Covers the basic principles of cost accounting systems used in manufacturing and service industries. Topics include job order and process cost systems, activity-based costing methods, standard costing, budgeting and reporting.

ACCT 2540 – Accounting in Practice  
Prereq: ACCT 2410 or concurrently. Introduces the theoretical and practical applications of preparing accurate and complete accounting records and reports. Principles of internal control and generally accepted accounting principles will be emphasized by participation in relevant case studies.

ACCT 2910 – STUDENTfacturED Internship  
Prereq: ACCT 1110, 1120, and 2020 and instructor approval; or ACCT 2010 and 2020 and instructor approval. Provides contextual, real-world experience, and opportunity to reinforce previously learned concepts, skills, and critical thinking ability related to business and technical job functions typical of biotech manufacturing companies.

ACCT 2950 – Accounting Lecture Series  
Prereq: Variable to topic or project, contact department. Presents a forum where students will be introduced to topics of current interest and demand in the field of accounting. Topics studied will vary from semester to semester.

ACCT 2990 – Current Topics in Accounting  
Prereq: Variable to topic or project, contact department. Presents a forum where students will be introduced to topics of current interest and demand in the field of accounting. Topics studied will vary from semester to semester. Special project is required.

ACR 1100 – Metallurgy/Nonstructural Parts  
Coreq: ACR 1111. This is a course in analysis and repairs of non-structural component parts and assemblies found in the construction of modern unibody and frame type vehicles.

ACR 1111 – Non-structural Skill/Appl Dev  
Coreq: ACR 1100. This is a lab class for repairs of damaged non-structural parts. See ASE task list for more information. It concurs with ACR 1100 theory.

ACR 1199 – Specialty Training  
Prereq: Previous SLCC training and industry experience. Industry specific training for Collision Repair Technicians.

ACR 1200 – Struct. Analysis/Damage Repair  
Prereq: ACR 1100 and ACR 1111. Coreq: ACR 1211. A course in analysis and repair of structural component parts and assemblies found in the construction of modern unibody and frame type vehicles.
ACR 1211 – Structural Damage Repair 7 cr
Prereq: ACR 1100 and ACR 1111. Coreq: ACR 1200. Developed in the analysis and repair of structural component parts and assemblies found in the construction of modern unibody and frame type vehicles.

ACR 1299 – Specialty Training 1-7 cr
Industry specific specialized training. This course is taught as requested by industry.

AERO 1010 – Foundations of USAF I 1 cr
Coreq: AERO 1110. This course focuses on development, organization and doctrine of the United States Air Force, emphasizing strategic force requirements.

AERO 1011 – Foundations of USAF II 1 cr
Coreq: AERO 1111. This class analyzes the development and organization of the United States Air Force, defensive forces, general purpose forces and tactical air forces.

AERO 1110 – General Mil. Ldrshp Lab I 1 cr
Coreq: AERO 1010. This course studies and reviews Air Force standards, customs and courtesies. Students are also introduced to drill and ceremonies in today's Air Force.

AERO 1111 – Gen. Mil. Ldrshp Lab II 1 cr
Coreq: AERO 1011. This course studies and reviews Air Force standards, customs and courtesies. Students are also introduced to drill and ceremonies in today's Air Force.

AERO 2010 – Air Power History I 1 cr
Coreq: AERO 2110. This course traces the development of various concepts of air power employment, emphasizing factors that have prompted research and technological change.

AERO 2011 – Air Power History II 1 cr
Coreq: AERO 2111. This course further traces the development of various concepts of air power employment, emphasizing factors that have prompted research and technological change.

AERO 2110 – General Mil. Ldrshp Lab III 1 cr
Coreq: AERO 2100. This course prepares students to apply Air Force standards, customs and courtesies within this service branch. Drill and ceremonies leadership, along with an introduction to review and honors are discussed.

AERO 2111 – General Mil. Ldrshp Lab IV 1 cr
Coreq: AERO 2110. This course examines various Air Force standards, customs and courtesies. Drill and ceremonies leadership, introduction to review and honors also are discussed.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMTT 1120</td>
<td>Aircraft Regulations</td>
<td>8 cr</td>
<td>Recommended Coreq: AMTT 1140. Theory and practical application of maintenance forms and records, maintenance publications, fluid lines and fittings, mechanic privileges and limitations, cleaning and corrosion control, weight and balance, and aircraft drawings.</td>
</tr>
<tr>
<td>AMTT 1140</td>
<td>Aircraft Electrical/Hardware</td>
<td>8 cr</td>
<td>Recommended Coreq: AMTT 1120. Technical information and laboratory projects necessary for the practical application and understanding of theories, principles and concepts of basic electricity; ground operation and servicing; materials and processes; and basic physics.</td>
</tr>
<tr>
<td>AMTT 1160</td>
<td>Aviation Technician Math</td>
<td>3 cr</td>
<td>Designed to provide students with training in basic mathematical applications to provide math skills necessary to solve job related problems. Review of basic math, algebra and geometry.</td>
</tr>
<tr>
<td>AMTT 1220</td>
<td>Airframe Systems I</td>
<td>8 cr</td>
<td>Prereq: AMTT 1120 and AMTT 1140. Technical information and laboratory projects necessary for the practical application and understanding of theories, principles, and concepts of sheet metal; aircraft finishes; wood structures; aircraft covering; and welding.</td>
</tr>
<tr>
<td>AMTT 1240</td>
<td>Airframe Systems II</td>
<td>8 cr</td>
<td>Prereq: AMTT 1120 and AMTT 1140. Theory and practical application of communication and navigation, aircraft electrical systems, aircraft fuel systems, assembly and rigging, and fire protection systems.</td>
</tr>
<tr>
<td>AMTT 1260</td>
<td>Airframe Systems III</td>
<td>8 cr</td>
<td>Prereq: AMTT 1120 and AMTT 1140. Theory and practical application of aircraft landing gear, hydraulic and pneumatic, cabin atmosphere control, ice and rain control, position and warning, and aircraft instrument systems.</td>
</tr>
<tr>
<td>AMTT 1400</td>
<td>Aircraft Electronic Systems</td>
<td>5 cr</td>
<td>Prereq AMTT 1240 or instructor approval. Technical information and laboratory projects necessary for the practical application of testing and troubleshooting aircraft avionics systems, and for understanding theories, principals, and related concepts.</td>
</tr>
<tr>
<td>AMTT 2320</td>
<td>Airframe Inspection</td>
<td>8 cr</td>
<td>Prereq: AMTT 1120, AMTT 1140, AMTT 1220, AMTT 1240, and AMTT 1260. Theories, principles, and concepts of reciprocating engine principles; engine instruments; induction and engine airflow systems; engine exhaust and reverser systems; engine fire protection; and engine cooling.</td>
</tr>
<tr>
<td>AMTT 2340</td>
<td>Powerplant Systems</td>
<td>8 cr</td>
<td>Prereq: AMTT 1120 and AMTT 1140. Theories, principles, and concepts of fuel metering; engine electrical systems, ignition and starting systems, engine fuel systems, and lubrication systems.</td>
</tr>
</tbody>
</table>
AMTT 2420 – Reciprocating Engines 8 cr
Prereq: AMTT 1120 and AMTT 1140. Theory and practical application of reciprocating engines, and propellers.

AMTT 2440 – Powerplant Inspection 8 cr
Prereq: AMTT 1120, AMTT 1140, AMTT 2320, AMTT 2340, and AMTT 2420. Technical information and laboratory projects necessary for the practical application and understanding of theories, principles, and concepts of turbine engines; unducted fans; auxiliary power plants; and engine inspection.

AMTT 2990 – Special Studies 1-5 cr
Prereq: Instructor approval. Theory and practical application of a specific subject area taken within a course to complete program or license requirements.

ANTH 1010 – Culture & Human Experience: Introduction to Cultural Anthropology (SS) 3 cr
An introduction to the field of cultural anthropology, a study of diverse living peoples throughout the world. In addition, the course introduces cultural anthropology as a subfield of anthropology that studies contemporary societies.

ANTH 1020 – Human Origins: Evolution and Diversity (BS) 3 cr
This course provides an introduction to biological anthropology, one of the subfields of anthropology, and includes surveys of hominid fossils, primate biology and behavior, human biological variation, ecology and adaptation, and evolutionary theory.

ANTH 1030 – World Prehistory: An Introduction (SS) 3 cr
Introduction to the several million-year-old archaeological record of human prehistory. Students will examine broad patterns in prehistory and explore the richness of human creativity in foraging and farming cultures, as well as states and empires.

ANTH 1900 – Special Studies-Anthropology 1-3 cr
This course is designed to explore special topical and/or subjects related to the study of anthropology. The course should be considered a more specialized and individualized learning experience in an area of anthropology.

ANTH 2000 – Archaeology Internship 3
This course consists of working 45 hours during summer semester in the field of archaeology under the supervision of a field archaeologist. It also involves regular meetings with an Anthropology instructor to connect the field experience to supervisor.

ANTH 2011 – People & Cultures of SW (HU) 3 cr
This course offers an introduction to the diverse peoples of the American Southwest. The course will examine the cultures of the Hopi, Navajo and Ute people.
ANTH 2030 – Introduction to Archaeology (SS) 3 cr
An introduction to modern archeological techniques, methods and theories for reconstruction of past life-ways in order to understand cultural adaptation to various environments.

ANTH 2120 – Sacred Traditions (HU) 3 cr
This course explores the beliefs and practices of indigenous cultures. It examines the range of anthropological approaches to the study of religious traditions that have developed and been refined over the past hundred years. It employs a mix of resources, including textual and visual materials and lectures.

ANTH 2341 – Fundamentals of Archaeology 3 cr
Introduction to basic archaeological field techniques; mapping, field notes, survey, photography, and basic excavation techniques. Combines lectures and field exercises.

ANTH 2500 – Field School 1-4 cr
A formal field-based intro to the historic and prehistoric cultures and the techniques of field work anthropologists and other scholars use to generate knowledge about cultures. Includes basic arch. survey/excavation techniques, recordation techniques, and the collection of artifacts.

ANTH 2530 – Historical Archaeology (ID) 3 cr
Historical archaeology is the interdisciplinary study of past human cultures through oral and written records and through physical cultural remains. It introduces students to the ways these different types of historic and archaeological evidence can be used to understand and re-interpret the past.

ANTH 2900 – Special Topics in Anthropology 1-3 cr
The course is an intermediate field techniques course, designed to advance student knowledge of survey, excavation, recordation and fieldwork organization.

ANTH 2950 – Archival Internship 3 cr
This course consists of working 45 hours during summer semester in the field of archaeology under the supervision of a field archaeologist. It also involves regular meetings with an Anthropology instructor to connect the field experience to supervisor.

APPR 1470 – Math for the Trades (QS) 5 cr
This is a customized course in applied mathematics for the trades including algebraic and trigonometric functions.

AR 1100 – Automotive Refinishing 5 cr
Coreq: AR 1111. A course in the preparation and application of base and top coats on damaged vehicles for finish coating.
AR 1111 – Refinishing Skill Development 7 cr
Coreq: AR 1100. Skill development of surface prep and painting competencies. Lab class covers ASE task requirements.

AR 1199 – Specialty Training 1-7 cr
Prereq: Previous SLCC training and industry experience. Industry specific training for Automotive Refinishers.

AR 1200 – Advanced Auto Refinishing 5 cr
Prereq: AR 1100 and AR 1111. Coreq: AR 1211. This is a theory course for advanced refinishing procedures and techniques including color matching and multi-stage finishes. See ASE task list for more information.

AR 1211 – Advanced Skill Development 7 cr
Prereq: AR 1100 and AR 1111. Coreq: AR 1200. This is a lab class to develop skills in advanced painting and finishing competencies. See ASE task list for more information.

AR 1230 – Auto Color and Design Theory 2 cr
Airbrush theory and Lab covering image of color in design and lettering techniques.

AR 1299 – Specialty Training 1-7 cr
Prereq: Previous SLCC training and industry experience. Industry specific training for Automotive Refinishers.

ARB 1010 – Beginning Arabic I 5 cr
First in a series of four courses which focus on listening, speaking, reading, writing and culture. Major objective of the first year is to develop functional language ability in the Arabic culture. Lab attendance is required.

ARB 1020 – Beginning Arabic II (LN) 5 cr
Prereq: ARB 1010 or permission of instructor. Second in a series of four courses which focus on listening, speaking, reading, writing and culture. Major objective of the first year is to develop functional language ability in the Arabic culture. Lab attendance is required.

ARB 1300 – Beginning Conversation/Arabic 1 cr
Prereq: ARB 1010 or instructor approval. Beginning Arabic Conversation is intended to practice previously-acquired conversation skills to increase speaking ability and vocabulary. Attendance in lab is required. Course may be repeated for credit.
ARB 1900 – Special Studies in Arabic 1-2 cr
Prereq: Instructor approval. Students plan areas of study, Service Learning component or travel and work with the instructor on an individual basis. Topics may be in language or culture. Lab may be required. May be repeated for credit.

ARB 2010 – Intermediate Arabic I 4 cr
Prereq: ARB 1020 or instructor approval. Second-year Arabic courses increase functional language ability focusing on listening, speaking, reading, writing as well as increased focus on culture (philosophies, history, geography, literature, etc) Lab attendance is required.

ARB 2020 – Intermediate Arabic II 4 cr
Prereq: ARB 1020 or instructor approval. Second-year Arabic courses increase functional language ability focusing on listening, speaking, reading, writing as well as increased focus on culture (philosophies, history, geography, literature, etc) Lab attendance is required.

ARB 2300 – Intermediate Conversation 1 cr
Prereq: ARB 1020 or instructor approval. Intermediate Arabic Conversation is intended to practice previously-acquired conversation skills to increase speaking ability and vocabulary. Attendance in lab is required. Course may be repeated for credit.

ARB 2900 – Special Topics in Arabic 1-3 cr
This is a course designed by faculty which allows students to explore specific interests in Arabic language and culture. Lab attendance required. May be repeated for credit.

ARCH 1010 – Intro. to Design Professions 3 cr
The study of the roles that designers play in society and what job markets are available in the areas of architecture, CAD, construction management, architectural history, landscape architecture, and interior design.

ARCH 1100 – Intro. to Arch. Drawing 3 cr
Students will about architectural drawings used in residential and commercial projects. Practical skills for reading blueprints of floor plans, sections, details, elevations and schedules.

ARCH 1130 – Basic Drawing 3 cr
Practical skills in the fundamentals of drawing and freehand sketching. Graphic media such as pencil, pen, charcoal and ink will be explored. Instruction will focus on the use of light, shadow, texture, contour and form.
ARCH 1210 – Residential Construction 5 cr
Prereq: ARCH 1310 or 2350. Residential construction techniques are analyzed from site planning to finish construction. Building codes, estimating, and specifications are discussed as they relate to methods and materials of residential construction common to Utah.

ARCH 1310 – Intro. to AutoCAD 3 cr
Students gain the practical knowledge in the use of AutoCAD that is essential in producing architectural drawings. This course includes hands-on applications. Simple drawings will be produced.

ARCH 1350 – Computer Graphics 3 cr
Studies include the manipulation of scanned and digital images, desktop publishing, digital presentations and web page designs. Various computer software will be used to promote the ideas and designs of architects and designers.

ARCH 1510 – Architectural Design Workshop 3 cr
This course will develop visual awareness and basic abstract design principles. Balance, symmetry, repetition, order variety, uniformity, proportion, motif and color will be introduced with various generic and abstract projects.

ARCH 2060 – Construction Documents 3 cr
Prereq: ARCH 1010 or CMGT 1010 or instructor approval. Provides the foundation required for the interpretation of construction documents including drawings and specifications. This course prepares students for CSI's Construction Document Technician Examination.

ARCH 2150 – Architectural Graphics 3 cr
Prereq: ARCH 1130. Course explores the preferred hand presentation techniques used with both two and three-dimensional drawings in the arch. design. Students will experience the jury process, peer review and learn skills needed to prepare portfolios.

ARCH 2210 – Commercial Construction 5 cr
Prereq: ARCH 1210 or CMGT 1010. Basic materials and installation methods for commercial construction are studied. These include site work, concrete, masonry, curtain-walls, steel, doors, window finishes, and an overview of codes.

ARCH 2310 – Modeling/Rendering/Animation I 3 cr
Digital modeling is presented as an essential tool for architectural design, visualization, and presentation. Principles are stressed so that acquired skills can be used with any modeling, rendering and animation software.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ARCH 2320</td>
<td>Modeling/Rendering/Animation II</td>
<td>3 cr</td>
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<tr>
<td></td>
<td>Prereq: ARCH 2310. Skills developed in ARCH 2310 are enhanced with new techniques and intermediate and advanced skills. Presentation skills are also developed through advanced projects.</td>
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<tr>
<td>ARCH 2330</td>
<td>CAD Customization</td>
<td>3 cr</td>
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<td>Prereq: ARCH 1310. Basic customization of AutoCAD software will be discussed and practiced as it applies to industry. Emphasis will be placed on developing AutoCAD tools and skills that will save time and improve productivity.</td>
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<tr>
<td>ARCH 2350</td>
<td>Advanced Architectural CAD</td>
<td>3 cr</td>
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<tr>
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<td>Students will develop BIM skills and use specific 3D architectural oriented software. Design and construction documentation will be examined.</td>
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<tr>
<td>ARCH 2460</td>
<td>Construction Estimating</td>
<td>2 cr</td>
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<td></td>
<td>Prereq: ARCH 1210 or CMGT 1010. Material take-offs, labor cost estimates, sub-contractor bids, equipment costs, price extensions and competitive bidding, with and without the use of the computer, will be covered in this class.</td>
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<tr>
<td>ARCH 2470</td>
<td>Codes, Zoning &amp; Inspections</td>
<td>2 cr</td>
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<tr>
<td></td>
<td>This course is the study of current building codes and an overview of zoning regulations. This course will help with inspections for code enforcement and compliance, occupancy classifications, area limitations and life-safety regulations.</td>
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<tr>
<td>ARCH 2510</td>
<td>Residential Design - CAD</td>
<td>5 cr</td>
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<td></td>
<td>Prereq: ARCH 1210 and ARCH 1310. Provides a study of light frame construction techniques and production of residential construction drawings using CAD software. Students produce a professional set of presentation and construction drawings of a residential structure.</td>
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<tr>
<td>ARCH 2520</td>
<td>Commercial Design - CAD III</td>
<td>5 cr</td>
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<tr>
<td></td>
<td>Prereq: ARCH 2210 and ARCH 2510. Examines commercial construction materials, techniques and the production of construction drawings using CAD software. Students will produce a professional set of presentation and construction drawings of a commercial structure.</td>
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<tr>
<td>ARCH 2900</td>
<td>Internship</td>
<td>1-3 cr</td>
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<td>Supervised work experience in a business, industrial, or government environment related to the program major. Credit awarded for successful completion of specific learning objectives that provide new learning related to the program major.</td>
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<tr>
<td>ARCH 2990</td>
<td>Special Studies</td>
<td>1-20 cr</td>
</tr>
<tr>
<td></td>
<td>Prereq: Instructor approval. This course is designed so the student can work on special individualized projects under the supervision of the instructor.</td>
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</tr>
</tbody>
</table>
ART 1010 – Exploring Art (FA)  3 cr
Introduces visual art to the non-major. Provides historical perspective of visual art development. Study of major principles, elements, media, and techniques. Nonjudgmental art project, reading, writing, required.

ART 1020 – Intro to Drawing (non-maj)(FA)  3 cr
An introductory drawing course for non-majors. Line, shape, perspective and light logic will be discussed. Using these techniques, students will develop their drawing skills. Some reading and writing will be required.

ART 1040 – Jewelry:Culture & Creation(FA)  3 cr
Jewelry has been a factor in the culture of many civilizations. This course teaches art and construction techniques. Students will design and create several unique jewelry pieces during the class using various techniques.

ART 1050 – Intro to Photography (FA)  3 cr
Examines the important contribution of photography and photographers in the field of art. Students will learn basic operations of a digital or film SLR camera (which is required for course), perform shooting assignments, learn visual rules of composition, and conduct research. For non-art/photography majors.

ART 1060 – Hist/Art Lettering/Callig.(FA)  3 cr
A study of the development of lettering throughout history. Several historic alphabets are studied and written. Various writing fluids and papers are explored. An introduction to bookmaking is part of this course. Extra cost for supplies.

ART 1110 – Foundation I Drawing  4 cr
Introduction to principles of visual awareness and drawing. Use of line to describe 3D reality on a 2D surface. Linear perspective will be a primary emphasis. Course will include a study of light logic.

ART 1120 – Design  3 cr
Students will be introduced to the basic principles (balance, rhythm, emphasis, unity) and elements (line, shape, texture, space, size, value, color) of design. All Visual Art & Design majors are required to take this class.

ART 1135 – Printing Fundamentals  3 cr
This is a hands-on class in which students will produce actual printed items. Printing history, printing processes, terminology, art preparation, photo reproduction, prepress, bindery, paper, inks and related items will be covered.
ART 1150 – Art Foundation Seminar (HR) 2 cr
Theory and practice of human relations in artwork environments. Self-concept, interpersonal skills, teamwork, communication, networking, conflict resolution, career development, cross-cultural and gender relations, portfolio development.

ART 1200 – InDesign Software 3 cr
Students learn the skills, tools and procedures needed to create electronic page layout files for output using leading industry software.

ART 1210 – Math for Visual Arts (QS) 3 cr
This course covers basic math functions required of visual artists including fractions, decimals, measurements and percentages. Concepts specific to working with computers and scanners will be addressed as well as basic cost estimating as it relates to the graphics industry.

ART 1230 – Typography & Layout 3 cr
Prereq: ART 1120 and 1200 can either be taken before or in the same term. This course combines the study of typography with the fundamentals of layout. Students will study the history of letters and will learn to identify various typefaces. They will solve layout problems using design principles and type.

ART 1240 – Screen Printing 3 cr
Students will create designs that they will prepare and print using a direct emulsion stencil. They will learn screen preparation and stencil application. Most projects will be printed on paper.

ART 1250 – Airbrush 3 cr
This curriculum will include basic use and skill with airbrush; application to a variety of rendering problems including simple dimensional forms and objects and multi-color masking.

ART 1260 – Figure Drawing 3 cr
Prereq: ART 1110. A study of figure drawing techniques and concepts. Students work directly from the model. Knowledge gained in anatomy, gesture, and structure.

ART 1280 – Photoshop Software/Design 3 cr
Graphic Design, Illustration, and Electronic Publishing students should take this course. Students learn the skills, tools and procedures needed to create basic to intermediate Adobe Photoshop documents for print and non-print media.

ART 1310 – Photography I 4 cr
Discussion and operation of film and digital SLR cameras, along with film and digital lab techniques. Fully adjustable digital or film SLR camera and other photo equipment required.
ART 1320 – Photographic Vision 3 cr
Prereq: ART 1310 or 1050 or either concurrently. Photographic expression and visual composition are explored through image capture and printing assignments. Emphasis placed on creative exploration, personal expression and visual arrangement of content.

ART 1340 – Photography Lighting and Equipment 1 4 cr
Prereq: ART 1310 and ART 1380 (can be taken concurrently). Introduction of various lighting and camera equipment used for photographic applications. Including medium and large format cameras, high-end digital capture, studio lighting equipment, lighting modulators, and computer equipment required to create imagery.

ART 1375 – Photographing Diversity(FA,DV) 3 cr
Prereq: ART 1050 or 1310 w/C grade or better. Study and photographically document social issues relating to non-dominant cultures, minorities, societies, biases and privileges. Study contributions made by photographers/artists relating to historic and contemporary diversity issues. Fully adjustable film or digital camera required.

ART 1380 – Photography II 4 cr
Prereq: ART 1310. A continuation of Photography I, w/emphasis on producing high quality images through advanced camera controls and the applied aesthetics of photography. A digital or film SLR camera is required.

ART 1400 – Copyrights for Creative Professionals 1 cr
This introductory short course focuses on U. S. copyrights given to creative individuals who produce visual, musical, literary works of art or performing arts. The course also covers licensing and trademarking.

ART 1420 – Salesmanship And Promotion For Creative Professionals 2 cr
This introductory short course will introduce basic sales and self-promotional principles and techniques specifically tailored for creative artists.

ART 1440 – Building A Creative Business 2 cr
This introductory short course will introduce basic business structures and examine the process of setting up a business for creative professionals working in the areas of music, the many forms of visual design, fine art, animation, film and video, and the literary arts.

ART 1530 – Beginning Painting-Watercolor 3 cr
This course will focus on the introduction and exploration of watercolor techniques. Composition and design will be discussed. The subject matter will include still life and occasional outdoor studies.
ART 1540 – Beginning Painting-Oil 3 cr
This course will focus on the introduction and exploration of oil painting techniques. Composition and design will be discussed. The subject matter will include still life and occasional outdoor studies.

ART 1560 – Head Studies-Portrait Painting 3 cr
Intermediate oil painting course focusing on painting portraits, observe and interpret planes and anatomy of the human head. Shape, value, light, and color will be the main emphasis. Composition and paint application will be addressed.

ART 1580 – Landscape Painting 2 cr
Understand and apply the basics of painting landscapes. Explore materials, techniques, color theory, and expression. Most class sessions will be held at locations around Salt Lake. Learn skills such as drawing, color, value, edges, and brushwork.

ART 1620 – Intro to Animation 2 cr
Introduction to the production process, skill sets, foundational principles, and techniques of animation. An intense course with heavy emphasis on drawing.

ART 1660 – Storyboarding 3 cr
Prereq: ART 1110 and ART 1620. Introduction to visual storytelling, as applied to conceptualizing storyboards and animatics for various time based mediums.

ART 1670 – Character Animation Basics 3 cr
Prereq: ART 1620 (for 2D) or ART 2640 (for 3D) and instructor approval. Expanding on principles of animation, body mechanics, and acting to create animated performances for both traditional and 3D application.

ART 1680 – Game Development 3 cr
Prereq: ART 1800. Introduction to seminal movements, principles, analysis, mechanics and theories of game play and development. Applied through a collaborative production workflow creating design documentation, and prototyping of physical and software based games.

ART 1690 – Foundation Level Software Testing for Game Developers 1 cr
This course covers the basics of software testing and while geared toward game development, is valid for all forms of software testing. Students will be introduced to forms, strategies and tools of effective software testing.

ART 1800 – Digital Media Essentials 4 cr
Intro to software and hardware used to create multimedia productions. Hands-on experience using hardware, software to create 2D/3D graphics, sound, animation, and video. Discussion of the multimedia market, copyright, and ethics in mass media.
ART 1810 – Intermed. Photoshop/Multimedia  
Prereq: ART/COMM/EBT/ENGL/FLM 1800. Class required for Multimedia emphasis students. A continuation of Photoshop skills learned in ART 1800. Photoshop will be used to create maps for use in 3D animation, and graphics for web design and digital video production.

ART 1850 – Portfolio/Career Preparation  
An introductory course focused on portfolio and freelance career preparation for all creative artists.

ART 1900 – Special Project  
Prereq: Instructor approval. This course is an Independent Study course. Any of the VAD courses can be used as curriculum. This is to be done on an individual need basis. With approval of the instructor.

ART 2000 – Visual Art CO-OP Education  
Prereq: Sophomore standing, minimum of 2.0 GPA, study-related employment working at least 20 hours per week, and instructor approval. This is a supervised work experience in a business, industrial, or government environment related to the program major. Credit is awarded for successful completion of specific objectives that provide new learning related to the major.

ART 2010 – History of Visual Art & Design  
This class examines visual art from ancient civilizations to the present including graphic design. Emphasis is on the context in which new movements appear and how fine art and graphic design are related.

ART 2040 – Intermediate Jewelry  
Prereq: ART 1040 or instructor approval. Continuation of the techniques taught in ART 1040. Students will learn advanced jewelry fabrication and create several unique jewelry pieces.

ART 2050 – Visual Dev & Character Design  
Prereq: ART 1120 and ART 1260. Design and stylization of human and animal characters, environments, and props for visual storytelling applied to concept art, comic books, and cartoon illustration.

ART 2070 – Portfolio Development  
Prereq: ART 2230 (Graphic Design Emphasis) or ART 2270 (Illustration Emphasis), must be successfully completed before a student can register for the class or instructor approval. Students develop portfolio, resume, and self-promotion strategies. Design business practices introduced.

ART 2080 – VAD Internship  
Prereq: Instructor approval and second-year status. Students may elect to participate in visual arts internships through approved employers. Students learn practical work experience as it applies to their career in the visual arts.
ART 2110 – Foundation II Drawing 4 cr
Prereq: ART 1110 or 1020 (for Photo Emphasis). Value and light logic are explored using paint medium. Course includes fundamentals of color theory. Included: color mixing, painting techniques and materials. Composition, creative use of value, and image building are covered.

ART 2120 – eDesign and Publishing 3 cr
Adobe InDesign and the Adobe Digital Publishing Suite are used for publishing to electronic devices such as the Apple iPad and the Amazon Kindle. Emphasis will be placed on mastering the Adobe Digital Publishing Suite to create digital magazines. The creation of electronic documents including Interactive PDFs, ePUBs, and iBooks will also be covered.

ART 2140 – Adv Photoshop Software/Design 2 cr
Prereq: ART 1250, ART 1810, or ART 2340 or instructor approval. This course is for all Visual Art and Design majors wishing to perfect advanced features and skills specific to graphic design application. Students will create and rework portfolio pieces.

ART 2200 – Advanced InDesign Software 2 cr
Prereq: ART 1200 and ART 1230. Students will develop advanced skills to create electronic files ready for printing. They will also use their skills to produce quality portfolio pieces.

ART 2210 – Illustration I 3 cr
Prereq: ART 1110, ART 2110 (can be taken concurrently), or instructor approval. Various black and white and color media will be introduced to develop editorial and advertising illustration techniques with emphasis on composition, drawing, creativity, exploration of techniques.

ART 2220 – Advanced Design 3 cr
Prereq: ART 1135 and ART 1230; must be successfully completed before a student can register for the class; take ART 2220 after or concurrent w/ART 2230. This course builds upon previous Design, Typography and Layout classes as well as introduces students to corporate identity and collateral design problems. Students will produce portfolio and art show quality work.

ART 2230 – Advanced Typography & Layout 3 cr
Prereq: ART 1230 must be successfully completed before a student can register for the class; Recommended prereq: ART 2230 before ART 2220 or concurrently. This course is a continuation of ART 1230. Students will explore the design aspects and possibilities inherent in typography as well as more complex layout problems. Students will produce portfolio and art show quality work.
ART 2240 – Package Design 3 cr
Prereq: ART 113 and ART 2230 must be successfully completed before a student can register for the class. This course will cover design considerations for basic packaging. Packaging fundamentals & basic materials & processes will be introduced. Projects may include hang-tags, bags, boxes, cylinders or point-of-purchase displays.

ART 2260 – Advanced Figure Drawing 2 cr
Prereq: ART 1260. This is a continuation of ART 1260. Advanced techniques and principles in figure drawing. Primary emphasis on light logic, gesture and head studies.

ART 2270 – Illustration II 3 cr
Prereq: ART 2210 or instructor approval. In-depth development of editorial/advertising illustration will be covered as well as skills using various black and white and color media. Students will produce original art with both traditional and digital media.

ART 2280 – Advertising Workshop 3 cr
Prereq: ART 2230. This course introduces students to product/service promotion and advertising. Students will gain a basic understanding of the components of an advertising agency; strategies, media choices, budgets, production analysis, proposals and presentations. Professional ethics will be addressed.

ART 2290 – Advanced Illustration 2 cr
Prereq: ART 2270 or instructor approval. Creation of an Illustration Portfolio, with finished examples that show pictorial evidence of skill and personal style in chosen medium from the broad spectrum of media reviewed.

ART 2300 – Alternative Photography 3 cr
Prereq: ART 1310. An exploration of a variety of non-traditional photographic processes and techniques. Emphasis is placed on applying these techniques to individual artistic photographic expression and creating a fine-art portfolio.

ART 2310 – Photography Lighting And Equipment 2 4 cr
Prereq: ART 1340 and ART 1380. Apply photo studio environment and equipment to create images of still-life, product, portrait, and location. Emphasis on light theory, lighting equipment, all camera formats, and refinement of digital exposure and film image capture.

ART 2320 – Documentary Photography 3 cr
Prereq: ART 1380. The study of photographic documentary and photojournalism techniques and applications for visual communication. Emphasis placed on the emotional impact of photographic images. Professional ethics will be addressed.
ART 2330 – Photography: A Cultural History (HU) 3 cr
An examination of the art, cultural impact, social connections, and invention of photography. Historic photographers, events, trends, applications, and techniques are explored. Contemporary connections are examined.

ART 2340 – Photoshop for Photographers 3 cr
Prereq: ART 1380. Utilize Adobe Photoshop, Camera Raw processing to produce images specific to photography. Emphasis on digital workflow, color spaces, ICC profiles, image scans, file types, shortcuts, digital printing and output.

ART 2350 – Photographing People/Portrait. 3 cr
Prereq: ART 2310 or concurrently. Techniques to photograph informal, formal, and environmental portraits. Produce aesthetic portraits in the studio or location utilizing electronic flash. Refine posing, composition and conceptual aspects for dramatic portraits of people.

ART 2360 – Nature Photography 3 cr
Prereq: ART 1380. Explores the principles, philosophies, history, technical aspects and business practices of nature photography. Includes both in-class and on-location image capture assignments.

ART 2370 – Photography Business Practices 3 cr
Prereq: ART 2310. Students develop self-promotional marketing strategies, learn professional photographic business practices such as usage rights, billing and writing a simple business plan.

ART 2375 – Photo Portfolio Development 1 cr
Prereq: ART 2310. Recommended Coreq: ART 2370. This course provides advanced photography students additional time and instructional guidance in portfolio development and presentation. Students practice personal portfolio direction and image selection.

ART 2380 – Adv. Studies in Photography 4 cr
Prereq: ART 2310 w/C grade or better. Refinement of all photographic aspects and vital development of individual photographic style. Demonstrate interpretation of advanced lighting applications utilizing photographic equipment for creative studio and location technique.

ART 2400 – Web Project Management 3 cr
Prereq: ART 2440 and ART 2550. Students will develop the skills necessary to manage Web site development and design projects from conception to delivery. Students create project specifications based upon a client's input and then write a project proposal, develop a project plan using the industry-leading project management software, manage a project, react to unexpected issues, and deliver a final product.
ART 2412 – Illustrator Software  3 cr
Students will create original designs, layouts, and illustrations using Adobe Illustrator vector software. Production issues for print and web media presented. Design, illustration, and multimedia students are required to take ART 2412.

ART 2420 – Advanced Illustrator Software  2 cr
Prereq: ART 2412 or instructor approval. For Visual Art and Design students (2nd yr. status best) or working artists who wish to create/rework portfolio pieces. Advanced use of Adobe Illustrator, and interface with the following: Photoshop, In-Design, Flash. Six original projects required.

ART 2440 – Web Site Design  3 cr
Prereq: ART/COMM/ENGL/FLM 1800, or ART 1280 (Graphic Design, Illustration or Graphic Communication Technologies Emphasis) must be successfully completed before a student can register for the class. Students learn the knowledge and skills needed to build and manage professional web sites using Dreamweaver and Fireworks. Students create interactive web sites, graphics, animation, and advanced styling using HTML, CSS, and JavaScript.

ART 2470 – Digital Video Production  2 cr
Prereq: ART/COMM/ENGL/FLM 1800, ART 1280, ART 2340, or instructor approval. The course is an introduction to the technical issues of digital video production. Including the capturing and editing of digital video and audio for animation, web, mobile, and digital media applications.

ART 2480 – Digital Painting  2 cr
Prereq: ART/COMM/ENGL/FLM 1800 or ART 1280; ART 2110. Expanding on traditional painting techniques using digital painting programs that mimic the use of traditional media. Projects focus on design and application for illustrations, special effects, 3D textures, and concept designs.

Prereq: Instructor approval. This course continues all work begun in other computer graphics classes. Students pursue their own direction in the production of finished projects.

ART 2510 – Mobile Publishing Seminar  3 cr
Prereq: ART 1200, ART 2120, ART 2440. Students will refine electronic, mobile, and web publishing techniques to create cutting edge publications and visual based applications for mobile devices and outlets such as the Apple App Store. This capstone course will review the latest trends in social media giving students exposure to many of the most popular trends in graphic arts, mobile publishing, and social media.
ART 2520 – Advanced Drawing  2 cr
Prereq: ART 1110 or instructor approval. Build on knowledge of proportion, line, value and shape. Expressive and imaginative interpretation are encouraged. Textural explorations, symbolic content in drawings and rapid drawing exercises are areas of skills developed.

ART 2530 – Advanced Painting - Watercolor  3 cr
Prereq: ART 1530 or portfolio review by instructor. A continuation of ART 1530. Further development of various watercolor techniques and composition. Students are encouraged to develop their own unique talent. Maturation and experimentation of aesthetic philosophy are expected.

ART 2540 – Advanced Painting - Oil  3 cr
Prereq: ART 1540. A continuation of beginning oil. Further development of oil painting techniques. Composition and color are emphasized.

ART 2550 – Website Design II  3 cr
Prereq: ART 2440 w/C grade or better. Continuation of web design principles to create advanced Website designs by integrating animation, video, and audio along with CSS, and JavaScript libraries. Emphasis is placed on interface design principles and concepts.

ART 2560 – Figure Painting  3 cr
Prereq: ART 1260 and ART 2110. Painting the draped and undraped figure in oil or acrylic. Emphasis on light logic, color theory. Painting the human head will be emphasized.

ART 2570 – e-Commerce Design  3 cr
Prereq: ART 2440. Covers the strategy and methodology in creating e-Commerce Website designs. Topics include demographics of the Internet, opportunity and risk assessment, competitive analysis, current technologies, and e-Commerce trends.

ART 2580 – Web Animation  3 cr
Prereq: ART 2440. An Introductory course focused on using design software to create effective web page animation.

ART 2590 – Dynamic Web Design  4 cr
Prereq: ART 2440 and ART 2550. In this capstone web design course students will learn the essentials of designing websites that have dynamically changing content. Basic knowledge and structure of database driven websites with user generated content using PHP and MySQL will be discussed. Foundations in validating and processing form data along with designing themes for open source content management systems are taught.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Description</th>
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<tbody>
<tr>
<td>ART 2610</td>
<td>Multimedia Authoring</td>
<td>2 cr</td>
<td>ART 2440.</td>
<td>This is a continuation of ART 2440. Flash and Dreamweaver software will be introduced and used to design and prepare Web pages.</td>
</tr>
<tr>
<td>ART 2620</td>
<td>Motion Graphics</td>
<td>2 cr</td>
<td>ART 1230 and ART 1620.</td>
<td>The integration of type and image in motion using design and animation principles in the creation of graphics for time based visualizations.</td>
</tr>
<tr>
<td>ART 2630</td>
<td>Introduction to 3D Modeling</td>
<td>3 cr</td>
<td>ART/COMM/ENGL/FLM 1800 or instructor approval.</td>
<td>Application of modeling, texturing, rendering, lighting and compositing principles using 3D software with emphasis on applying traditional art principles.</td>
</tr>
<tr>
<td>ART 2640</td>
<td>Introduction to 3D Animation</td>
<td>3 cr</td>
<td>ART 2630 and ART 1620, or instructor approval.</td>
<td>Application of the various methods for creating animation using 3D software, including keyframing and simulations with emphasis on applying traditional animation principles.</td>
</tr>
<tr>
<td>ART 2650</td>
<td>3D Character Design &amp; Rigging</td>
<td>3 cr</td>
<td>ART 2640.</td>
<td>Methodology and strategies for digitally sculpting character models, and creating readily revisable and animator friendly rigs for maximum flexibility in a CG visualization.</td>
</tr>
<tr>
<td>ART 2660</td>
<td>Visual Effects &amp; Compositing</td>
<td>3 cr</td>
<td>ART 2640.</td>
<td>Overview of the processes used to create and composite 2D and 3D special effects using procedural workflows and various software tools to achieve efficient and flexible results.</td>
</tr>
<tr>
<td>ART 2665</td>
<td>3D Lighting &amp; Rendering</td>
<td>3 cr</td>
<td>ART 2630.</td>
<td>Exploring procedural and painting methods to create art-directable surface textures/shaders utilizing different rendering engines &amp; software, also techniques and practices for lighting, multi-pass rendering, and compositing for use in CG visualizations.</td>
</tr>
<tr>
<td>ART 2670</td>
<td>Animation Production Workshop</td>
<td>4 cr</td>
<td>ART 1660 and 50 completed credit hours toward an Animation Emphasis.</td>
<td>Student driven portfolio development based on animation/design projects that emphasize working in a production pipeline.</td>
</tr>
<tr>
<td>ART 2680</td>
<td>Game Assets &amp; Production</td>
<td>3 cr</td>
<td>ART 1680, ART 2640, and (CSIS 1350 or 1850).</td>
<td>Applying principles and process from Game Development in a collaborative production by creating assets and implementing them in an engine to produce a prototype game.</td>
</tr>
</tbody>
</table>
ART 2900 – Visual Art & Design Seminar 1-3 cr
Prereq: Instructor approval. Students may elect to participate in visual arts seminars and workshops, which may include travel. There may be additional costs.

ART 2910 – Photo Fieldtrip Workshop 3 cr
Prereq: Instructor approval. Multiple-day, off-campus fieldtrip relating to photographic studies. Students tour world-class galleries/museums, attend private displays of historic and contemporary art, perform photographic work, keep a reflective journal.

ART 2940 – Special Topics Graphic Design 1-6 cr
Prereq: Instructor approval. This course allows design majors to learn special skills, hone specific skills, learn new software or explore special graphic design topics in a classroom setting.

ART 2950 – Special Topics in Illustration 1-6 cr
Prereq: Instructor approval. This course allows illustration majors to learn special skills or techniques, hone specific skills, learn new software or explore special illustration topics in a classroom setting.

ART 2960 – Special Topics in Animation 1-6 cr
Prereq: Instructor approval. This course allows animation majors to learn special skills, hone specific skills, learn new software or explore special animation topics in a classroom setting.

ART 2970 – Special Topics in Photography 1-6 cr
Prereq: Instructor approval. VAD Photo majors to learn special techniques, hone specific skills, learn new software and/or explore special photographic topics in a classroom setting.

ART 2980 – Special Topics in Multimedia 1-6 cr
Prereq: Instructor approval. This course allows Multimedia majors to learn special skills or techniques, hone specific skills, learn new software or explore special topics in a classroom setting.

ART 2990 – Advanced Independent Studies 1-3 cr
Prereq: Instructor approval. After completing all available courses in an area of study, students have the opportunity to pursue advanced study with a faculty member on an individual basis. Students must consult with that faculty member about details and permission.

ARTH 2520 – Latin American Art to 1821(HU) 3 cr
Examines visual art from Prehistory to Colonial-era Latin America. Artworks are critically considered as objects that embody and convey ideas and meanings in the context of their periods and cultures, and within the developments of art over time.
ARTH 2640 – Asian Art: Buddhist Art 3 cr
Examines the artistic traditions of Buddhism. Beginning with the birth of Buddhism in India, the course will follow the development and spread of Buddhist art to China and the rest of Asia.

ARTH 2700 – Asian Art: Japan 3 cr
Course focuses on the artistic and cultural traditions of Japan beginning with the prehistoric Jomon era and continuing to the present.

ARTH 2710 – Art History: Prehistory/Ren (HU) 3 cr
An examination of visual art forms from Prehistory to the European Renaissance. Emphasis: developing a comparative understanding of a variety of works (including painting, sculpture, and architecture) from different cultures in context.

ARTH 2720 – Art History: Ren/Contemp. (HU) 3 cr
An examination of the visual art forms created from the period of the Renaissance to the Contemporary era. The study focuses on the aesthetic, cultural, and psychological factors that shape the changes in artistic expressions through time.

ASL 1010 – Beginning ASL I 5 cr
First in series of four courses which focus on expressive and receptive skills in American Sign Language and an introduction to American Deaf culture. Major objective of the first year is to develop functional language ability in the Deaf community.

ASL 1020 – Beginning ASL II 5 cr
Prereq: ASL 1010. Second in a series of four courses which focus on expressive and receptive skills in American Sign Language and an introduction to American Deaf Culture. Major objective of the first year is to develop functional language ability in the Deaf community.

ASL 1300 – Conversation 1 cr
Prereq: ASL 1020. Course practices currently held conversation skills to increase expressive and receptive ability with varied vocabulary. Includes role plays, small group work and presentation. May be repeated for credit.

ASL 1900 – Special Studies in ASL 1-3 cr
Prereq: ASL 1020. In this ASL special studies course, students plan areas of study, Service Learning component or travel and work with instructor on an individual basis. Some work may be done in groups. May be repeated for credit.
ASL 2010 – Intermediate ASL I  
4 cr  
Prereq: ASL 1020. Second-year ASL courses increase functional language ability focusing on expressive and receptive skills in ASL as well as increased focus on American Deaf Culture (philosophies, history, geography, literature, etc.)

ASL 2020 – Intermediate ASL II  
4 cr  
Prereq: ASL 2010. Fourth in a series of four courses which focus on expressive and receptive skills in ASL and an in-depth exploration of American Deaf Culture. Major objective of second year is to increase functional language ability. Emphasis is on proficiency.

ASL 2100 – Proficiency Development  
4 cr  
Prereq: ASL 2020. The course focuses on proficiency development. Students will learn techniques and strategies to increase their language proficiency in a variety of social, educational and cultural settings.

ASL 2300 – Conversation II  
1 cr  
Prereq: ASL 2020. Course practices currently held conversation skills to increase expressive and receptive ability with varied vocabulary. Includes role-plays, small group work and presentations. May be repeated for credit.

ASL 2400 – Topics in ASL  
1-3 cr  
Prereq: ASL 2010. A special topics course will include related areas in literature, linguistics, or visual communication. Topics vary and may include Visual Gestural Communication, professional terminology, ASL linguistics, etc.

ASL 2700 – Introduction to ASL Literature  
3 cr  
Prereq: ASL 2020. This course focuses on ASL literature forms, including storytelling, poetry, and comedy to better understand Deaf culture and American Sign Language.

ASL 2710 – Introduction to Deaf Art/Film  
3 cr  
Prereq: ASL 2010. Exploration of artistic expression as practiced by Deaf individuals and in Deaf communities around the world to express individual identity and develop/define cultural identity.

ASL 2750 – Special Topics in Deaf Culture  
1-3 cr  
Prereq: ASL 2010. This is a course designed by faculty and allows students to explore specific interests in American Deaf culture including Bi-Cultural competence, signed history project, cultural/medial views of deafness. May be repeated for credit.

ASL 2900 – Special Topics  
1-3 cr  
Prereq: ASL 2010. A special topics course will include related areas in literature, linguistics, or visual communication. Topics vary and may include Visual Gestural Communication, professional terminology, ASL linguistics, etc.
AUTO 1010 – Maint & Lt Repair Fundamentals 6 cr
An introductory course providing fundamentals of operation and maintenance procedures including: researching service information, shop safety, tool, and equipment use, maintenance and light repair service procedures. Prerequisite to additional AUTO courses. Completers may test to become Honda PACT students.

AUTO 1150 – Auto Electrical & Electronics 6 cr
Prereq: AUTO 1010 or successful completion of challenge exam for AUTO 1010. Diagnostic and repair procedures involved in electrical and electronic systems with practical application of Ohm's law. Hands-on diagnosis and repair of charging, starting, lighting, electronic accessory, and supplemental restraint systems.

AUTO 1199 – Spec. Trng/Auto 1-15 cr
Allows the student to acquire additional expertise in a specific automotive application, approved by the instructor.

AUTO 1250 – Automotive Engine Repair 6 cr
Prereq: AUTO 1010 w/C grade or higher, or successful completion of challenge exam for AUTO 1010. This is a National Automotive Technician Education Foundation (NATEF) certified training course covering the theory of operation of four-stroke gas internal combustion engines. Teaches engine components, design characteristics, systems, subsystems, and diagnostics. Maintenance and repair procedures will be performed on live work, mock-ups, components, and department owned vehicles.

AUTO 1299 – Automotive Specialty Training 0.5-12 cr
Allow automotive students to acquire additional expertise in a specific industrial automotive application, to be approved by the instructor.

AUTO 1350 – Automotive Braking Systems 6 cr
Prereq: AUTO 1010 w/C grade or higher, or successful completion of challenge exam for AUTO 1010. This is a National Automotive Technician Education Foundation (NATEF) certified training course covering the theory, functions of repair, service procedures, and shop practices of Automotive Braking Systems.

AUTO 1450 – Auto. Suspension & Steering 6 cr
Prereq: AUTO 1010 w/C grade or higher, or successful completion of challenge exam for AUTO 1010. This is a National Automotive Technician Education Foundation (NATEF) certified training course covering the theory, functions of repair, and maintenance of automotive suspension and steering systems.
AUTO 2000 – Roger L. Miller Automotive Internship 6 cr
Students use on-the-job training for college credit. This is a program-related work in the automotive field. Credit is awarded for completion of specific learning objectives in the program major. Internships will be paid or unpaid as determined by the employer.

AUTO 2150 – Manual Transmissions & AC 6 cr
Prereq: All 1000 level automotive courses w/C grade or higher. This is a National Automotive Technician Education Foundation (NATEF) certified training course covering the diagnostic and repair procedures involved in automotive heating, air conditioning, manual transmissions, transaxles, four wheel drive systems, and final drive components.

AUTO 2250 – Automatic Transmissions 6 cr
Prereq: All 1000 level automotive courses w/C grade or higher. This is a National Automotive Technician Education Foundation (NATEF) certified training course covering the in-vehicle and off-vehicle diagnostic and repair procedures involved in automotive automatic transmissions and transaxles, and continuous variable transmissions (CVT).

AUTO 2350 – Engine & Emission Controls I 6 cr
Prereq: All 1000 level automotive courses w/C grade or higher, or equivalent industry experience. This is a National Automotive Technician Education Foundation (NATEF) certified training course covering the diagnosis and repair of automotive engine performance and emission-related problems. The course includes, but is not limited to, the diagnosis and testing of ignition, fuel delivery, and emission systems.

AUTO 2450 – Engine & Emission Controls II 6 cr
Prereq: All 1000 level automotive courses and AUTO 2350 w/C grade or higher, or equivalent industry experience. This is a National Automotive Technician Education Foundation (NATEF) certified training course covering the diagnosis and repair of automotive engine performance and emission-related problems. The course includes, but is not limited to, the diagnosis and testing of ignition, fuel delivery, and emission systems.

AVAD 1010 – Airport Systems & Facilities 3 cr
An overview of basic internal and external organizational structures and common infrastructure associated with airports. Specific topics discussed include types of airports in the US, airport administrative and regulatory structures, National Plan of Integrated Airport systems [NPIAS], airport jobs and career paths, public relations, infrastructure and facilities, airspace and Air Traffic Control.

AVAD 1020 – Airport Operations & Administration 3 cr
An overview of the operational and administrative processes associated with modern airports. Specific topics discussed include airport regulations governing planning, management and operations, security processes and procedures, financial management, capacity and delay, economic, political and social roles of airports, airport master planning process and the future of airport management.
BIOL 1010 – Intro to Biology (BS) 4 cr
Prereq: RDG 0900 w/C grade or better, or appropriate Accuplacer score. Coreq: BIOL 1015. For non-science majors. The study of living organisms from bacteria to plants and animals. Introduces cell structures and physiology, inheritance, evolution, and classification. Three hours of lecture per week; additional lab component (BIOL 1015) required.

BIOL 1015 – Intro to Biology Lab (BS) 0 cr
Coreq: BIOL 1010; required lab component of BIOL 1010. Laboratory study, experimentation, and analysis illustrating important biological principles. One laboratory session per week.

BIOL 1030 – Intro to Plant Biology (BS) 4 cr
Prereq: RDG 0900 w/C grade or better, or appropriate Accuplacer score. Coreq: BIOL 1035. For non-science majors. An introduction to plant form, function, and reproduction and a survey of the plant kingdom. Three hours of lecture per week with additional lab component (BIOL 1035) required.

BIOL 1035 – Intro to Plant Biol. Lab (BS) 0 cr
Coreq: BIOL 1030; required lab component of BIOL 1030. Important aspects of plant biology are illustrated. Lab activities include: plant anatomy, physiology, life cycles, and a survey of the plant kingdom. One laboratory session per week.

BIOL 1050 – Intro to Animal Biology (BS) 4 cr
Prereq: RDG 0900 w/C grade or better, or appropriate Accuplacer score. Coreq: BIOL 1055. For non-science majors. Topics include: animal classification, evolution, and diversity. Three hours of lecture per week with additional lab component (BIOL 1055) required.

BIOL 1055 – Intro to Animal Biol. Lab (BS) 0 cr
Coreq: BIOL 1050; required lab component of BIOL 1050. Activities include: use of the microscope, cell structures, evolution, animal development and systematics, and a survey of animal phyla. One laboratory session per week.

BIOL 1070 – Intro to Marine Biology (BS) 4 cr
Prereq: RDG 0900 w/C grade or better, or appropriate Accuplacer score. Coreq: BIOL 1075. Introductory study of Biology focusing on marine biological systems. Intended for non-science majors. Three hours of lecture per week with additional lab component (BIOL 1075) required.

BIOL 1075 – Intro to Marine Biol. Lab (BS) 0 cr
Coreq: BIOL 1070; required lab component of BIOL 1070. Students will study marine plants, plankton, invertebrates and vertebrates. One laboratory session per week.
BIOL 1090 – Human Biology (BS) 3 cr
Prereq: RDG 0900 w/C grade or better, or appropriate Accuplacer score. Focuses on humans as biological entities. Introduces the scientific process, chemical and cellular bases of life, role of DNA in the continuity of life, evolution, and interrelationships among humans and other living organisms. Three hours of lecture per week.

BIOL 1120 – Intro. Conservation Biol (BS) 3 cr
Prereq: RDG 0900 w/C grade or better, or appropriate Accuplacer score. Introductory biology course that focuses on the patterns and processes that create biological diversity. Examines causes and consequences of diversity losses from genes-ecosystems. Also analyzes approaches to preventing diversity loss.

BIOL 1400 – Environmental Science (ID) 4 cr
Coreq: BIOL 1405. Survey of contemporary environmental issues related to conservation and management of natural resources concurrent with increasing socioeconomic and human population demands. Topics such ecology, eco-psychology, resource management, soil and food production, water and air pollution, solid and hazardous waste, global climate change and environmental economics will be emphasized.

BIOL 1405 – Environmental Science Lab (ID) 0 cr
Coreq: BIOL 1400; required lab component of BIOL 1400. Scientific principles and data collection needs for gaining an understanding of environmental challenges on local, regional, and global scales will be emphasized in the Laboratory. Some field trips may be required.

BIOL 1610 – College Biology I (BS) 4 cr
Prereq: MATH 0990 w/C grade or better, or appropriate Accuplacer score; RDG 0990 w/C grade or better, or appropriate Accuplacer score. Coreq: BIOL 1615. Content: biological chemistry, cell structure, metabolism, genetics, evolution, and diversity. Three hours of lecture per week with additional lab component (BIOL 1615) required.

BIOL 1615 – College Biology I Lab (BS) 0 cr
Coreq: BIOL 1610; required lab component of BIOL 1610 College Biology I.

BIOL 1617 – College Biology I Workshop 1 cr
Coreq: BIOL 1610. This course is designed to be a supplement to BIOL 1610. Content: biological chemistry, cell structure, metabolism, genetics, evolution, and diversity.

BIOL 1620 – College Biology II 4 cr
Prereq: BIOL 1610 w/C grade or better. Coreq: BIOL 1625. For Biology/Science majors. Content: evolution, diversity, structure and function of plants, structure and function of animals, and ecology. Three hours of lecture per week with additional lab component (BIOL 1625) required.
BIOL 1625 – College Biology II Laboratory 0 cr
Coreq: BIOL 1620; required lab component of BIOL 1620. Laboratory observation and experimentation to enhance understanding of evolution, diversity, and ecology. Three hours of lab per week with additional lecture component (BIOL 1620) required.

BIOL 2000 – CO-OP Education 2-4 cr
Prereq: Sophomore standing, minimum 2.0 GPA, study-related employment of at least 20 hrs/week and approval of director of cooperative education, Instructor approval. Work experience in business, industrial, or government environment related to program major. Credit awarded upon completion of specific objectives.

BIOL 2020 – Cell Biology 4 cr
Prereq: BIOL 1610 w/C grade or better. Coreq: BIOL 2025. For biology/science majors. Topics covered include cell division, organelle structure and function, gene expression, cytoskeleton, and extracellular matrix. Three hours of lecture per week with additional lab component (BIOL 2025) required.

BIOL 2025 – Cell Biology Lab 0 cr
Coreq: BIOL 2020; required lab component of BIOL 2020. Introduction to some of the basic lab techniques in modern cell biology. Lab activities include: microscopy, cell fractionation and analysis of cellular components. One laboratory session per week.

BIOL 2030 – Genetics 4 cr
Prereq: BIOL 1610 w/C grade or better AND CHEM 1210 w/C grade or better. Coreq: BIOL 2035. For biology/science majors. An introduction to the principles of genetics. Topics include: transmission (Mendelian), molecular, and population genetics. Three hours of lecture per week with additional lab component (BIOL 2035) required.

BIOL 2035 – Genetics Lab 0 cr
Coreq: BIOL 2030; required lab component of BIOL 2030. Hands-on and computer-simulated laboratory investigations of genetic processes. Lab emphasizes data analysis and complements information learned in the lecture. One laboratory session per week.

BIOL 2060 – Microbiology 4 cr
Prereq: BIOL 1610 w/C grade or better. Coreq: BIOL 2065. For HS and biology/science majors. A survey of microbiological principles related to human health. Covers taxonomy, cell structure, physiology, and genetics of microorganisms. Three hours of lecture per week with additional lab component (BIOL 2065) required.
BIOL 2065 – Microbiology Lab  
Coreq: BIOL 2060; required lab component of BIOL 2060. Introduces practical aspects of microbiology. Lab activities include: microscopy, cell culture, staining, and techniques for characterizing and identifying bacteria. One laboratory session per week.

BIOL 2220 – Ecology  
Prereq: BIOL 1610 w/C grade or better. Coreq: BIOL 2225. For biology/science majors. Intro to ecological and evolutionary principles, including: population interactions, ecosystem structure/function, energy flow, and biogeography. Three hours of lecture per week and additional lab component (BIOL 2225) required.

BIOL 2225 – Ecology Lab  
Coreq: BIOL 2220; required lab component of BIOL 2220. This lab provides an introduction to ecological methods, measurements, and data analysis. One laboratory session per week.

BIOL 2320 – Human Anatomy  
Prereq: BIOL 1610 w/C grade or better. Coreq: BIOL 2325. For HS and biology/science majors. Intro to the structure of the human body using a systemic approach. Structural relationships are evaluated by macro and microanalysis. Three hours of lecture per week and additional lab component (BIOL 2325) required.

BIOL 2325 – Human Anatomy Lab  
Coreq: BIOL 2320; required lab component of BIOL 2320. Hands-on evaluation of anatomical structures using microscopes and dissection. Human cadavers, histology slides and human/animal body parts are used as study materials. One laboratory session per week.

BIOL 2327 – Instr. Exp. in Human Anatomy  
Prereq: BIOL 2320 w/B grade or better. For Biology/Science or Health Science majors. Mentoring students on the structure of the human body. Cell types, tissue types, and the major organ systems, including integumentary, skeletal, muscular, nervous, cardiovascular, endocrine, respiratory, lymphatic, digestive, urinary and reproductive. One hour of lecture, four hours of lab weekly.

BIOL 2350 – Field Studies in Biology  
Prereq: BIOL 1610 w/C grade or better. For biology/science majors. This course provides an introduction to field studies of local environments and ecosystems.

BIOL 2420 – Human Physiology  
Prereq: BIOL 1610; CHEM 1110 or CHEM 1210 (all w/C grade or better). Coreq: BIOL 2425. For HS and biology/science majors. A cellular and systemic approach to the study of body functions, including physical and chemical processes and interactions among the systems. Three hours of lecture per week and additional lab component (BIOL 2425) required.
BIOL 2425 – Human Physiology Lab 0 cr
Coreq: BIOL 2420; required lab component of BIOL 2420. Hands-on lab investigations of physiological processes. Includes data acquisitions, analysis of cardiovascular, respiratory, digestive, immune and muscular systems. One laboratory session per week.

BIOL 2900 – Special Topics in Biology 1-5 cr
Prereq: Defined by instructor. Special topics for students majoring in biology or other science fields. Satisfies Biology Department elective requirement toward AS degree.

BIOL 2990 – Independent Study 1-2 cr
Prereq: BIOL 1610 w/C grade or better. For biology/science majors. This independent study is based on a student-selected biological topic. It may involve laboratory, field and/or library study.

BLA 1110 – Bricklayer 1A 5 cr
Prereq: APPR 1470 w/C grade or higher, or appropriate Accuplacer score. This course teaches the basics of brick laying, proper tool handling and safety, layout and course measurements.

BLA 1120 – Bricklayer 1B 5 cr
Prereq: BLA 1110 w/C grade or higher. This course presents the basics of block masonry and the proper and safe use of tools and equipment.

BLA 1210 – Bricklayer 2A 5 cr
Prereq: BLA 1120 w/C grade or higher. This course covers the joining of materials including brick to block, block to stone, arches, and more.

BLA 1220 – Bricklayer 2B 5 cr
Prereq: BLA 1210 w/C grade or higher. This course presents the final math portion of the program as it relates to the masonry trade. Also refractory, which is industrial masonry, with safe use of tools and equipment.

BLA 2310 – Bricklayer IIIA 5 cr
Prereq: BLA 1220 w/C grade or higher. This is the first part of an advanced course in which bricklayers will learn and improve basic skills which are essential to the trade. Students will concentrate on learning tools and their proper use, joining materials such as brick and block, block and stone, turning arches, sills and anchoring systems, etc.

BLA 2320 – Bricklayer IIIB 5 cr
Prereq: BLA 2310. This is the second part of an advanced course in which bricklayers will learn and improve basic skills which are essential to the trade. Students will concentrate on learning tools and their proper use, joining materials such as brick and block, block and stone, turning arches, sills and anchoring systems, etc.
**SLCC COURSE DESCRIPTIONS**

**BMAN 1110 – Intro to Biomanufacturing (ID) 3 cr**
Provides an introduction to biotechnology product manufacturing. Focuses on history of the industry, the required multidisciplinary approach, the details of the manufacturing process, and related legal, social, and ethical issues.

**BMAN 1120 – Basic Biomanufacturing Skills 1 cr**
Prereq: BMAN 1110 (can be taken concurrently) or instructor permission. Provides a basic understanding of the core skills required for working in a manufacturing environment typical of biotechnology companies and reinforces critical thinking skills.

**BMAN 1130 – Bioengineering in Society (ID) 3 cr**
Explores the impact of bioengineering in society by examining the history of the field, multidisciplinary involvement, technological innovations, medical needs addressed, and product design and manufacturing challenges.

**BMAN 1150 – Bioman Quality System and Regs 3 cr**
Prereq: BMAN 1110 and 1120 w/C grade or better or instructor permission. Provides thorough understanding of the quality system and regulations associated with biomanufacturing.

**BMAN 1180 – Biomanufacturing Experience 2 cr**
Prereq: BMAN 1110 and 1120 w/C grade or better or instructor permission. Provides hands-on biotechnology product manufacturing experience, and reinforcement of previously learned concepts, skills, and critical thinking ability.

**BMAN 2110 – Good Manufacturing Practices 1 cr**
Prereq: BMAN 1150 and 1180 w/C grade or better or instructor permission. Provides foundational knowledge of good manufacturing practices governing the manufacture of biotechnology products. This is key knowledge to working effectively at biomanufacturing companies.

**BMAN 2120 – Verification and Validation 2 cr**
Prereq: BMAN 1150 and 1180 w/C grade or better or instructor permission. Provides theoretical knowledge of verification and validation principles as well as practical hands-on training of general methodologies typically used for verification and validation in a biomanufacturing setting.

**BMAN 2130 – Measurement Fundamentals 2 cr**
Prereq: BMAN 1150 and 1180 both w/C grade or higher, or instructor permission. Provides the fundamentals of measurement as well as practical hands-on training to reinforce measurement and calibration concepts and skills typically used in a Biomanufacturing setting.
SLCC COURSE DESCRIPTIONS

**BMAN 2910 – STUDENTfacturED Internship**  
1-4 cr  
Prereq: BMAN 1150 or 1180 w/C grade or better or instructor permission. Provides contextual, real-world experience and an opportunity to reinforce previously learned concepts, skills, and critical thinking ability related to business and technical job functions typical of biotech manufacturing companies.

**BTEC 1010 – Intro to Biotechnology**  
3 cr  
Prereq: MATH 0990 and RDG 0990 w/C grade or better or equivalent placement test score. Coreq: BTEC 1015. This course teaches students the history, branches, and applications of the biotechnology industry. It also examines the scientific basis for biotechnology products and examines the ethical and legal aspects important in the industry.

**BTEC 1015 – Intro to Biotechnology Lab**  
1 cr  
Prereq: MATH 0990 and RDG 0990 w/C grade or better or equivalent placement test score. Coreq: BTEC 1010. This course teaches students fundamental theoretical and practical hands-on knowledge of commonly used instruments, preparation of solutions, reagents, and methodology used in the life science laboratory.

**BTEC 1030 – Biotechnology Seminar**  
2 cr  
Prereq: BTEC 1010 and 1015 w/C grade or better. This course teaches students to search, comprehend, and evaluate scientific literature. Students will develop analytical and communication skills necessary to succeed as a productive team member in the biotech field.

**BTEC 1060 – Nucleic Acid/Protein Biotech**  
2 cr  
Prereq: BTEC 1010 and BIOL 1610 w/C grade or better. The chemistry of DNA, RNA and proteins will be the foundation for learning about the biological structure, function and analysis of these macromolecules.

**BTEC 1080 – Biotechnology Experience**  
3 cr  
Prereq: BTEC 1010 and 1015 w/C grade or better. This course is an early hands-on research experience in which students conduct mentored research activities. Students apply their knowledge to specific research topics assigned by Biotechnology faculty/staff.

**BTEC 2010 – Applied Molecular Biology**  
3 cr  
Prereq: BTEC 1010 and 1015 w/C grade or better and BIOL 1610 w/C grade or better. This course teaches students practical aspects of DNA technology that includes restriction digestion, properties of plasmids, recombinant DNA cloning, gel electrophoresis, the polymerase chain reaction and protein expression.
BTEC 2020 – Biomolecular Sep and Analysis  
Prereq: BTEC 2010 w/C grade or better. Purification and analysis techniques that are applied to biologically active substances are taught. Attention will be given to protein purification and analysis and includes immunological, electrophoretic, and chromatographic technologies.

BTEC 2030 – Cell Culture  
Prereq: BTEC 2010 w/C grade or better. Methods of eukaryotic cell culture are taught. Students learn proper techniques to handle, store, and maintain cells in culture. Includes specialized analysis techniques to probe various aspects of cell biology relevant to biotechnology.

BTEC 2040 – Advanced Molecular Methods  
Prereq: BTEC 2010 w/C grade or better. This course teaches advanced concepts used in genetic engineering and analysis of gene expression. These include principles of DNA sequencing, quantitative PCR, mutagenesis, and reverse transcription.

BTEC 2050 – Bioinformatics  
Prereq: BTEC 2010 w/C grade or better. Students will learn to use computer programs and software to gather, store, analyze and integrate biological data from sources such as whole genomes and other relevant databases. Previous computer knowledge is not needed.

BTEC 2060 – Biotechnology Instrumentation  
Prereq: CHEM 1110 and 1115 w/C grade or better; BTEC 1080 or 2100, and BTEC 2010, or BMAN 1150 and 1180 w/C grade or better, or instructor permission. Provides a comprehensive understanding and operational training of instrumentation commonly used in the biotechnology industry, including operational principals, best practices, maintenance procedures, and user-achievable repairs.

BTEC 2100 – Biotechnology Research  
Prereq: BTEC 1080 w/C grade or better or instructor permission. This course is a capstone research experience in which students conduct high level mentored research activities on specific research topics assigned by Biotechnology faculty/staff or in collaboration with biotechnology companies.

BTEC 2900 – Spec. Topics in Biotechnology  
Prereq: By instructor permission only. Defined by the instructor for students majoring in Biotechnology. Students must contact the instructor prior to registering for the course.

BUS 1010 – Introduction to Business (IN,HR)  
This is an introductory business course which will expose students in the diverse world of business, revealing how each of us is connected to business personally, professionally, and how business connects us culturally and socially. Students will learn how individuals function within a specific field and how various disciplines work together in cross functional teams.
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BUS 1040</td>
<td>Ethics at Work (ID)</td>
<td>3 cr</td>
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<tr>
<td>Students develop judgment about workplace ethics through critical reading, thinking, writing, research and analysis; consider issues from multiple disciplines/opposing views; choose research/Service Learning related projects and write reports.</td>
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<tr>
<td>BUS 1050</td>
<td>Foundations of Business (ID)</td>
<td>3 cr</td>
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<td>Prereq: ENGL 1010 or concurrently, or that students have compatible writing skills. Historical, sociological and philosophical overview of the fundamental aspects of business. Topics include business in a world in change, socioeconomics, the human factor and ethics in the workplace and social responsibility in a global market.</td>
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<tr>
<td>BUS 1100</td>
<td>Applied Business Calculus</td>
<td>3 cr</td>
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<td>Prereq: MATH 1050 or MATH 1090. This course examines the mathematics of calculus applied to business applications. Polynomial and exponential functions, mini-maxi theory, limits, derivatives and integration will be reviewed.</td>
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<tr>
<td>BUS 1900</td>
<td>Special Projects/DECA</td>
<td>2 cr</td>
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<tr>
<td>This class provides you the opportunity to apply business techniques and strategies in various hands-on projects and activities. Collegiate DECA is an international professional organization which has four basic objectives to achieve: Vocational Development, Social Intelligence, Social Consciousness, and Leadership Development.</td>
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<tr>
<td>BUS 1910</td>
<td>Special Projects (PBL)</td>
<td>2 cr</td>
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<td>Students participate in the Phi Beta Lambda organization which promotes competent, aggressive business leadership; understanding of American free enterprise; setting of career goals; building character and self-confidence.</td>
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<tr>
<td>BUS 2200</td>
<td>Bus. Communications (CM,IN)</td>
<td>3 cr</td>
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<td>Prereq: ENGL 1010 w/C grade or better. Students develop critical reading, thinking, listening, speaking and writing skills for business; conduct research, assess communication situations, make effective arguments, work in teams and present research/Service Learning related projects.</td>
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<tr>
<td>CCLA 1110</td>
<td>Construction Craft Laborer 1A</td>
<td>5 cr</td>
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<tr>
<td>An introductory course in the construction craft. Students will gain a basic knowledge of construction safety, hand and power tools, blueprint reading, and an introduction to concrete and building related materials.</td>
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<tr>
<td>CCLA 1120</td>
<td>Construction Craft Laborer 1B</td>
<td>5 cr</td>
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<tr>
<td>Prereq: CCLA 1110. This course provides students with knowledge and skills concerning foundations and slab on grade methods, and methods for reinforcing, handling and placing concrete and introduces distance measuring and leveling techniques.</td>
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</table>
CCLA 1210 – Construction Craft Laborer 2A 5 cr
Prereq: CCLA 1120. This course provides students with an in-depth understanding of vertical and horizontal forms. An introduction to crane operation will also be presented.

CCLA 1220 – Construction Craft Laborer 2B 5 cr
Prereq: CCLA 1210. This course provides a basic understanding of ironworking, electrical safety, construction equipment operation, oxy-fuel cutting, and safety concerns associated with high rise construction.

CEAB 0001 – Accelerated Block Program 0 hrs
Offset costs of developing, updating and maintaining accelerated program.

CEAE 0100 – Electrical Principles for Alternative Energy 45 hrs
Designed to provide students with a basic understanding of electrical principles and the National Electric Code pertaining to the alternative and renewable energy fields.

CEAE 0200 – Basic Photovoltaic Systems 45 hrs
Prereq: CEAE 0100 w/ C grade or better or instructor approval. This course teaches students the basic operating principles of a utility interactive solar photovoltaic system, how to conduct a site evaluation, perform a financial analysis and effectively design a photovoltaic system.

CEAE 0300 – Advanced Photovoltaic Systems 45 hrs
Prereq: CEAE 0200 w/C grade or better or instructor approval. This course builds upon the foundation of knowledge students acquire in the Basic PV course. Successful students will be able to adapt mechanical or electrical designs; perform system checkouts and inspections; design, install, maintain and troubleshoot commercial and off-grid photovoltaic, battery based systems. Students will assemble and troubleshoot full systems at the Solar Training Yard.

CEAE 0410 – NEC 2014 Solar Photovoltaics 8 hrs
Course covers 2014 NEC requirements that govern solar installations. Gain understanding of solar pv electrical energy systems and how they relate to other electrical power production sources.

CEAE 0500 – NABCEP PV Cert Exam Prep 16 hrs
Review of course materials and procedures for students accepted by N A B C E P to sit for their Solar PV Installer Certification exam. Bring the National Electric Code Book (not handbook) Calculator, Pencil and Highlighter.

CEAE 0510 – NABCEP Entry Level Exam Prep 6 hrs
Review of materials, procedures and task analysis details for students planning to take the N A B C E P Entry Level Exam. SLCC Miller Campus Testing Center is an authorized provider of the computer based test.
CEAL 0100 – Transition to Teaching 0 hrs
This orientation class will assist students who have a Bachelors degree in a subject area taught in Utah schools make a successful transition to teaching through the ARL program.

CEAL 0200 – Managing Behavioral Problems 0 hrs
Students will learn problem solving skills that will assist them with behavior problems in their classes. Disruptive behaviors will be addressed and strategies to prevent reoccurrence will be taught.

CEAT 0600 – CDL 3rd Party Tester Training 0 hrs
This training will certify individuals through the Dept of Public Safety, Drivers License Division to administer the CDL road test.

CEBC 0003 – Fast Trac New Venture 0 hrs
Comprehensive entrepreneurship-educational program that provides entrepreneurs with business insights, leadership skills and professional networking so that they are prepared to create a new business or expand an existing enterprise.

CEBC 0004 – Fast Trac Planning 0 hrs
Designed to look at and evaluate business. Take a hard look at all aspects of a company and write a new business plan.

CEBC 0005 – Intellectual Property Seminar 0 hrs

CEBC 0007 – Financial Tools Essntl for SB 0 hrs
This course goes over all the financial needs a small business will encounter.

CEBC 0008 – Self-Employment Workshop LDS 0 hrs
Learn the basics of starting a business and discover the resources in the community to help you manage and improve your business.
CEBC 0009 – Meet the Money People 0 hrs
Meet the Money People event will introduce you to current finance options for starting or growing your business. Hear from several prominent finance sources in Utah and learn what type of financing may best fit your needs. This valuable event is highly recommended for entrepreneurs seeking start-up financing, business owners seeking growth funding and all businesses wishing to understand financing alternatives to improve their operations.

CEBC 0010 – Money and How to Get It 0 hrs
This class is about the types of financing available, what type of financing would be appropriate for your business and how to go about finding and qualifying for funds.

CEBC 0011 – Marketing Workshop Series 0 hrs
This marketing workshop series will teach participants how to promote a business using effective strategies while saving time and money doing so. 10 trade secrets to bet on. What methods to use and why for targeting prospects. Image and branding - Disney vs. Lagoon. How to make advertising successful. The difference between direct response and brand advertising. How to overcome a customers' lack of trust.

CEBC 0013 – Fast Trac - First Step 0 hrs
11 week course: Communicating the business concept, gathering information for feasibility, product and services.

CEBC 0015 – Internet Marketing 0 hrs
Learn how to market your business online and how to keep it in the top of all major search engines.

CEBC 0016 – Market Research 0 hrs
Help with operating a business. Covers information related to establishing business operations and how a business plan can help organize a business. Technical, marketing, financial, and human resource issues will be covered.

CEBC 0017 – Strategic Marketing 0 hrs
Class for any owner, manager or officer of a small business. Covers 4 essential financial statements - 5 basic analysis tools and more.

CEBC 0018 – Start Smart 0 hrs
Start Smart Orientations is a 2 hour workshop providing an overview of all services provided by SL SBDC program. Covers basic requirements of starting and growing a business in Utah.

CEBC 0019 – Financing Your Business Conf 0 hrs
Mini-conference on financial strategies for start-ups and the established small business operator.
CEBC 0020 – My New Enterprise 0 hrs
Essential business information to help you develop your entrepreneurial skills and build your business on a strong foundation. Build a Business Plan.

CEBC 0021 – Internet Marketing 0 hrs
Introduction to the basic concepts on internet marketing. Great for anyone who wants to launch a web site for business. Helps to determine which types of internet marketing are right for your business.

CEBC 0022 – The Optimal Path 0 hrs
Introduction and development from a Business Idea to a Business Model and Business Plan.

CEBC 0034 – 7 Habits of Small Bus Mgrs 0 hrs
7 essential habits that highly effective managers share.

CEBC 0045 – Nail It Then Scale It Workshop 0 hrs
Join the ranks of today’s most innovative entreprenuers and experience success through the Nail It Then Scale It (NISI)Method.

CEBC 0047 – Law School for Small Business 0 hrs
Receive expert legal advice on todays hottest legal topics facing entrepreneurs.

CEBC 0060 – SB Emp Tax Withholding 0 hrs

CEBC 0061 – Sole Proprietor 0 hrs
Offers help for business owners to understand and comply with federal/state statutes and reporting requirements for Sole Proprietors.

CEBC 0062 – SCORE Training 0 hrs
How to form a limited liability company.

CEBC 0063 – Choosing A Business Entity 0 hrs
Class addresses the potential liabilities and tax considerations when choosing a legal structure for your business.

CEBC 0065 – LLC Workshop & S-Corp 0 hrs
Help for business owners to understand and comply with federal/state statutes and reporting requirements for LLC.
SLCC COURSE DESCRIPTIONS

CEBC 0069 – How to Find Customers 0 hrs
Explores the pitfalls and common mistakes made by most new businesses. Identifying your company’s top priorities how to identify your business competitive advantages. 6 rules for creating good messaging.

CEBC 0070 – Partnership Workshop 0 hrs
Help business owners understand and comply with federal/state statutes and reporting requirements.

CEBC 0100 – Salt Lake SBDC - Counseling 0 hrs
Salt Lake SBDC Counseling Sessions. Sessions run for 1 hour and .5 hours for prep and reporting.

CEBI 0001 – Biz Net Connect 0 hrs
MBIC/SBDC monthly business networking event.

CECA 0100 – Career Transitions 0 hrs
Thinking of making a career shift? Career Transitions is a useful guide that will equip you with tools that will assist you in creating a personal inventory of interests, knowledge, education and skills. This information will assist students to identify and assess potential career options to map out a better future.

CECD 0200 – BIM for Contractors - I 0 hrs

CECD 0201 – BIM for Contractors - II 0 hrs
Build more for BIM managers and those individuals who will interact at a higher level with the technology. The recommended Technology would be Navisworks Manage, Sketch up and Revit Architecture.

CECD 0205 – Navisworks Manage 2011 0 hrs
Autodesk Navisworks Manage provides the most complete Navisworks design project review solution. Includes the functionality of both Autodesk Navisworks Review and Autodesk Navisworks Simulate.

CECD 0206 – Advanced Navisworks Manage 0 hrs
Advanced Navisworks Manage is Continuation of Navisworks I. Hands on lab work exploring the work flow processes of Timeliner, Clash Detective, & Presenter. Attendees will learn through hands-on lab work the necessary work flow process involved in using Timeliner, Clash Detective and Presenter. A basic understanding of Navisworks functions, navigation and tools should be understood before taking the course.
CECD 0300 – AutoDesk Revit Architecture
Covers basics of Revit Architecture, from schematic design through construction documentation introduces student to the concepts of building information modeling and tools for parametric building design and documentation.

CECD 0301 – Revit MEP
Building information modeling and the tools for parametric MEP systems design and documentation using Autodesk Revit MEP.

CECD 0302 – Autodesk Revit MEP-HVAC Plumb
Revit MEP basics specific to HVAC/Plumbing.

CECD 0303 – Autodesk Revit MEP-Electrical
Revit MEP basics-specific to electrical.

CECD 0304 – Advanced Revit Architecture
Advanced Revit Architecture, Parametric building modeler for architects that allow changes anytime, anywhere in the design process.

CECD 0305 – Autodesk Revit Families
Extrusions, blends, reference lines and planes, family categories, labels parameters, type catalogs, constraints and connectors.

CECD 0306 – Revit Structure
Learn about building information modeling and the tools for parametric structural design and documentation. Will learn the fundamental features of Revit Structure, Schematic Design, and construction documentation.

CECD 0400 – AutoCAD I
Over 70 percent of the 2D drafting commands are covered. Draw, edit, construct and display drawings. Learn to use layering, dimensioning and text to create simple drawings with notes and title blocks. Finally, plot these drawings.

CECD 0410 – AutoCAD LT Essentials
Teaching the features, commands and techniques for creating, editing and printing drawing with AutoCAD LT. Topics include annotation, hatching, dimensioning, layers and line types and working with reusable content.
CECD 0500 – AutoCAD II
Increase efficiency by using blocks, attributes, xrefs and paper/model space. Learn dimensioning variables, dimension styles, grips, hatching and splined curves. Learn to import and export data with AutoCAD.

CECD 0610 – AutoCAD 2002 Update
One day workshop covering new features of AutoCAD 2002.

CECD 0620 – Transitioning From AutoCAD2002
This course will introduce the student to the significant changes in AutoCAD from AutoCAD 2002 to AutoCAD 2006.

CECD 0700 – AutoLISP
This course teaches you how to use proper syntax and functions to create programs that will streamline your drawing process. Become more productive with AutoLISP.

CECD 0730 – Autodesk Civil 3D
Students learn to create and edit points, alignments, and profiles, and to create and analyze surface data. They will perform corridor modeling, create subassemblies and cross-sections, and perform grading operations.

CECD 0830 – Architectural Desktop I
Learn how to use new tools for mass modeling, space planning, grid layout, object anchoring and presentation. Learn to create and manipulate intelligent 3D wall, door, window, stair and roof objects and much more.

CECD 0840 – Land Development Desktop I
Covers Autodesks Land Development Desktop software in detail. Topics include coordinate geometry, editing surfaces site analysis, parcel layout and design and horizontal alignments. Learn the project mgt and interface tools.

CECD 0880 – Solidworks
A complete 3D CAD solution providing your design team with all of the data management and communication tools they need. Learn to work smarter and faster with this 3D CAD software. Learn to use time saving tools to develop better products.

CECD 0881 – Advanced Solidworks
A complete 3D CAD solution providing tour design team with all of the data management and communication tools. Learn to work smarter and faster with SolidWorks.
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<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
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<tr>
<td>CECD 0890</td>
<td>Autodesk Inventor Level I</td>
<td>0 hrs</td>
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<tr>
<td></td>
<td>Learn to create, edit, document, print, analyze,</td>
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<td></td>
<td>dimension and produce 2D sketches and 3D</td>
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<td></td>
<td>parametric parts and assemblies. Also learn</td>
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<td>basic 3D modeling techniques and become familiar</td>
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<td>with Inventors Design Support System.</td>
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<tr>
<td>CECD 0905</td>
<td>AutoCAD Electrical</td>
<td>0 hrs</td>
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<td>Students will learn the important features of</td>
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<td>AutoCAD Electrical, building schematics, panels</td>
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<td>and circuits reusing circuit and component</td>
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<td>information, customizing components, preparing</td>
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<td>reports from schematics.</td>
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<tr>
<td>CECD 0970</td>
<td>Autodesk 3DsMax Design</td>
<td>0 hrs</td>
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<td>A complete end to end reference that provides</td>
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<td>users with complete info on all the features</td>
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<td>and options available in the latest version of</td>
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<td>3DsMax design.</td>
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<tr>
<td>CECD 0980</td>
<td>Autodesk 3ds Max Design II</td>
<td>0 hrs</td>
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<td>A complete end to end reference that provides</td>
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<td>users a complete info on all of the features</td>
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<td>and options available in 3ds max design.</td>
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<td></td>
<td>This is an advanced course.</td>
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<tr>
<td>CECI 0001</td>
<td>Intro Competitive Intelligence</td>
<td>0-45 hrs</td>
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<td>The introductory course examines the principles,</td>
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<td>roles, responsibilities, and activities</td>
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<td>associated with CI-BI work, as well as the</td>
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<td>history of CI-BI. The learner will survey a</td>
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<td>range of functions, models, practices,</td>
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<td>processes, techniques, technologies, and tools</td>
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<td>that will be applied to basic, experiential</td>
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<td>projects.</td>
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<td>CECI 0010</td>
<td>Intermediate Competitive Intelligence</td>
<td>0-45 hrs</td>
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<td>Strategic Competitive Intelligence capitalizes</td>
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<td>on the intelligence life-cycle continuum learned</td>
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<td>in CI 1000. Companies must compete in order</td>
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<td>to increase customers, market share, revenue,</td>
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<td>and profit. Although competitive intelligence</td>
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<td>is still in its formative stages, many tools and</td>
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<td>techniques have been turned into best practices</td>
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<td>adopted by the more progressive firms. The</td>
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<td>intermediate course examines competition</td>
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<td>and intelligence, and how they became</td>
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<td>intertwined. Learners will construct useful</td>
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<td>frameworks for viewing the competitive</td>
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<td>environment. More in depth activities on</td>
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<td>sources, intelligence collection, gathering,</td>
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<td>reporting, and distribution will be investigated.</td>
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<td>CECO 0003</td>
<td>Composites Level I</td>
<td>4 hrs</td>
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<td>Students will learn how composite materials</td>
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<td>are designed, processed and manufactured.</td>
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<tr>
<td>CECO 0004</td>
<td>Composites Level II</td>
<td>8 hrs</td>
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<td>This course focuses on the processing of</td>
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<td>materials used in the composites industry.</td>
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CECO 0005 – Composites Level III  8 hrs
Course will teach advanced composite processes such as filament winding and nondestructive testing (NDT) of composite parts. Get skills for advanced processing and inspection of composite materials and finish work as well as using the autoclave.

CECO 0006 – Composites Exelis (ITT) New Hire  0 hrs
Course for Exelis (ITT) new hire employees, learning the basics of composites.

CECP 0001 – Creative Problem Solving- Pers  0 hrs
Solving problems is inherent to the human experience. When the right solution to a problem isn’t clear, the skills of creative problem solving help you to correctly identify the problem, provide alternative ways to generate abundant ideas, and execute on a plan for success. Learn the steps and associated tools that have been proven to work for problems of all types, sizes and levels of complexity.

CECP 0010 – Creative Problem Solving- Team  0 hrs
Teams operate best when ideas are allowed to flourish. When the right solution to a problems isn’t clear, the skills of creative problem solving help teams to correctly identify the problem, provide alternative ways to generate abundant ideas, and execute on a plan for success. Learn the steps and associated tools that have been proven to work for problems of all types and sizes.

CECT 0006 – 2014 National Electrical Code  0.8 hrs
Course will cover over 400 new codes and definitions of the 2014 NEC Requirements for electrical installations. Major changes allowing new forms of alternate energy to power electric vehicles will be studied.

CECT 0009 – Electrical Safety & Code Rev  0.8 hrs
Course covers new code changes, existing code, and common mistakes made on job sites. Learn how to prevent costly mistakes resulting in fines and penalties. New rules on lugs and terminals and GFCI placement in residential dwellings reviewed. Safety, personal protective equipment, OSHA rules, grounding rules and motor control diagrams covered. Must bring a 2011 code book and a calculator to class.

CECT 0010 – LEED: Construction & Design  0-20 hrs
Overview of LEED principles and the LEED rating system used to measure and certify buildings that employ green building principles in their construction and design.
CECT 0011 – Lead Based Paint Basics 0.1 hrs
Lead causes a long list of learning and behavioral problems. As well as kidney disease, miscarriages and birth defects. Experts say lead poisoning doubles the number of children in special education. Studies also show lead plays a major role in crime rates. Any amount of lead is bad for you. This presentation will update you on the latest RRP industry happenings and how they may impact various construction trades.

CECT 0012 – Introduction to Asbestos 0.1 hrs
This course is intended as a brief introduction and overview of asbestos. The course includes discussion on where asbestos comes from, how it is used in industry, and where it is found in everyday residential and commercial settings and products. Health effects are also discussed and include asbestosis, mesothelioma, and lung cancer.

CECT 0013 – Intro to Solar PV Industry 0.1 hrs
Introduces the birth of photovoltaic technology; its development; market growth; industry; its different applications; and the variety of different solar technologies.

CECT 0014 – Solar PV Module Placement 0.1 hrs
This presentation discusses the preferred placement of solar PV panels to maximum energy production and key considerations to take into account such as warranties, and added costs for common mounting methods and different roof types.

CECT 0015 – Home Energy Techniques 0.1 hrs
The course presentation is a case study of a newly constructed home, illustrating innovative and cost effective energy-saving construction techniques. It argues that energy efficient construction is affordable and advantageous to the consumer and the community.

CECT 0020 – Mechanics’ Liens in Utah 0.1 hrs
Overview of mechanics lien laws to help contractors and suppliers become more familiar with current laws in Utah. Learn the steps you need to take to help protect your lien rights.

CECT 0021 – Energy & The Building Shell 0.1 hrs
The presentation is an introduction into the concept of the building shell. Resistance to and conduction of energy across the building shell will be discussed. The learner will become familiar with the air and thermal barriers and recognize good building practices with respect to the building shell.

CECT 0022 – Air Leakage 0.1 hrs
The presentation describes the need and importance of a building's air barrier. Common leakage areas and industry accepted preventative measures will be identified and discussed.
CECT 0023 – Insulation Windows & Doors 0.1 hrs
INSULATION: The thermal barrier in a building will be described in detail in this discussion. Areas of thermal bridging and the need for thermal gaps will be reviewed.
WINDOWS 7 DOORS - The performance of windows and doors and their significance to overall building thermal performance will be discussed.

CECT 0024 – Greening the Workforce 0.1 hrs
This course introduces the participant to the concept of 'green' building in commercial construction. Efforts being made to build a safe, productive, and sustainable workforce of craft professionals will be highlighted.

CECT 0025 – Home Air & Water Heating 0.1 hrs
Various methods of heating air and water in the home will be discussed. A focus on energy efficient methods will be applied. Course sections include HVAC load calculations, HVAC duct calculations, types of heating systems, zoning systems, hot water energy usage, water heating energy - capacity & efficiently, and water system types.

CECT 0026 – Cooling, Lighting, Appliances 0.1 hrs
This presentation reviews various methods of air conditioning including evaporative cooling, natural ventilation, whole house fan duct work, and + & - air pressure. The effect each method has on the overall energy performance of a building is presented in detail. Energy efficient lighting & appliances are reviewed. Lighting efficacy and other lighting concepts are presented.

CECT 0027 – Health & Safety 0.1 hrs
This presentation will review the effects and concerns of space heating, cooling and ventilation on the health & safety of a building’s occupants. Building ‘ health’ protocols including Safety Policies & Procedures, IAQ, CO testing, common exhaust equipment in relation to ventilation are all reviewed in detail.

CECT 0028 – HERS Test Prep 0.1 hrs
This presentation provides a study guide, test taking tips, and practice questions to help the student prepare to take the Home Energy Rating System (HERS) exam. Over a dozen test topics are reviewed.

CECT 0030 – Construction Insurance Issues 0-20 hrs
This presentation will help contractors and material suppliers become more familiar with what their insurance policy may or may not cover and how they can best protect themselves in the event misfortune occurs as a result of their work.
CECT 0031 – Immigration Reform Control Act

Hiring and documenting legal workers have gotten more complicated for contractors & small business owners. With laws recently passed at both the Federal and State level, this course will discuss the intricacies of properly completing the I-9 form as well as running E-verify on employees. Common mistakes that contractors make during this process will be reviewed.

CECT 0032 – Fair Labor Standards

This course presents issues relevant to the Fair Labor Standards Act. Issues include major provisions such as coverage, minimum wage, overtime pay, youth employment and recordkeeping. Compliance and enforcement of the FLSA will also be addressed as a way to assist in decision making with employee hiring or use of independent contractors.

CECT 0033 – Workers' Compensation Issues

In this presentation, issues concerning Experience Modification will be discussed in detail. Specific issues that will be covered include the definition, qualifications, comparison rates computation, E-mod Management, and the 'split point' change. Understanding these issues will help in making sound business decisions as they relate to staffing.

CECT 0034 – Insurance 101

This course analyzes insurance coverage, exclusions, and how to reduce the costs associated with liability insurance. Workers' compensation insurance covers, how to avoid violating the law when travelling out of state and other common efforts contractors make are reviewed. Major changes going into effect in 2014 relative to the Affordable Care Act (health care reform laws) will also be discussed.

CECT 0035 – Health Reform (Afford Care Act

This presentation by two experts in the HR Field, will offer participants a detailed understanding of how to comply with the many requirements of the Affordable Care Act. The law will be examined from many perspectives including benefits, shared responsibility, affordability, and more.

CECT 0036 – Employee Handbook

This presentation reviews - from a risk management perspective - employment law and guidelines to follow when drafting an Employee Handbook. Handbook sections range from Employment-at-Will and Welcome Letter to Security and Termination of Employment. Participants will be well prepared to draft a comprehensive Employee Handbook for their business that is ready for legal review.

CECT 0037 – OSHA Recordkeeping

This course reviews OSHA recordkeeping requirements. The OSHA 300 Log, OSHA 300A and OSHA 301 will be reviewed in detail. In addition, the course reviews the criterion used to determine how work-related injuries and illnesses are to be documented. This course provides critical information that can be used by administrative personnel assigned to safety recordkeeping.
CECT 0039 – Legal System 101 Know Terms 0.1 hrs
This course provides an overview of the U.S. legal system including the history, background, and context of the system. Participants will use what they have learned to successfully operate and manage a construction related business. Also covered in the presentation are the legal risks in the construction industry and strategies to minimize, allocate and manage those risks.

CECT 0040 – Litigating Construction Cases 0-20 hrs
Litigation in construction cases is the focus. Pros and cons of alternative dispute resolution and the expense associated with litigation will be covered. Includes tips to avoid litigation in the future.

CECT 0050 – Construction Contracts in Utah 0-20 hrs
Explore several common provisions in contracts and discuss how Utah law may enhance or modify provisions. Topics include: indemnification, alternate dispute resolution, prompt payment and attorney fees.

CECT 0060 – AIA/Consensus DOCS 0-20 hrs
AIA A201 form and the new Consensus DOCS contracts endorsed by the Assn of General Contractors will be discussed. Recent changes along with suggestions for usage will be presented.

CECT 0070 – Advanced Leed Topics 0-20 hrs
Course focuses on green building and energy conservation issues as taught by an expert in energy conservation- building and contractor issues.

CECT 0080 – Construction Law Updates 0-20 hrs
Overview of how recent changes to laws by the Utah Legislature and the impact on a Contractors business. Review of regulations as they pertain to construction trades and how court decisions have impacted Utah contractors.

CECT 0088 – HVAC Energy Controls& Analysis 0.1 hrs
HVAC energy analysis involves HVAC system engineering, equipment efficiencies, utility costs and lifecycle costs. The focus for this course is on chiller analysis, efficiency and energy costs. Understand control variable adjustments and supervisory control strategies aimed at energy conservation as well as control strategies for typical central cooling systems.

CECT 0089 – Building Code 101 0.1 hrs
This presentation is a brief overview of the International Code Council and National Fire Protection Association building code adopted by the State of Utah. Compliance to the current adopted codes is stressed as required for building construction across the state.
CECT 0090 – Intl Bldg Code/Commrcl Bldgs 0-20 hrs
Review information on current International Residential Building Code requirements. Overview of the changes from 2003-2006 IRC and learn about the state of Utah Building Code amendments with respect to commercial buildings.

CECT 0110 – Intl Residential Code 0-20 hrs
Review information on current Intl Residential Building Code requirements. Overview of the changes from 2003-2006 IRC and learn about the state of Utah Building Code amendments with respect to residential buildings.

CECT 0111 – Patent Protection Basics 0.1 hrs
Learn the basics of patent law and how to obtain or interface with patent protection. Class offers step-by-step approach to patent your engineering method or design or interface and navigate around another’s patented rights.

CECT 0112 – Intellectual Prop & Copyright 0.1 hrs
Review of Intellectual Property aspects and issues involved in the engineering and construction industry. Understand how to copyright-protect your engineering drawings or designs or handle another’s copyright protected material.

CECT 0113 – 7 Habits of Effec Contractors 0.3 hrs
Contractors are led through a step by step process of how to run their contractor practice, their personal lives, their employees, and their organizations optimally and efficiently. From Dr. Stephen Covey’s best-selling book.

CECT 0114 – 7 Habits of Contractor Manager 0.1 hrs
Course teaches contractor managers how to develop and apply skills and optimum leadership in their profession. Based on Dr. Stephen Covey’s best selling book, The 7 Habits of Highly Effective People.

CECT 0120 – The New Face of Marketing 0.25 hrs
From face-to-face to Facebook, the marketing landscape continues to evolve. Old school or new school, the objective remains the same: How do I send the right message, to the right person, at the right time? Marketing can make all the difference. This course merges marketing fundamentals with yesterdays and todays strategies with one objective: Getting results!

CECT 0121 – Construction Meets EPA 0.1 hrs
A Supreme Court ruling has the potential to impose heavy regulations on commercial construction. Findings by the EPA indicate greenhouse gases pose a significant danger to health. While compliance has been pushed into the future, there are court challenges that could bring those regulations crashing down on the construction industry. This program will help you learn what impact they may have.
CECT 0122 – Green Certification & Ratings 0.1 hrs
This presentation provides an introduction to green building, what it is, and how it is applied via various green building rating systems in the United States.

CECT 0123 – OSHA & Multi-Employer Policy 0.1 hrs
We will discuss OSHA’s role and what employers need to do to comply with the OSHA regulations. We will look at Inspections, PPE, OSHA Recordkeeping and Reporting, Hazard Communication, OSHA whistleblower laws and employee rights. We will also spend time looking at OSHA’s focus four in regards to construction accidents. We will spend some time discussing OSHA’s Multi-Employer Citation policy.

CECT 0124 – Profitability or Bust 0.1 hrs
Job costing is important to contractors to: prepare estimates, run and manage jobs, forecast jobs, and support for claims and change orders. The key is determining your key performance indicators (KPIs) and accumulate, record and report costs accordingly.

CECT 0125 – Stix & Brix to Dollars & Sense 0.2 hrs
Business can be easier than we make it. This class will focus on the how tos of transitioning from trade specifics to business specifics. If you are losing sleep wondering what to do next with your business, this class is for you! Whether you’re in survival mode or you want to gain market share, you will leave with some clear next steps to give you solid footing to achieving excellent results.

CECT 0198 – Theory Test Prep 1.6 hrs
Two-Saturday course prepares individuals to take the Theory Utah Journeyman or Master Electrical Exam by reviewing each of the primary theory topics covered when sitting for the electrical theory portion of the exam.

CECT 0199 – Code Test Prep 1.6 hrs
Two-Saturday course prepares individuals to take the Code Utah Journeyman or Master Electrical Exam by reviewing each of the primary code topics covered when sitting for the code portion of the exam.

CECT 0200 – Utah Code Book Review 0 hrs
Focus is on the DOPL Contractors State Code Book additions and supplements for the current year.

CECT 0201 – LEED 101 0.1 hrs
Overview of LEED (Leadership in Energy and Environmental Design) principles and the LEED rating system used to measure and certify buildings that employ green building principles in their construction and design.
CECT 0202 – Advanced LEED 0.1 hrs
Course focuses on green building and energy conservation issues taught by an expert in energy conservation building.

CECT 0203 – Mechanics' Liens Law 0.1 hrs
Overview of Mechanics lien laws and their relationship to current laws in Utah. Students will learn the steps they need to take to help protect their lien rights.

CECT 0204 – Insurance Legal Issue in Const 0.1 hrs
Engineers will become more familiar with construction insurance policies, what they cover and how to protect yourself in the event of misfortune as a result of your work.

CECT 0205 – Litigating a Construction Case 0.1 hrs
Litigation in construction cases is the focus of the lecture. The pros and cons of alternative dispute resolution and the expense associated with litigation. Session will conclude with tips to avoid litigation in the future.

CECT 0206 – Successful Contracts 0.1 hrs
Explore several common provisions in construction related contracts and learn how Utah law may enhance or modify provisions. Topics include: Indemnification, alternate dispute resolution, prompt payment and attorney fees.

CECT 0207 – Construction Law Topics 0.1 hrs
The AIA A201 (American Institute of Architects) form and the consensus DOCS contracts endorsed by the Association of General Contractors will be discussed. Recent changes along with the suggestions for usage will be presented.

CECT 0208 – Construction Legislative Topic 0.1 hrs
Overview of how relatively recent changes to laws by the Utah Legislature in 2009 session impact an Engineer’s business. Review of regulations as they pertain to construction trades and how court decision have impacted Utah contractors.

CECT 0209 – IBC Commercial Codes 0.1 hrs

CECT 0210 – IRC Residential Code 0.1 hrs
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>CECT 0211</td>
<td>7 Habits of Engineer Managers</td>
<td>0.1 hrs</td>
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<td></td>
<td>Course teaches engineer managers how to develop and apply skills for optimum leadership in their profession. Based on Dr. Stephen Covey’s best-selling book The Seven Habits of Highly Effective People.</td>
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<tr>
<td>CECT 0212</td>
<td>7 Habits of Effective Engineer</td>
<td>0.3 hrs</td>
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<td>Engineers are led through a step-by-step process of how to successfully apply time, relationship and Career Dev skills within engineering careers. Based on Dr. Stephen Covey’s bestselling book, The Seven Habits of Highly Effective People.</td>
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<tr>
<td>CECT 0213</td>
<td>7 Habits of Engineer Mgrs CD</td>
<td>0.1 hrs</td>
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<td>Course teaches engineer managers how to develop and apply skills for optimum leadership in their profession. Based on Dr. Stephen Covey’s bestselling book, The 7 Habits of Highly Effective People.</td>
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<tr>
<td>CECT 0214</td>
<td>7 Habits of Effect Engineer CD</td>
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<td>Engineers are led through a step-by-step process of how to successfully apply time, relationship and career dev skills within engineering careers. Based on Dr. Stephen Covey’s bestselling book, The 7 Habits of Highly Effective People.</td>
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<td>CECT 0215</td>
<td>Patent Protection Basics</td>
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<td>Learn the basics of patent law and how to obtain or interface with patent protection. Class offers step-by-step approach to patent your engineering method or design or interface and navigate around another’s patented rights.</td>
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<td>CECT 0216</td>
<td>Intellectual Prop &amp; Copyright</td>
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<td>Review of Intellectual Property aspects and issues involved in the engineering and construction industry. Understand how to copyright-protect your engineering drawings or designs or handle another’s copyright protected material.</td>
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<td>CECT 0300</td>
<td>LEED 101</td>
<td>0.1 hrs</td>
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<td></td>
<td>Overview of LEED (Leadership in Energy and Environmental Design) principles and the LEED rating system used to measure and certify buildings that employ green building principles in their construction and design.</td>
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<tr>
<td>CECT 0301</td>
<td>Advanced LEED</td>
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<td></td>
<td>Course focuses on green building and energy conservation issues taught by an expert in energy conservation building.</td>
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<tr>
<td>CECT 0302</td>
<td>Mechanics’ Liens Law</td>
<td>0.1 hrs</td>
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<td></td>
<td>Overview of Mechanics’ lien laws and their relationship to current laws in Utah. Students will learn the steps they need to take to help protect their lien rights.</td>
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<td>CECT 0303</td>
<td>Insurance Legal Issues in Cons</td>
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<td>Become more familiar with construction insurance policies, what they cover and how to protect yourself in the event of misfortune as a result of your work.</td>
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<tr>
<td>CECT 0304</td>
<td>Litigating a Construction Case</td>
<td>0.1 hrs</td>
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<td></td>
<td>Litigation in construction cases is the focus of the lecture. The pros and cons of alternative dispute resolution and the expense associated with litigation. Session will conclude with tips to avoid litigation in the future.</td>
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<tr>
<td>CECT 0305</td>
<td>Successful Contracts</td>
<td>0.1 hrs</td>
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<td></td>
<td>Explore several common provisions in construction related contracts and learn how Utah law may enhance or modify provisions. Topics include: Indemnification, alternate dispute resolution, prompt payment and attorney fees.</td>
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<tr>
<td>CECT 0306</td>
<td>Construction Law Topics</td>
<td>0.1 hrs</td>
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<td></td>
<td>The AIA A201 (American Institute of Architects) form and the consensus DOCS contracts endorsed by the Association of General Contractors will be discussed. Recent changes along with the suggestions for usage will be presented.</td>
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<tr>
<td>CECT 0307</td>
<td>Construction Legislative Topic</td>
<td>0.1 hrs</td>
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<td></td>
<td>Overview of how relatively recent changes to laws by the Utah Legislature in 2009 session impact an Engineer’s business. Review of regulations as they pertain to construction trades and how court decision have impacted Utah contractors.</td>
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<tr>
<td>CECT 0308</td>
<td>IBC Commercial Codes</td>
<td>0.1 hrs</td>
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<tr>
<td>CECT 0309</td>
<td>IRC Residential Code</td>
<td>0.1 hrs</td>
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<tr>
<td>CECT 0310</td>
<td>Patent Protection Basics</td>
<td>0.1 hrs</td>
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<td>Learn the basics of patent law and how to obtain or interface with patent protection. Class offers step-by-step approach to patent your engineering method or design or interface and navigate around anothers patented rights.</td>
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<td>CECT 0311</td>
<td>Intellectual Prop &amp; Copyright</td>
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<td>Review of Intellectual Property aspects and issues involved in the engineering and construction industry. Understand how to copyright-protect your engineering drawings or designs or handle anothers copyright protected material.</td>
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CECT 0400 – LEED 101 0.1 hrs
Overview of LEED (Leadership in Energy and Environmental Design) principles and the LEED rating system used to measure and certify buildings that employ green building principles in their construction and design.

CECT 0401 – Advanced LEED 0.1 hrs
Course focuses on green building and energy conservation issues taught by an expert in energy conservation building.

CECT 0402 – Mechanics' Liens Law 0.1 hrs
Overview of Mechanics lien laws and their relationship to current laws in Utah. Students will learn the steps they need to take to help protect their lien rights.

CECT 0403 – Insurance Legal Issues in Cons 0.1 hrs
Become more familiar with construction insurance policies, what they cover and how to protect yourself in the event of misfortune as a result of your work.

CECT 0404 – Litigating a Construction Case 0.1 hrs
Litigation in construction cases is the focus of the lecture. The pros and cons of alternative dispute resolution and the expense associated with litigation. Session will conclude with tips to avoid litigation in the future.

CECT 0405 – Successful Contracts 0.1 hrs
Explore several common provisions in construction related contracts and learn how Utah law may enhance or modify provisions. Topics include: Indemnification, alternate dispute resolution, prompt payment and attorney fees.

CECT 0406 – Construction Law Topics 0.1 hrs
The AIA A201 (American Institute of Architects) form and the consensus DOCS contracts endorsed by the Association of General Contractors will be discussed. Recent changes along with the suggestions for usage will be presented.

CECT 0407 – Construction Legislative Topic 0.1 hrs
Overview of how relatively recent changes to laws by the Utah Legislature in 2009 session impact an Engineer’s business. Review of regulations as they pertain to construction trades and how court decision have impacted Utah contractors.

CECT 0408 – Patent Protection Basics 0.1 hrs
Learn the basics of patent law and how to obtain or interface with patent protection. Class offers step-by-step approach to patent your engineering method or design or interface and navigate around anothers patented rights.
CECT 0409 – Intellectual Prop & Copyright 0.1 hrs
Review of Intellectual Property aspects and issues involved in the engineering and construction industry. Understand how to copyright-protect your engineering drawings or designs or handle another's copyright protected material.

CECT 0410 – 7 Habits of Effective Attorney 0.3 hrs
Attorneys are led through a step by step process of how to successfully apply time, relationship and career dev skills with engineering careers. Based on Dr. Stephen Covey's bestselling book, The Seven Habits of Highly Effective People.

CECT 0500 – 7 Habits of Effect Funeral Dir 0.3 hrs
Funeral directors are led through a step by step process of how to successfully apply time, relationship and career skills within funeral careers. Based on Dr Stephen Covey's bestselling book, The Seven Habits of Highly Effective People.

CECT 0501 – Funeral Director Management 0.35 hrs
Funeral Directors are shown ways to gain a different way of thinking for both personal and professional focus and accomplishment. This course will help participants better understand and identify the tasks and priorities that matter most, which will enable them to perform to their best abilities.

CECT 0502 – Bloodbourne Pathogens 1 hrs
What are the OSHA requirements specific to funeral homes? This course will review bloodborne diseases including hepatitis and HIV and how to protect yourself from exposure. Record keeping and reporting procedures in case of exposure. Learn what it takes to keep your funeral home and employees safe from hazardous pathogens.

CECT 0503 – Firefighter Funeral Traditions 1 hrs
The funeral of a firefighter is steeped in tradition. In this course you will not only learn the tradition, you will also learn the meaning, or history behind it.

CECT 0504 – Hazardous Comm & Formaldehyde 1 hrs
This course looks at OSHA's Hazardous Communication and Formaldehyde standards. It explores hazardous chemical inventory requirements, what chemicals are considered hazardous and the important components of a Material Safety Data Sheet (MSDS) and how to read it. The course also explains formaldehyde exposure limits, and health affects, including ways to prevent over-exposure.

CECT 0600 – Focus For Teachers 0.3 hrs
This module is presented in a way to help you gain a different way of thinking for both personal and professional focus and accomplishment. Performing to your best abilities is a goal that we all want but fall short of sometimes. This module will help you better understand and indentify the tasks and priorities that matter most, which will enable you to reach this goal.
CECT 0650 – Stay on Task/Maintaining Care 0.1 hrs
The responsibilities of a Radiation Therapist require patients being treated with precision and attention to detail. There also needs to be a compassionate approach to patient care. Using both approaches of precision and compassion provide a complete approach to the patients daily treatment experience.

CECW 0110 – Word Level I 0 hrs
This workshop teaches students how to create, format, print and save Word documents. Tasks include text format, cut, copy and paste; spelling and grammar tools. Students will also learn how to work with document views and print options.

CECW 0124 – Word Level II 0 hrs
This workshop teaches students how to insert dates and symbols; create and edit Tables, apply borders and shading. The student will also learn how to insert, move and size graphics, Watermarks, WordArt and drawing objects; create and modify Templates and create Newsletter-Style Columns.

CECW 0125 – Word Level III 0 hrs
This workshop teaches students how to use AutoFormat, AutoCorrect, AutoText, Find and Replace, and Thesaurus. Students will also learn how to use Outline view, Section Headers and Footers, Table of Contents/Authorities, Index, Bookmarks, Footnotes, and Endnotes.

CECW 0210 – Excel Level I 0 hrs
This workshop introduces the basic tools & shortcuts to become more productive using MS Excel for creating, printing and saving Excel workbooks. Students will learn basic formulas and functions, absolute references, work with ranges, auto-fill, and copy/move data.

CECW 0211 – Excel Large Worksheets 0 hrs
This workshop teaches students how to work with large data sets and multiple worksheets; insert/delete worksheets, move, copy, and re-name worksheets. Other topics include creating 3-D formulas or formulas using multiple worksheets/workbooks and range names.

CECW 0212 – Excel Charts and Graphics 0 hrs
This workshop teaches students how to present your data using Excel Charts. Tasks include creating, formatting and editing charts; changing chart types, formatting chart objects, legends, data table, source data, and printing charts. Advanced chart formatting of Gridlines, Axis, Secondary Axis, Trendline, and user defined Charts.

CECW 0213 – Excel Database Mgt/Pivot 0 hrs
This workshop teaches students how to take raw data and create valuable management reports using Excel Database tools. Filter data with AutoFilter and Advanced filters; perform Multiple-field sorts; format data using Conditional Formats, Data Bars, Icon Sets, Validation, Subtotals, Database functions, PivotTables and PivotCharts.
CECW 0214 – Excel Advanced Functions 0 hrs
This workshop introduces advanced Excel functions including Financial Functions, IF, AND, OR Logic Functions, VLOOKUP, HLOOKUP, and ISERROR advanced functions. Students will learn about Scenarios, Goal Seek, Data Tables and Custom Views.

CECW 0215 – Excel Organizational Tools 0 hrs
This workshop introduces the skills to organize Excel information; create Comments, use Auditing Tools, Worksheet Protection, Workbook Protection, assigning and removing passwords. Students will also learn how to create and use Excel Templates, share Excel workbooks with others and track changes to shared workbooks.

CECW 0216 – Excel Macros, Toolbars 0 hrs
Learn how to use Excel Macros for repetitive tasks. This workshop introduces the skills necessary to Define, Record and Run Excel Macros. Students will learn how to edit Macros, enter Macro Commands using the Visual Basic for Applications window, use Relative and Absolute References; assign Macro shortcut-Keys, create and modify macro buttons.

CECW 0230 – QuickBooks Beginning 0 hrs
This workshop will review general accounting basics including the profit and loss report and balance sheet. Students will learn how QuickBooks works, setting up a company file, customizing the chart of accounts, setting up a bank account, navigating menus and reports, customizing the desktop, merging names, entering historical data, and writing letters in Microsoft Word using the data in QuickBooks.

CECW 0231 – QuickBooks Intermediate 0 hrs
This workshop covers tracking fixed assets and their associated liabilities, depreciation, memorized transactions, making deposits not related to receivables, sales tax, bank reconciliation, custom memorized reports, backing up/accountant’s review copy, budgets, and credit card transactions.

CECW 0232 – QuickBooks Advanced 0 hrs
This workshop covers setting up and tracking payroll liabilities, adding employees, adding payroll items, year-to-date payroll issues, payroll additions and deductions, preparing quarterly 941, making payroll tax deposits, processing payroll checks, processing payroll liabilities, and payroll reports. Also covered in this workshop are job costing topics such as time tracking, assigning costs to jobs, and job costing reports.

CECW 0233 – QuickBooks Professional 0 hrs
This workshop includes QuickBooks Beginning, Intermediate and Advanced workshops.
CECW 0302 – Introduction to Mac 0 hrs
This workshop will put you in control of the Mac operating system. You'll learn how to organize and manage your files, how to find things, and introduce you to Mac programs such as iTunes, iPhoto, iCal, and iMovie.

CECW 0304 – Windows Overview 0 hrs
This workshop teaches students the basics of Personal Computers hardware/software components, Windows features, Start Menu, Taskbars, views and toolbars. Tasks include using multiple windows, opening, moving, sizing, closing, switching between windows, working with multimedia files. Cut, Copy and Paste. Students will learn File Management, how to organize files, folders using Windows Explorer.

CECW 0305 – Introduction to PC 0 hrs
This workshop teaches students the basics of Personal Computers hardware/software components, Windows features, Start Menu, Taskbars, views and toolbars. Tasks include using multiple windows, opening, moving, sizing, closing, switching between windows, working with multimedia files. Cut, Copy and Paste. Students will learn File Management, how to organize files, folders using Windows Explorer.

CECW 0307 – Mac Overview 0 hrs
Course covers both how to secure Linux and how to use Linux as a security device for your own network. Topics covered include IP filtering, proxy services, secure shell, intrusion detection, and virtual private networks.

CECW 0313 – A+ Computer Training 0 hrs
The A+ workshop covers basic to advanced PC hardware and Windows operating system installation, configuration, and troubleshooting and helps prepare students for the CompTIA A+ certification exam.

CECW 0314 – Network+ Computer Training 0 hrs
The Network+ workshop covers basic networking concepts for connecting to a network and setting up a small office/home office (SOHO) network. This workshop helps students prepare to take the CompTIA Network+ certification exam.

CECW 0315 – Security+ Computer Training 0 hrs
The Security+ workshop covers critical security concepts and skills required for military IT personnel as well as for an increasing number of IT security jobs with corporations and the government. This workshop helps students prepare to take the CompTIA Security+ certification exam.

CECW 0401 – Understanding Databases 0 hrs
Participants learn the basic terminology, design methodology and relational concepts of a database. The course includes exercises in analyzing real-world database examples as well as relating database design to business issues.
CECW 0405 – Access Level I
0 hrs
This workshop teaches students how to create a MS Access database or how to modify your existing database. Topics include creating tables, creating relationships between tables, setting field properties, filtering and sorting records. You will also learn how to create simple queries and modify query results using Design View and create basic Forms and Reports using the Wizards. Time is reserved for assistance on your specific needs and projects.

CECW 0406 – Access Level II
0 hrs
This workshop teaches students how to create Query tasks using And/Or, comparison operators, calculated fields, multiple tables in a query, action queries and using advanced query wizards. Form and Report tasks include using the new features in 2007/2010 to quickly create forms and reports, using the Design View editing tools. Advanced Form features include how to create Combo boxes; Option Groups and Check Boxes. Advanced Report features include how to add groupings, calculations, sub totals, and grand totals.

CECW 0407 – Access Level III
0 hrs
This course introduces more advanced features including using sub forms, creating form letters, integrating MS-Access with Excel, Word and other databases, creating and modifying switchboards, importing and indexing. This course also includes a comprehensive introduction to Macros, a unique method for using Visual Basic actions, without being a programmer. Time is reserved for assistance on your specific needs and projects.

CECW 0408 – Access Adv Topics: Query Topic
0 hrs
This workshop is for experienced Access users. Tasks include techniques for basing one query upon another, effective use of Joins, Crosstab Queries, and queries for Combo Boxes. This course also includes a comprehensive look at using Functions for calculations in queries; date functions (such as DateDiff), text functions (such as the functions needed split text into separate columns) and the IIF function which allows management in data based on conditions. Examples from your work can be integrated into the class and time is reserved for assistance on your specific needs.

CECW 0409 – Access Adv Topics: Reporting
0 hrs
This workshop is for experienced Access users. Tasks include creating a custom form for entering query criteria for a report, printing criteria on a report, and using sub-reports, conditional formatting, changing the sort order of a report on the fly, creating grouping levels and adding graphics to a report. This course also shows you how to use Domain Functions so that data from unrelated sources can be incorporated on the same report. Examples from your work can be integrated into the class and time is reserved for assistance on your specific needs.
CECW 0410 – Access- Adv Topics: Macro 0 hrs
This workshop is for experienced Access users. Teaches thorough understanding of Macros the actions they have to offer and how Macros relate to Visual Basic. Common and advanced uses for macros are discussed, such as creating macro groups for better organization, using the SetValue macro to set properties on the fly, creating a splash screen, using macros with action queries to automate processes, sending custom emails and converting macros into visual basic code. Examples from your work can be integrated into the class and time is reserved for assistance on your specific needs.

CECW 0414 – Access Adv Security 0 hrs
Learn to set up security for your MS Access database using the Security wizard. Create/modify users/passwords, customize user/group rights, use Workgroup Administrator, implement security on a network.

CECW 0429 – Access Spec Topics 0 hrs
Special topics with MS Access.

CECW 0504 – Outlook Level I 0 hrs
Learn how to work with Outlook Messages and Message features, Calendar, Contacts, Tasks, and organizing Outlook items.

CECW 0507 – MS Office Overview 0 hrs
Provides an introduction to MS Word, Excel spreadsheets and PowerPoint presentations and Outlook.

CECW 0508 – MS Project Level I 0 hrs
Microsoft Project helps you easily plan projects, stay organized and keep projects on track. Students will learn how to start, save, print and close a project, use project templates, work with Tasks, create and adjust resources. Students will learn how to create, change and assign calendars, define costs, assign costs, and work with the critical path.

CECW 0601 – Internet Overview 0 hrs
Introduces the skills necessary to begin using the Internet. Students will learn Internet terms and definitions, how to use Internet Explorer and Firefox browsers, how to navigate forward, back and home, how to create bookmarks, use search engines to locate information, and how to print information. Internet email (Yahoo, Gmail or Hotmail) and social networking sites Facebook, LinkedIn and Twitter will also be explored.

CECW 0603 – Dreamweaver 0 hrs
Dreamweaver is a professional Web site design and production tool that gives you the power you need for rapid Web development. DreamWeaver will help you build better Web sites faster.
CECW 0607 – Flash
Introduces Flash to the first time user. Learn how to import external files such as images, sounds and movies.

CECW 0609 – eBay Selling
Topics include opening a seller account, doing effective research, creating listings, setting pricing, opening a PayPal account, learning how to monitor your listings, completing transactions, and learning how to pinpoint fraud.

CECW 0612 – CSS & XHTML
This workshop teaches students how to use CSS3 & XHTML5 to control the style and layout of multiple Web pages. CSS allows you to save time designing, updating and maintaining Web pages as well as presenting a consistent appearance for your Web pages.

CECW 0620 – Social Media For Business
This workshop is designed for small to medium businesses that are new to social media marketing, or are struggling with proper implementation. In a hands-on environment, you will learn the basics and how to get started.

CECW 0701 – Publisher
This workshop teaches students how to use Microsoft Publisher to create, a wide range of professional-quality publications and marketing materials. Create brochures, postcards, greeting cards, or newsletters, from a large selection of pre-designed, customizable templates to deliver high-quality results without having graphic design experience.

CECW 0703 – PowerPoint Level I
This workshop teaches students how to create, run and navigate PowerPoint presentations. Topics include presentation skills, slide format/layout, text format, bullets, drawing objects, images and pictures. Students will learn how to print slides, handouts, Speaker Notes, move, duplicate and sort slides; set Slide Transitions, run and navigate a Slide Show.

CECW 0704 – PowerPoint Level II
This workshop teaches students how to create more advanced presentations. Topics include charts, tables; Custom Color Schemes, editing presentation masters, notes masters, handout masters and saving a Custom Template. Students will learn how to set up slides with Special Effects, Animation, Sound and Video. Students will also learn how to edit and import charts; create custom charts, use organization charts, diagrams and SmartArt.
CECW 0800 – Photoshop Level I
This workshop is designed to help students create images for both print and the Web. Students will use Photoshop's basic tools, palettes, and features to create images, retouch photographs, and save files using multiple file formats.

CECW 0801 – PhotoShop Level II
This workshop builds upon the concepts from InDesign Level I. Before taking this course, students should have basic photo editing skills, and they should know how to create simple shapes and drawings. Students will learn advanced features to create artwork for both print and the Web.

CECW 0803 – Adobe Acrobat Professional
This course provides students with the skills needed to create PDF (Portable Document Format) documents. PDF Forms can be delivered, filled out by users, and returned either electronically or on paper. Tasks include how to create interactive forms with Text fields, Checkboxes, Radio Buttons, List Boxes, Drop-down List, Combo Boxes, buttons and images.

CECW 0804 – Illustrator Level I
Learn how to use Adobe Illustrator to create artwork for both print and web. Explore setup options, identify components of the workspace; navigate in the artwork window, view artwork using menus, tools, and panels; create basic shapes, lines and text objects; transform using scale, rotate, flip and align; modify text formats to enhance appearance, alignment and spacing options.

CECW 0805 – Illustrator Level II
This workshop is filled with interactive exercises designed to help students create artwork for both print and Web using Illustrator. Students will learn how to use advanced features to Transform objects, apply Filters and Effects, automate tasks, modify Images, 3D effects, Liquify and Symbolism Tools.

CECW 0806 – Indesign Level I
This workshop helps students design and produce professional print documents and layouts using Indesign. Students will learn how to manipulate text, shapes, colors, and frames to create eye-catching print products.

CECW 0807 – Indesign Level II
This workshop builds upon the concepts from InDesign Level I. Students will learn how to manipulate page layout, control the appearance of text and tables, and create books, tables of content, and indices; convert documents to PDF and other formats.

CECW 0813 – Adobe Creative Suite
The Adobe Creative Suite workshop includes beginning and advanced workshops for Photoshop, Illustrator and InDesign.
### CECW 0820 – Video Editing 0 hrs
Students will learn how to create a movie using Adobe Premiere Professional software. This hands-on course guides students through the process of creating a movie from start to finish, leaving time for questions and answers about the many options that Adobe Premiere provides.

### CECW 0825 – Visio 0 hrs
Use Microsoft Visio software to communicate information by using diagrams. Students will learn about the Visio environment how to use stencils, scale and resize objects, draw basic shapes, manipulate compound lines, and distribute and group objects. They will also learn how to create network diagrams, drawings, org charts, work with text, format shapes and lines, apply a background page, advanced layout and connection techniques.

### CECW 0990 – MS Office Special Topics 0 hrs
MS Office Special Topics

### CECW 0991 – CWS Special Topics 0 hrs
Special Topics workshop

### CEEI 0100 – SLR Photo: Basics 10 hrs
Do you want to learn how to go beyond a point and shoot snapshots? Learn the basics of SLR photography: ISO, Program Modes, Aperture, Shutter Speed, Priorities, Depth of Field, Photo Composition and much more. Be sure to bring your SLR Digital camera and instruction manual to class.

### CEEI 0110 – SLR Photo-Beyond the Basics 10 hrs
Prereq: CEEI 0100. Learn about the cameras and equipment, how to take better photographs, flash photography, fun photography including smoke and water drops. Also learn home studio lighting and macro, night, and landscape photography. Be sure to bring your SLR digital camera and instruction manual to class.

### CEEI 0321 – Career Transitions 15 hrs
A Growing number of adults are choosing to work beyond their traditional retirement years! This workshop is designed for those re-entering the workforce, planning to work a little longer or wanting to explore new educational or career pathways.

### CEEI 0322 – Savvy Social Security 1.5 hrs
This informational workshop will share important rules and strategies for collecting your Social Security, how to estimate benefits, coordinate benefits w/your spouse & other sources of retirement income and minimize taxes.
CEEI 0323 – Easy Musical Keyboarding 7.5 hrs
This revolutionary 'easy to learn' musical keyboarding workshop is designed for those who are 50 plus. Basic music concepts using an easy to follow lesson book will help you improve your mental fitness & develop a new hobby to love!

CEEI 0324 – Intro to Tai Chi & Qi Gong 24 hrs
Chi Gung & Tai Chi began in ancient China as means of physical/mental enlivening & rejuvenation. Discover the body’s natural process of healing - strengthening joints, circulatory systems & balance.

CEEI 0325 – Begin Tai Chi (Yang Style) 7 hrs
This graceful form of ancient Chinese martial arts is still practiced today as meditation in motion. Students will learn basic concepts of body/mind connection, self massage, meditation techniques to calm the mind and reduce stress.

CEEI 0327 – Boost Your Technology! Boomers 10 hrs
This series of basic computer & social media training is designed for adult learners who want to be more technology savvy. Learn to navigate your personal computer & get connected with friends & family through social media.

CEEI 0328 – Skype Basics 2 hrs
Stay connected with friends and family using Skype to make voice and video calls on the internet for free! Make calls around the world for a fairly affordable rate. Webcam is included in the cost of course fee.

CEEI 0329 – Jane Austen:Life,World & Novel 9 hrs
Weekly discussions will explore Jane Austen's life, novels & the world she lived in. Learn to address a Duke, properly be introduced to a gentleman at a ball, learn the stories of England’s royalty & Jane's connection to French Revolution.

CEEI 0331 – Smart Investing for Retirement 6 hrs
What is your retirement exit strategy? Retirement is one of life's biggest transitions. Discover the financial tools you need and plan your future with confidence!

CEEI 0332 – Keep It Movin’ 30 hrs
This low impact training is geared with the baby boomer in mind! Join your peers in this strength training and balance workout combined with a fun atmosphere. Class meets at Alta Canyon Sports Center in Sandy for 15 weeks.
CEEI 0333 – Basic Nutrition Healthier Life
10 hrs
Improve your health by learning how your body reacts to calories, hydration, carbohydrates, fiber, protein, fat, vitamins and minerals. You'll also learn how your diet can affect diseases such as inflammation, allergies, hypertension, cholesterol, and much more.

CEEI 0334 – Intro to Square Foot Gardening
2 hrs
Discover the advantages of a SFG system as well as basic concepts including plantings, spacing and secret to a successful soil mix. Learn from a certified SFG professional who trained under the founder of SFG, Mel Bartholomew.

CEEI 0335 – Intermediate SFG
2 hrs
Continuation of introductory SFG soil structure, composting, advanced techniques, vertical gardening and gardening protection discussed. Instructor is a certified SFG professional trained by the founder of SFG, Mel Bartholomew.

CEEI 0336 – Advanced SFG
3 hrs
This hands-on workshop will build on previously taught concepts. Building a light station, sprouting seed, composting methods for saving seeds and increasing efficiency will be introduced. Bring your working gloves & notepad!

CEEI 0337 – Designer Cookies - Dresses
3 hrs
Designer Cookies Module 1: All About Dresses
This hands-on workshop will teach you to create simply exquisite cookies for any season and occasion. So simple even the novice will feel like a pro.

CEEI 0338 – Designer Cookies-Baby Shower
3 hrs
Designer Cookies Module 2: Baby Shower Bibs
This hands-on workshop will teach you to create simply exquisite cookies for any season and occasion. So simple even the novice will feel like a pro.

CEEI 0339 – Designer Cookies-Birthdays
3 hrs
Designer Cookies Module 3: Birthday Cakes & Balloons
This hands-on workshop will teach you to create simply exquisite cookies for any season and occasion. So simple even the novice will feel like a pro!

CEEI 0340 – Designer Cookies-Springerle
5 hrs
Designer Cookies Module 4: German Springerle
This hands-on workshop will teach you to create simply exquisite cookies for any season and occasion. So simple even the novice will feel like a pro!
CEEI 0341 – Designer Cookies: Ornaments  
Designer Cookies Module 5: Christmas Ornaments  
This hands-on workshop will teach you to create simply exquisite cookies for any season and occasion. So simple even the novice will feel like a pro!

CEEI 0342 – Creative Molds: Shells/Flowers  
Creative Molds Module 1: Sea Shell & Flowers  
Decorate with creativity through this hands-on workshop and amaze everyone with your clever, crafty, edible decorations!

CEEI 0343 – Creative Molds: Buttons/Jewels  
Creative Molds Module 2: Buttons & Jewels  
Decorate with creativity through this hands-on workshop and amaze everyone with your clever, crafty, edible decorations!

CEEI 0344 – Chocolate Art Edible Designs  
Chocolate Art Module 1: Edible Chocolate Designs  
Learn how to create edible chocolate designs and how to use modeling chocolate to create fantastic designer-style desserts. This is a hands-on workshop you're going to love!

CEEI 0345 – Chocolate Art: Modeling Design  
Chocolate Art Module 2: Modeling Chocolate Designs  
Learn how to create edible chocolate designs and how to use modeling chocolate to create fantastic designer-style desserts. This is a hands-on workshop you're going to love!

CEEI 0349 – Discovering the World of Wine  
Explore & taste the six noble grape varieties of the world! You'll enjoy learning about the "markers" of each grape variety, organoleptic wine eval techniques and shopping tips for the best wine values! Bring your photo ID to class.

CEEI 0350 – Laughter Yoga  
This is a mind/body class practicing laughter to lower stress hormones, foster a positive and hopeful attitude and help increase health and vitality through unconditional laughter and breathing.

CEEI 0351 – Fortify Your Knowledge of Port Wine  
Taste three styles of port wine paired with blue cheeses and chocolates while you learn the history and production methods of the world's most popular and collectible fortified wine.
CEEI 0352 – Champagne and Sparkling Wine  
2 hrs
Taste sparkling wines from France, Italy, Spain, & the new world paired w/ appetizers & plenty of ideas for holiday parties. Learn about Methode Champenoise style of production & Champagne’s most impressive price tag of all sparkling wines.

CEEI 0353 – Beginning Oil Painting  
10 hrs
Discover the art of oil painting through this hands-on work-shop! Instructor will introduce art supplies; colors and values; design compositions & techniques to enable students to create a beautiful painting to take home!

CEEM 0001 – Energy Mgt AB Program  
0 hrs
Offset costs of developing, updating and maintaining accelerated program.

CEEM 0310 – Lighting Fundamentals  
3 cr
Assess quantity and quality of light, light sources and controls, luminaries, manufacturer lamp and ballast specifications, lighting power density and HVAC interactions, retrofit opportunities, cost saving annually, lighting codes/regulations and lighting audit projects.

CEEM 0320 – Lighting Applications  
3 cr
Review terminology and lighting fundamentals, IES illumiance selection procedures, lighting system evaluation, luminaries and associated components. Perform illuminance calculations, including point-by-point, lumen and computerized procedures.

CEEM 0410 – Energy Investment Analysis  
2 Cr
Prereq: EGMT 1210, 1240, 1310 and MATH 1010. What is/isn't appropriate energy efficiency measure investment? Utility rate schedules, simple payback analysis, comp. interest, time value of money, cost estimating, life cycle cost analysis, simulation tools reviewed. LCCA project req.

CEEM 0420 – Energy Accounting  
2 Cr
Prereq: CIS 2990. Course will review energy units, data gathering for energy accounting utility rates and schedules, energy data organization, acj. baselines, cost avoidance, load factor, data analysis, data presentation, ENACT software and spreadsheet development.

CEEN 1100 – Introduction To Civil And Environmental Engineering Design  
3 cr
Prereq: MATH 1010 or appropriate Accuplacer score. The progression of civil and environmental engr. including the major elements of the profession. An understanding of the core disciplines and design in engr. is reviewed. It includes speakers, design project, and lectures.

CEEN 2000 – Cooperative Education In Civil Engineering  
1-2 cr
Prereq: Sophomore standing, minimum 2.0 GPA, and instructor approval. A supervised work experience in a business, industrial or government related to the program major. Credit is awarded for successful completion of specific learning objectives that provide new learning related to the major.
CEEN 2010 – Statics 3 cr
Prereq: MATH 1210. Recommended prereq: PHYS 2210. Principles of forces, moments and couples; resultant and static equilibrium of general force systems; statically equivalent systems, center of gravity and pressure; friction; free body method of analysis. Principles applied to engineering problems.

CEEN 2020 – Dynamics I 2 cr
Prereq: CEEN 2010. Position, velocity and acceleration, vector calculus, particle kinematics, kinetics of particles, including Newton’s Laws, conservation of momentum and energy, and impact vibratory motion of particles are covered.

CEEN 2130 – Engineering Economics With Statistics And Probability 4 cr
Prereq: MATH 1050 or MATH 1080. Lectures and discussion on Engineering economic decisions, equivalence and interest formulas, rate of return, project evaluation and cash flow, depreciation, taxes, and an intro. to Eng. Probability and Statistics.

CEEN 2140 – Strength of Materials 2 cr
Prereq: CEEN 2010 and MATH 2250 (either can be taken concurrently). Coreq: CEEN 2145. Internal forces in members, concept of stress and strain, axial loading, Hooke’s Law, torsion, pure bending, traverse loading, transformations of stress and strain, plane stress and strain, pressure vessels, Mohr’s circle, strain energy, beam deflection and column bending are discussed.

CEEN 2145 – Testing Of Engineering Materials 1 cr
Recommended coreq: CEEN 2140. This is an introductory laboratory in mechanical behavior of materials using basic testing methods and instrumentation, column bending, tension and compression of metals, concrete failure, Charpy’s Impact, and creep tests.

CEEN 2240 – Surveying For Civil Engineers 3 cr
Prereq: MATH 1060 or MATH 1080, or appropriate Accuplacer score. Surveying procedures and their application to design and construction are taught. Students receive hands-on experience using total stations, GPS, and other surveying equipment. Laboratory included.

CEEN 2300 – Engineering Thermodynamics 2 cr
Prereq: CHEM 1210 and MATH 1220. Recommended prereq: PHYS 2210. First and second law of thermodynamics, internal energy, enthalpy, entropy and open and closed systems are covered. Engineering cycles including Carnot, Otto, Diesel, Brayton and Refrigeration are introduced.

CEEN 2450 – Numerical Methods 3 cr
Prereq: ENGR 1030 or 1040; MATH 2250. Recommended prereq: MATH 2210. Numerical techniques used in engineering computing, including: convergence, error accumulation, roots, solution of linear and nonlinear equations, numerical integration and differentiation, and solutions to differential equations.
CEEN 2900 – Special Topics In Civil/Environmental Engineering  1-3 cr
Special Topics reflecting items of current interest in Civil/Environmental Engineering in addition to some of the ASCE (American Society of Civil Engineers) issues and engineering marvels.

CEET 0100 – CPR  0 hrs
Course satisfies the BLS CPR prerequisite for the EMT program.

CEET 0200 – EMT Re-Certification  0 hrs
For those holding current valid EMT certification. Training selected by the student and instructor from the ongoing course. Provides required general CME hours for the currently certified EMT.

CEET 0300 – EMT-Advanced Course  0 hrs
Advance EMT training to include advance airway techniques, intravenous therapy, Advanced EMT level drug administration, Advanced EMT patient assessment skills. Upon successful course completion, students will be recommended to take the Utah Department of Health Advanced EMT Certification test.

CEGC 0120 – RESNET/HERS Rater Exam Prep  10 hrs
Introduction to integrating green methods into projects and remodels. Students will evaluate existing buildings and create a retrofit plan that incorporates elements of energy efficiency, water efficiency materials, indoor air quality and other green building features.

CEGE 0001 – General Education AB Program  0 hrs
Offset costs of developing, updating and maintaining accelerated program.

CEGM 0100 – Intro to Gas Measurement-Pilot  0 hrs
Intro to Natural Gas Measurement is a pilot course utilizing curriculum developed by the Gas Measurement Training Council. It will provide an overview of the natural gas measurement and transmission industry and the basic skillsets necessary to work as a field technician. Topics will include gas properties, fluid mechanics, gas flow measurement, gas meters, and industry standard safety guidelines.

CEGN 0001 – Gen Computer & Internet Tools  0 hrs
Introduction to genealogy computer programs and basic genealogy skills used to conduct research and document records with appropriate citations. Students will learn how to use internet tools for genealogy research. May take Department Challenge Exam in place of course.

CEGN 0010 – Intro to Genealogical Research  0 hrs
Prereq: Completion of CEGN 0001 w/C grade or better or CEGN 0001 Department Challenge Exam. Students explore record groups and repositories which contain 10 U.S. sources known to provide evidence linking families from students’ lifetime to 1850 and solve research problems by evaluating evidence.
CEGN 0011 – U.S Record Groups
0 hrs
Prereq: Completion of CEGN 0010 with a/C grade or better or CEGN 0010 Department Challenge Exam. Course will provide an in-depth study of sources, records, and methodologies not covered in CEGN 0010 essential to documenting and verifying family history and genealogies within the U.S. and focusing on a time period prior to 1850.

CEGN 0012 – International Record Groups
0 hrs
Prereq: Completion of CEGN 0010 w/C grade or better or CEGN Department Challenge Exam. Students examine and use major international record groups in genealogical research. Paleography, record recognition and usage, research strategies, and usage of the international collections at various repositories will be covered.

CEGN 0016 – Tracing Immigrant Origins
0 hrs
Prereq: Completion of CEGN 0011 or 0012 w/C grade or better. Introduction to methodologies and practices to extend family genealogies beyond the U.S. to other countries by finding evidence in unique U.S. records to link localities to International locations.

CEGN 0110 – Genealogy Writing & Publishing
0 hrs
Prereq: Completion of CEGN 0016 w/C grade or better. Introduction to standards in genealogical wiring, reporting, documentation and presentation of genealogical data. Students will also learn how to publish a family history in various medias.

CEGN 0111 – Genealogy and Family History Writing
0 hrs
This course introduces students to various forms of genealogical and family history writing, such as a compiled genealogy, four-generation report, research report, record resource guide, and family history narrative. It also introduces students to analytical reading, the writing process, analysis and evaluation of genealogical research and sources, and documentation styles.

CEGN 0150 – Preparing for US Credentials
0 hrs
Prereq: Completion of CEGN 0110 w/C grade or better. Students finalize an ICAPGen credentialing application, a 4-generation report (with record citations linked to original images and research planners, and an analysis of evidence), plus assemble a research portfolio, and take a practice exam.

CEGN 0151 – Preparing for Intl Credentials
0 hrs
Prereq: Completion of CEGN 0110 w/C grade or better. Students finalize international credentialing application, a 4-generation report (with record citations linked to original images and research planners, and an analysis of evidence), plus assemble a research portfolio, and take a practice exam.
CEHS 0500 – Therapeutic Rec Tech 1 0 hrs
This course consists of 10 nine hour sessions to fulfill the educational requirements for students pursuing a therapeutic rec tech license at the TRT level. Following the course students must register for the exam with the State of Utah.

CEHW 0240 – Theory/Practice of Meditation 0 hrs
This course is an overview of the use and practice of meditation to reduce stress and increase health and wellness. Different forms and purposes of meditation will be explored and a daily meditation practice encouraged.

CEHW 0242 – Laughter Yoga 0 hrs
A mind/body class combining lecture, practice and laughter to lower stress hormones, foster positive and hopeful attitude. To help people increase health and vitality through unconditional laughter and yogic breathing.

CEHW 0243 – Laughter Yoga Instructor Train 0 hrs
Training to become a certified Laughter Yoga Instructor who will then be able to lead Laughter Yoga sessions and Meditations for social clubs, corporate seniors, school children etc. Graduates will receive a CLYL certificate and be listed on Dr. Madan Katarians LY Website.

CEHW 0300 – Doula and Childbirth Education 0 hrs
This course covers the pre and post partum period of pregnancy as well as labor and delivery. Students will learn concepts of health and wellness for these periods of life for both the expectant mother and baby.

CEHW 0325 – Intro to Group Fitness Instr. 0 hrs
This course assists successful students to prepare for certification as fitness professional by covering the educational components of teaching a safe and effective group fitness class.

CEHW 0350 – Intro to Yoga Teacher Training 0 hrs
The focus is on asanas, pranayamas, the yoga philosophies, the yoga lifestyle and other traditional yoga techniques for use in daily personal practice.

CEHW 0355 – Yoga Teacher Training II 0 hrs
The course will cover human physical anatomy, physiology, and energy anatomy and physiology (chakras, nadis, etc) as applies to the subject and application of yoga practice.

CEHW 0360 – Yoga Teacher Training III 0 hrs
Recommended: HLTH 1350. Class covers the following principles of yoga: asanas, pranayamas, kriyas, chanting, mantra, meditation and other traditional yoga practices with equal time given to analytical training and teaching, and practice techniques.
CEHW 0365 – Yoga Teacher Training IV 0 hrs
Recommended: HLTH 1350. Class studies advanced asanas, pranayamas, kriyas chanting, mantra, meditation and other traditional yoga techniques. Teaching methodology and ethics will be covered.

CEHW 0370 – Yoga Teacher Practicum 0 hrs
Prereq: Instructor approval. This class allows students to complete the required practical teaching requirements for the Yoga Alliance. Practicum teaching will be done with fellow students during class and in the community as a volunteer.

CEHW 0375 – Yoga Sutras 0 hrs
This course offers an in-depth study of ancient and modern texts like Patanjali's Yoga Sutra or Hatha Yoga Pradipika. Students will explore various interpretations along with ways to apply the Sutras into everyday living & Yoga Practice.

CEHW 0380 – Yoga for Pathology 0 hrs
This course covers poses and contraindications according to yogic traditions & modern research for different conditions which yoga may be used to help alleviate or cope with certain pathologies. Instructors will not diagnose/treat clients.

CEHW 0385 – Yoga for the Life Cycle 0 hrs
This course offers an indepth study of the application of Yoga through the life cycle beginning with pregnancy, Childhood, Adolescence, Adulthood and Older Adults.

CEHW 0390 – Yoga Lab and Practicum 0 hrs
This course offers students opportunities to work on their own personal practice, to teach general populations and to work one on one with yoga students to help them find a practice suited to their needs and goals.

CEHW 0900 – Belly Dancing Basic 0 hrs
Course is designed to open the door to understanding movement through Middle Eastern dance.

CEHZ 0516 – Certified Pool Operator 0 hrs
2 day intensive program that covers pool and spa chemistry, testing, treatment, filtration, maintenance and automatic feeding equipment. Utah Health Dept Rule R395-302-28 enacted 9-1-98 requires all pool operators to be certified.

CEHZ 0517 – Certified Pool Operator Recertification 0 hrs
Students who have previously taken the 16 hour Pool and Spa Operator course that need to recertify may take the exam the last day of the Pool and Spa Operator course.
CEIB 0100 – Exec Cert of Global Bus Mgt 0-3 hrs
The Executive Certificate of Global Business Mgt is offered to business executive, professionals, working staff, entrepreneurs, and qualified students who wish to increase their knowledge and improve their strategies in global business practices.

CEIB 0200 – Shipping/Products Overseas 0 hrs
Designed to train export marketing and sales managers, in shipping products overseas.

CEIP 0011 – 650+ Bike Rental and Test 0 hrs
650+ tiered license test with bike rental

CEIP 0012 – Motorcycle Private Lesson 0 hrs
This course is in addition to the basic rider training and is conducted from the motorcycle safety foundations extended BRC.

CEIP 0014 – Motorcycle Rider Safety Course 0 hrs
Motorcycle rider training, basic riding skills for Utah state drivers license riding test waivers.

CEIP 0015 – Motorcycle Rescheduling Course 0 hrs
BRC reschedule - for makeups.

CEIP 0016 – Citizens Firearms 0 hrs
Fulfills training for concealed carry permit training for the State of Utah.

CEIP 0017 – Returning Rider Course 0 hrs
Basic Rider Education class designed for the beginning riders and those returning after many years of not riding. This course is designed to improve basic rider skills stopping, swerving, cornering, and the mental skills to safely ride on the roadways with other traffic. This course is approved as a license waiver skills test.

CEIP 0021 – Experienced Rider Course 0 hrs
Course is for riders with 1,500 miles of riding experience. Develop your physical skills with intensified practice of swerving, cornering, traction management, stopping and risk management.

CEIP 0025 – Adv Rider Crse/ Sportbike Tech 0 hrs
Advanced Rider Course designed to teach experienced riders advance braking, cornering, swerving, stopping, and mental strategies to improve rider safety on the roadways. This is an Advanced Rider Course/Sportbike Techniques for riders with at least 4000 miles on their bike. This class is the same basic class as the Military Sport Bike Course.
CEIP 0026 – Adv Rider Crse-Rider Coach Pr 0 hrs
This class is a Rider Coach Preparation designed to take advanced riders to the level of Coach to assist experienced riders to perfect their advanced skills as riders. This is an Advanced Rider Course/Sportbike Techniques for riders with at least 4000 miles on their bike. This class is the same basic class as the Military Sport Bike Course.

CEIP 0090 – Driver Education 0 hrs
A state-certified course in Driver Education offered to the community.

CEIP 0092 – Driver Ed Behind the Wheel Ins 0 hrs
A state approved course that readies the student to take the driving exam. Behind-the-wheel instruction to assist drivers in passing the driver license skills test.

CEIP 0093 – Driver Ed:In Car Sessions 0 hrs
Students who have completed on-line drivers education training still need the 6 hours of behind the wheel and 6 hours observations. This class is designed to meet the needs of these students. The student will be included with an existing class to complete their drives and Observations.

CEIS 0010 – Intro to Library Services 0-45 hrs
Course provides an overview of types of libraries, media and information centers, tools and terminology used in libraries, the role of library assistants, library Bill of Rights, privacy issues and library associations.

CEIS 0020 – Public Information Services 0-45 hrs
Course includes information about library circulation, covers policies, procedures, reserve collections, patron holds/requests, reference and information services, search strategies, information sources, customer communication and search techniques.

CEIS 0050 – Library Technical Services 0-45 hrs
Review processes by which materials are acquired for collections and prepared for public access. Bibilographic search tools, acquisition terminology, serials ordering, cataloging reference tools and resources covered.

CEKM 0001 – Intro Knowledge Management 0-45 hrs
This introductory course provides students with an introduction to a range of cases, concepts, models, practices, theories, and technologies related to the emerging field of Knowledge Management (KM). The course will survey business value of KM; careers in KM; intellectual capital; perspectives of knowledge creation, knowledge transfer, knowledge sharing, and knowledge leadership roles and skills.
CEKM 0010 – Intermediate Knowledge Management 0-45 hrs
Prereq: CEKM 1000. Strategic Knowledge Management capitalizes on the knowledge management (KM) life-cycle continuum learned in CEKM 0001. More in depth concepts, terms, techniques, tools, processes, and systems are introduced to the learner. The intermediate course examines the principles of KM, technologies and systems, and the management of KM in an enterprise.

CELN 0110 – Lineworker Apprenticeship 1A 75hrs
The lineworker apprenticeship program is designed to provide related technical instruction for students currently employed as apprentice lineworkers in the power generation and distribution industry. This course is the first in a series of eight courses and covers the topics of Transmission and Distribution Systems, Substations & Switchyards, Basic Electricity, A/C Fundamentals, Safety in Transmission & Distribution Maintenance, Climbing Wooden Poles, Bucket Trucks, and Material Handling Bucket Trucks.

CELN 0112 – Lineworker Apprenticeship 1B 75hrs
The lineworker apprenticeship program is designed to provide related technical instruction for students currently employed as apprentice lineworkers in the power generation and distribution industry. This course is the second in a series of eight courses and covers the topics of Hydraulic Derricks, Electrical Safety, Overhead Distribution Systems, Using Tools, Overhead & Underground Service Installation, Introduction to Metering, Safety in Meter Work, Rigging 1&2, Pole Framing & Guying, and Setting & Replacing Poles.

CELN 0121 – Lineworker Apprenticeship 2A 75hrs
The lineworker apprenticeship program is designed to provide related technical instruction for students currently employed as apprentice lineworkers in the power generation and distribution industry. This course is the third in a series of eight courses and covers the topics of Working on Distribution Poles, Care and Testing of Tools and Equipment, Overhead Distribution Systems, Distribution Line Safety, System Protection and Monitoring, Safet Bucket Truck Operations, Multimeter Operation and Use, Bucket Truck Rescue, Safety in Overhead Line Maintenance.

CELN 0122 – Lineworker Apprenticeship 2B 75hrs
The lineworker apprenticeship program is designed to provide related technical instruction for students currently employed as apprentice lineworkers in the power generation and distribution industry. This course is the fourth in a series of eight courses and covers the topics of Using Line Test Equipment, Tree Trimming, Pole Top Equipment and Replacement – Transformers – Cutouts & Reclosers – Switching Devices – Capacitors – Advanced Rigging, Transmission Structures, and Transmission Line Safety.
CELN 0231 – Lineworker Apprenticeship 3A 75hrs
The lineworker apprenticeship program is designed to provide related technical instruction for students currently employed as apprentice lineworkers in the power generation and distribution industry. This course is the fifth in a series of eight courses and covers the topics of Pole Top Equipment and Replacement – Voltage Regulators, Distribution Line Installation & Removal, Distribution Line Replacement, Transformer Connections, Distribution Line Repair – Gloves, Distribution Line Repair – Hotsticks, Troubleshooting Overhead Lines, Safety in Underground Line Maintenance, and Underground Residential Distribution Systems.

CELN 0232 – Lineworker Apprenticeship 3B 75hrs
The lineworker apprenticeship program is designed to provide related technical instruction for students currently employed as apprentice lineworkers in the power generation and distribution industry. This course is the sixth in a series of eight courses and covers the topics of Underground Cable Installation, Transformer Troubleshooting, Climbing Steel Poles and Towers, Transmission Line Installation, Rigging for High Voltage Work, Working on De-energized Transmission Lines, Overhead Troubleshooting, Overhead Troubleshooting in Emergency Conditions, and Power Quality.

CELN 0241 – Lineworker Apprenticeship 4A 75hrs
The lineworker apprenticeship program is designed to provide related technical instruction for students currently employed as apprentice lineworkers in the power generation and distribution industry. This course is the seventh in a series of eight courses and covers the topics of 34.5KV Rubber Glove Work, Pad-Mounted Transformers & Switchgear, Cable Splicing, URD Troubleshooting, Locating Primary & Secondary Faults, Safety in Substations and Switchyards, Control Equipment, and Capacitors & Reactors.

CELN 0242 – Lineworker Apprenticeship 4B 75hrs
The lineworker apprenticeship program is designed to provide related technical instruction for students currently employed as apprentice lineworkers in the power generation and distribution industry. This course is the last in a series of eight courses and covers the topics of Voltage Regulators, Power Transformers, Circuit Breakers, Relays, High Voltage Terminations, Transmission Line Repair Hot Sticks and Barehand Method.

CEMA 0231 – Advanced Medical Coding 0 hrs
Advanced practice with the current procedural terminology (CPT) and international classifications of diseases (ICD-9) coding procedures, HCPCS for optimal reimbursements as practiced in the medical setting.

CEMD 0910 – Intro. Medical Device Industry 24 hrs
Course provides an overview of the medical device industry, particularly in Utah. Topics include diversity of products, size & scope of industry, current trends & product life cycle—from conception to market approval & distribution.
CEMD 0920 – Basic Manufacturing Skills 24 hrs
Course focuses on fundamental principles of measurement, performing measurements, data management & analysis related to medical device mfg. Mastery of these skills is key to a successful career in the medical device/bioscience industry.

CEME 0111 – Meter Apprenticeship 1A 0 hrs
This course is for meter apprentices. It introduces electrical principles and principles of magnetism, and AC concepts. Students will learn about atomic structure, electrical qualities, Ohm's law, resistors, parallel circuits, trigonometry, and alternating current.

CEME 0112 – Meter Apprenticeship 1B 0 hrs
This course is for meter apprentices. Students will learn about math for metering, safety, watt-hour meter principles and wire tables.

CEME 0121 – Meter Apprenticeship 2A 0 hrs
This course is for meter apprentices. Students will learn about meter watt hour constants, register ratios and formulas. Also covers principles of accuracy testing and calibration.

CEME 0122 – Meter Apprenticeship 2B 0 hrs
This course is for meter apprentices. Students will learn about single phase meter application and installation; polyphase power systems and meter applications; meter testing and calibration; instrument transformers, testing single phase transformers, and Blondel's theorem.

CEME 0231 – Meter Apprenticeship 3A 0 hrs
This course is for meter apprentices. Students will learn about self contained polyphase meter testing and polyphase transformer related application. The course also covers demand metering concepts.

CEME 0232 – Meter Apprenticeship 3B 0 hrs
This course is for meter apprentices. Students will learn about testing and calibrating demand, meter mounting devices and test switches. The course also covers reactive meter testing.

CEME 0241 – Meter Apprenticeship 4A 0 hrs
This course is for meter apprentices. Students will learn about totalizing meters; installation checks and inspections; and customer relations. The course also covers solid state meters and associated devices.

CEME 0242 – Meter Apprenticeship 4B 0 hrs
This course is for meter apprentices. Students will learn about energy diversion, troubleshooting techniques and pulse initiators and recorders. The course also covers electronic metering, register programming and computers.
CEMS 0065 – Utah Notary Training Workshop  0.4 hrs
The Training workshop will prepare you to take and pass the States required online Notary Public examination.

CEPT 0100 – Pharmacy Tech Exam Review  0 hrs
This course will provide a review of the skills and competencies addressed in the Pharmacy Technician Certification Examination.

CESB 0001 – Dev Your Family Child Care Bus  4 hrs
Covers topics that help participants think and act as business owners. The unique combination of business and industry specific information has a proven track record of assisting individuals in developing and sustaining business.

CESG 0175 – Math For Energy Industry  0 hrs
This class includes an intensive basic math review and practical application of Measurements and Conversion. Algebra, Geometry and Trigonometry. Practical application will emphasize realistic mathematical problem solving in the Energy Industry, Basic Construction and Architecture/Drafting.

CESG 0180 – NAHB CGP  6 hrs
The National Association of Homebuilder's Certified Green Professional¿ (CGP) designation recognizes builders, remodelers and other industry professionals who incorporate green building practices into homes without driving up the cost of construction. Classwork leading to the designation provides a solid background in green building methods, as well as the tools to reach consumers, from the organization leading the charge to provide market-driven green building solutions to the home building industry.

CESG 0400 – Electricity for Power Industry  90 hrs
An introduction to electrical theory for students enrolled in the Electric Power Technology certificate program. Topics include electron theory; series and parallel circuits; direct and alternating current.

CESG 0411 – Electrical Distribution System  90 hrs
An introduction to the design and construction of overhead distribution systems for students in the Electric Power Technology program. Topics include high-voltage troubleshooting procedures; maintenance and construction of distribution systems.

CESG 0450 – Transformer Basics  60 hrs
This course exposes students to transformer design and operation, with an emphasis on the installation and maintenance of transformer equipment. Subjects include: three-phase transformers; autotransformers and reactors; safety requirements and troubleshooting.
CESG 0500 – Pole Climbing, Ropes & Rigging  
This course is designed to provide students with the basic knowledge and ability to safely ascend and descend wooden poles. Students will also learn the basic rigging procedures and knot tying techniques used in electric linework.

CESG 0600 – Print Reading  
Prereq: CESG 0400, 0175. An introduction to print reading fundamentals and the interpretation of blueprints. Emphasis is on electrical drawings and schematics.

CESG 0620 – Electromechanical Systems  
Prereq: CESG 0175, 0400, 0450. A study of devices and components that translate electrical energy into mechanical motion. Topics include DC and AC motors and controllers, servo and stepping motors, solenoids, linear motors and actuators. The course also introduces the student to programmable logic controllers (PLC), ladder logic and PID controllers.

CESG 0630 – Underground Distribution Sys  
Prereq: CESG 0400, 0411, 0450, 0500. An introduction to the design and construction of underground electrical distribution systems and the challenges they represent to the lineworker. Students will be trained to safely perform common distribution tasks performed in the construction and maintenance of underground distribution systems.

CESN 0111 – Substation Apprenticeship 1A  
This course is for substation apprentices. Students will learn about basic electricity, electrical safety, tool use, Ohm's law, and series circuits. The course also covers parallel and combination circuits and DC fundamentals.

CESN 0112 – Substation Apprenticeship 1B  
This course is for substation apprentices. Students will learn about basic electricity, electrical safety, tool use, Ohm's law, and series circuits. The course also covers parallel and combination circuits and DC fundamentals.

CESN 0121 – Substation Apprenticeship 2A  
Substation apprentices will learn about safety in substations and switchyards; electromagnetic induction; high voltage AC power; transformers; reading electrical system diagrams; and use of electrical test and line equipment.

CESN 0122 – Substation Apprenticeship 2B  
Substation apprentices will learn about distribution line safety; material handling bucket trucks; power transformer insulation resistor testing, turns ratio testing, oil tests pressure relay testing and new inspection tests.
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<td>CESN 0231</td>
<td>Substation Apprenticeship 3A</td>
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<td>safety in substations and switchyards;</td>
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<td>CESN 0232</td>
<td>Substation Apprenticeship 3B</td>
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<td>CESN 0241</td>
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<td>safety in transmission and distribution</td>
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<td>CESO 0100</td>
<td>Exploring Sonography</td>
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<td>medical sonography field as well as the</td>
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<td>Salt Lake Community College medical</td>
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<td>sonography program. Topics include</td>
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<td>program overview, and perspectives from</td>
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<td>students as well as those employed in the</td>
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<td>CESP 0001</td>
<td>CNG Vehicle Conversions</td>
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<td>CNG Vehicle Conversion class includes</td>
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<td>theory behind the operation of CNG/NGV</td>
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<td>inspection and repair. This class is</td>
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<td>CESP 0003</td>
<td>Composites Level I</td>
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<td>Basic composites training including</td>
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<td>general overview of composites</td>
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<td>manufacturing, vacuum bagging and a</td>
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<td>hands-on project.</td>
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<td>CESP 0014</td>
<td>Composites Level II</td>
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<td>CESP 0015</td>
<td>Composites Level III</td>
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<td>Composites Materials Advanced Level 3</td>
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<td>Certification.</td>
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CESP 0041 – Energy Investment Analysis  
Students will discuss appropriate energy efficiency measure investment, utility rate schedules, simple payback analysis, compound interest, time value of money, cost estimation and simulation tools.

CESP 0042 – Energy Accounting  
Review energy units, data gathering for energy accounting utility rates and schedules, energy data and organization baselines, cost avoidance, load factor, data analysis, and software and spreadsheet development.

CESP 0100 – Green Retrofitting  
Introduction to Green retrofitting methods for contractors. Topics include building evaluation, creating a retrofit plan with elements of energy, water and materials efficiency, indoor air quality and other green building features.

CESP 0102 – Introduction to Smart Grid  
Course provides an overview of Smart Grid concepts and technologies; defines the framework of the electric utility industry that is poised to make the transformation from a centralized, producer-controlled supply system to one that is less centralized and more consumer-interactive. Course topics include the technology enablers of Smart Grid, and the effects of public policy on Smart Grid implementation.

CESP 0120 – RESNET/HERS Rater Exam Prep  
Introduction to integrating green methods into projects and remodels. Students will evaluate existing buildings and create a retrofit plan that incorporates elements of energy efficiency, water efficiency materials, indoor air quality and other green building features.

CESP 0130 – Weatherization  
This course introduces principles of weatherization, including career opportunities and safety concerns related to the field. Students will learn the energy auditing process for existing construction and will visit and receive training at the Intermountain Weatherization Training Center.

CESP 0150 – Energy Essentials  
Overview of energy production and transmission along with the roles it plays in industry, transportation, building and homes.

CESP 0175 – Math For Energy Industry  
This class includes an intensive basic math review and practical application of Measurements and Conversion. Algebra, Geometry and Trigonometry. Practical application will emphasize realistic mathematical problem solving in the Energy Industry, Basic Construction and Architecture/Drafting.
CESP 0180 – NAHB CGP  
6 hrs
The National Association of Homebuilder's Certified Green Professional (CGP) designation recognizes builders, remodelers and other industry professionals who incorporate green building practices into homes without driving up the cost of construction. Classwork leading to the designation provides a solid background in green building methods, as well as the tools to reach consumers, from the organization leading the charge to provide market-driven green building solutions to the home building industry.

CESP 0200 – Basic Photovoltaic Systems  
0 hrs
Class will cover basic topics associated with the design and installation of photovoltaic systems.

CESP 0250 – Advanced Photovoltaic Systems  
0 hrs
This course builds upon the foundation of knowledge students acquire in the Basic course. After successful completion of course work in both the Basic and Advanced classes and additional field work students will be able to: safely work with photovoltaic systems; conduct site assessment, select appropriate system designs; adapt mechanical designs; adapt electrical designs; maintain and troubleshoot photovoltaic systems.

CESP 0300 – OSHA 10 Hour Safety Course  
0 hrs
Students will learn how to work and be part of a safe environment. Topics covered are: fall protection, fire protection, walking and working surfaces, electrical PPE, hazardous materials and what OSHA is. There are no pre-requisites for this class.

CESP 0310 – Lighting Fundamentals  
0 hrs
Assess quantity and quality of light, light sources and controls, luminaries, manufacturer lamp and ballast specifications, lighting power density and HVAC interactions, retrofit opportunities, cost saving annually, lighting codes/regulations and lighting audit projects.

CESP 0320 – Lighting Applications  
0 hrs
Review terminology and lightins fundamentals, IES illuminance selection procedures, lighting system evaluation luminaries and associated components. Perform illuminance calculations, including point-by-point, lumen and computerized procedures.

CESP 0400 – Basic Elect / Renewable Energy  
0 hrs
Designed to provide students with a basic understanding of electricity and the National Electric Code pertaining to the new renewable energy fields.

CESP 0410 – NEC 2011 Solar Photovoltaics  
0.8 hrs
Course covers 2011 NEC requirements that govern solar installations. Gain understanding of solar pv electrical energy systems and how they relate to other electrical power production sources.
CESP 0411 – Electrical Distribution System 0 hrs
The design and construction of electrical distribution systems will be covered in this course. Topics include substations; overhead and underground transmission and distribution lines; conductors and insulators; high and low-voltage troubleshooting procedures; stringing and live-line procedures.

CESP 0420 – CPR & First Aid 0 hrs
Students will obtain first-aid and CPR certification.

CESP 0430 – Energy Essent II-Basic Elect 0 hrs
Designed to provide students with a basic understanding of electricity and the National Electric Code pertaining to the new renewable energy fields.

CESP 0450 – Transformer Basics 0 hrs
This course exposes students to transformer design and operation that emphasizes the installation and maintenance of transformer equipment. Subjects include: three-phase transformers; autotransformers and reactors; safety requirements and troubleshooting.

CESP 0460 – Electricity for Power Industry 0 hrs
An overview of basic electrical principles and theories as well as practical application for use in the power industry. Topics include Introduction to Electrical Circuits; AC and DC Electrical Theory; Basic Electronic Theory Electrical Test Equipment and introduction to the National Electric Code.

CESP 0500 – NABCEP PV Cert Exam Prep 1.6 hrs
Review of course materials and procedures for students accepted by N A B C E P to sit for their Solar PV Installer Certification exam. Bring the National Electric Code Book (not handbook), Calculator, Pencil and Highlighter.

CESP 0510 – NABCEP Entry Level Exam 0 hrs
Sit for the N A B C E P Entry Level Exam

CESP 0528 – Fundamentals of Tech Writing 2.4 hrs
Learning the fundamentals of writing.

CESP 0560 – Pole Climbing, Ropes & Rigging 0 hrs
Students will learn to identify and implement the proper application of ropes, slings and rigging for electrical industry applications. Subjects include the care and maintenance of ropes and equipment, and hands on training leading to proficiency in pole climbing and rigging tasks.
CESP 0600 – Print Reading
An introductory course in electrical utility blueprint reading which defines the physical and electrical arrangements of equipment including power plants, substations, transmissions lines, distribution lines and customer service facilities. This is a critical skill for individuals who operate, maintain, repair or modify utility equipment.

CESP 0610 – Digital Electronics
An entry level course designed to give the student an understanding of digital electronic devices. The course covers number systems, binary mathematics, digital codes, logic gates, Boolean algebra, Karnaugh maps, and combination logic. Course emphasis is on circuit logic analysis and troubleshooting digital circuits.

CESP 0620 – Electromechanical Systems
A study of devices and components that translate electrical energy into mechanical motion. Topics include DC and AC motors and controllers, servo motors, stepping motors, solenoids, linear motors, and actuators. The course also introduces the student to programmable logic controllers, ladder logic, and PID controllers.

CESP 0630 – Underground Distribution Sys
An introduction to basic switching and metering systems used in the power industry. Students are introduced to meter testing equipment, meter diagrams and standards, and will learn how to read watt hour and demand meters.

CESP 0910 – Computer Literacy Energy Sect
Overview and introduction to computer software applications used in the Energy Sector. Students will learn basic computers skills to use personal computers, the internet, documents and spreadsheets in the workplace.

CESP 0950 – Workplace Safety/ OSHA 3095
Indepth study of Electrical Standards of OSHA and the hazards associated with electrical installations and equipment. Topics include single and three phase systems, grounding, hazardous locations and safety-related work practices. Emphasis is placed on electrical hazard recognition and OSHA inspection procedures.

CESP 0980 – LeanErgy
Students will learn management tools that can help identify opportunities for them to reduce energy use and other wastes as well as increase their work productivity and profitability.

CESS 0001 – Nat’l Admin Credential Upgrd
Upgrade training for child care providers to obtain or maintain credentialing.
CESS 0007 – Basic Welding  
Students will complete stick welding and carbon arc gouging.

CESS 0018 – Workplace Skills & Advancement  
Workplace Skills to prepare employees for advancement and career planning.

CESS 0110 – Applied Emissions  
Prerequisite for the Salt Lake County course.

CESS 0120 – UHP Light Duty Inspection  
Passenger, light truck safety inspection for Utah Highway Patrol.

CESS 0130 – UHP Heavy-Duty Inspection  
Truck, trailer and bus safety inspection for Utah Highway Patrol.

CEST 0001 – Nat'l Admin Credential Upgrade  
Course consists of forty hours of classroom instruction, practice and evaluation in nine competency areas. Students are expected to complete projects and reading assignments between classes.

CEST 0003 – Composites Level I  
Basic composites training including general overview of composites manufacturing, vacuum bagging and a hands-on project.

CEST 0004 – J Standard Certification  
J-Standard certification training for companies who do government or other projects requiring certification.

CEST 0006 – Mastering Police Reprt Writing  
Professional police report writing made easier. Become more confident in your writing, listening, note-taking, organizational, diction, grammar, active voice, punctuation, narration, and thinking skills.

CEST 0007 – Introductory Welding  
At the end of 40 hours students will complete stick welding and carbon arc cutting and gouging.

CEST 0011 – Intermediate Welding Skills  
GMAW (MIG) Short Arc, pulsed, and spray, welding on various thicknesses, and in flat vertical, horizontal, and overhead procedures.
CEST 0012 – Fundmntl Effective Briefings 0 hrs
Basic techniques to create a more effective briefing message. Basic presentation techniques used by effective presenters. Participants will practice these writing and presentation skills and receive feedback on performance.

CEST 0013 – Advanced Effective Briefings 0 hrs
Advanced techniques to create effective briefing messages. Learn advanced presentation techniques. Participants will practice these advanced writing and presentation skills and receive feedback on performance.

CEST 0014 – Composites Level II 8 hrs
Composite level 2, molds-prepreg-cores.

CEST 0015 – Composites Level III 8 hrs
Composites Materials Advanced Level 3 Certification.

CEST 0018 – Workplace Skills & Advance 0 hrs
Workplace Skills and Advancement for Intermountain Health Care.

CEST 0019 – Business Writing for Managers 0 hrs
Techniques for todays professional communicators for Tooele Army Depot. This is a hands-on, participatory, two-day workshop.

CEST 0026 – Basic Photovoltaic Systems 0 hrs
Basic topics associated with the design and installation of photo voltaic systems.

CEST 0027 – Adv Photovoltaic Systems 0 hrs
Advanced Solar Photovoltaic Installation Training.

CEST 0028 – De-Mystifying Marketing 0 hrs
A workshop to become a better marketer. Develop data-driven marketing strategies that get results.

CEST 0029 – From Anergy to Synergy 0 hrs
In Anergy to Synergy, participants learn what the latest research teaches us about how our brains work and react to various situations and stimuli.

CEST 0030 – APICS-Basics of Supply Chain 0 hrs
Basics of Supply Chain Management- elements of the supply chain.
CEST 0031 – Backflow Tester Certification 0 hrs
Attendees will learn backflow theory, hydraulics, prevention devices, testing equipment, test reports, prevention assemblies, fire suppression codes, regulations, approvals.

CEST 0032 – Backflow Tester Re-Cert 0 hrs
Attendees will learn backflow theory, hydraulics, prevention devices, testing equipment, test reports, prevention assemblies, fire suppression, codes, regulations, approvals, etc.

CEST 0033 – FastTrac New Venture 0 hrs
Comprehensive entrepreneurship-educational program that provides entrepreneurs with business insights, leadership skills and professional networking so that they are prepared to create a new business or expand an existing enterprise.

CEST 0034 – 7 Habits of Small Bus Mgrs 0 hrs
7 essential habits that highly effective managers share.

CEST 0035 – Human Resource Mgmt Cert Crse 0 hrs
Human Resource Management Certificate Course

CEST 0036 – Medical Terminology 0 hrs
This is a course for client employees to gain a better understanding of medical terminology. The Course will introduce the primary elements from which all medical terms are composed.

CEST 0037 – Foundations of Dementia Care 0 hrs
Foundations of Dementia Care provides tools for dementia care. Leading the team, basics of quality dementia care, ways to empower care givers. Improving communications and understanding behavior.

CEST 0038 – Personal Finance 0 hrs
This is a course for Community Health Center, Inc. employees to gain a better understanding of personal finance.

CEST 0039 – PHR Certification Course 0 hrs
Eleven week HRM Certification Course. In-depth Human Resource Management Course which covers all six of the HRM functional areas and includes HRM best practices.

CEST 0040 – Lean Manufacturing 101: Intro 0 hrs
Lean Manufacturing 101: An Introduction

CEST 0041 – Basic Electrical Theory 0 hrs
Designed to provide students with a basic understanding of electricity and the national Electric Code pertaining to the new renewable energy fields.
CEST 0042 – ICD-10 CM Documentation & Comp 0 hrs
This course covers family practice and general surgery speciality code details unique to ICD-10-CM, as well as information about documentation and compliance.

CEST 0043 – ICD-10-CM Documentation 0 hrs
For those who have a basic understanding of ICD-10-CM, this course covers more detailed information about documentation and compliant. The topics discussed help to gain a thorough understanding of documentation as the key in code selection within the ICD-10-CM system.

CEST 0044 – Illustrator Level II 0 hrs
This workshop is filled with interactive exercises designed to help students create artwork for both print and Web. Students will learn how to use advanced feature to Transform objects, apply Filters and Effects, automate tasks, modify images, 3D effects, Liquefy & Symbolism Tools.

CEST 0045 – Nail It Then Scale It Workshop 0 hrs
Join the ranks of today's most innovative entreprenuers and experience success through the Nail It Then Scale It (NISI) Method.

CEST 0046 – TE350-BICSI ITS Technician 0 hrs
Codes and standards/BICSI best practices and BICSI certification test.

CEST 0047 – Supervisor Training Class 0 hrs
Students will learn a range of supervisor skills such as management techniques, mediating insight, and stress management reduction.

CEST 0048 – Gen Computer & Internet Tools 0 hrs
Introduction to genealogy computer programs and basic genealogy skills used to conduct research and document records with appropriate citations. Students will learn how to use Internet tools for genealogy research.

CEST 0049 – Mastery of Bus Fundamentals 0 hrs
Acquire practical experience in strategic planning, management, and finance without enrolling in an MBA program.

CEST 0054 – Utah Performance Testing 0 hrs
This is a fun interactive workshop that will allow participants to have a big picture understanding of the Utah Performance testing process. Come and get your questions answered and tour the testing facilities.
CEST 0055 – Intro to Core Skills for CDI 0 hrs
This course will explore the key skills required for Deaf Interpreters including mirroring, consecutive interpreting, processing information, memory skills, expansion, simultaneous interpreting and sight translation ethics, team interpreting and various interpreting settings will also be discussed.

CEST 0056 – NIC Interview Skills 0 hrs
This seminar will give an overview of the NIC Interview Exam. The Demand Control Schema will be used as a framework for guiding participants to develop problem solving skills that can be applied to the NIC Interview. Students will have the opportunity to have hands on practice receiving feedback from instructor and peers.

CEST 0057 – Project Mgmt Fundamentals 0 hrs
Gain the skills you'll need to succeed in the fast growing field of project management.

CEST 0058 – Project Mgmt Applications 2.4 hrs
Experienced project manager teaches you tricks of the project management trade.

CEST 0060 – 2011 National Electrical Code 0.8 hrs
Course will cover over 400 new codes and definitions of the 2011 NEC Requirements for electrical installations. Major changes allowing new forms of alternate energy to power electric vehicles will be studied.

CEST 0090 – Electrical Safety & Code Rev 0.8 hrs
Course covers new code changes, existing code, and common mistakes made on job sites. Learn how to prevent costly mistakes resulting in fines and penalties. New rules on lugs and terminals and GFCI placement in residential dwellings reviewed. Safety, personal protective equipment, OSHA rules, grounding rules and motor control diagrams covered. Must bring a 2011 code book and a calculator to class.

CEST 0091 – Gen Computer & Internet Tools 0 hrs
Introduction to genealogy computer programs and basic genealogy skills used to conduct research and document records with appropriate citations. Students will learn how to use Internet tools for genealogy research.

CEST 0100 – Exectv Cert of Globl Bus Mgt 0 hrs
Hands-on course to increase knowledge and improve strategies in global business practices.

CEST 0101 – CNG Vehicle Conversions 0 hrs
Course prepares automotive technicians with skills to maintain CNG vehicles. Safely convert gasoline powered dedicated light duty natural gas vehicles or duel fuel powered vehicles. Prior experience as an automotive technician or completion of one semester of automotive course work.
CEST 0102 – Creating Web Pages 2.4 hrs
Learn how to design, create and post your very own website on the Internets WWW. Discover low-cost marketing techniques and search engine strategies.

CEST 0110 – Applied Emissions 0 hrs
Prepares students for the certification class at the Salt Lake Valley Health Department.

CEST 0120 – UHP Light Duty Inspection 0 hrs
Passenger, light truck safety inspection for Utah Highway Patrol.

CEST 0130 – UHP Heavy Duty Inspection 0 hrs
Truck, trailer and bus safety inspection for Utah Highway Patrol.

CEST 0146 – Introduction to SQL 2.4 hrs
Learn key concepts of Structured Query Language and knowledge of this database programming language. Learn basic structure of relational databases, how to read and write SQL statements and advanced data manipulation techniques.

CEST 0150 – Outlook 0 hrs
Students will learn the basic skills necessary for working with Outlook, Email, Calendar, Tasks, Contacts and Notes.

CEST 0164 – Intro to Java Programming 0 hrs
Learn Java but dont need prior programming knowledge. Practical exercises and examples teach you the most important Java concepts including databases and Java Server Pages.

CEST 0172 – Get Assertive! 0 hrs
Are you tired of being intimidated by others? Learn the skills to be assertive with bosses, co-workers, friends and family members, and how to diffuse anger and avoid criticism.

CEST 0173 – Grammar Refresher 0 hrs
Gain confidence in your ability to write grammatically correct documents or speeches. Using definitions, examples, and reinforcing exercises youll cover the basics of grammar.

CEST 0175 – Math for the Energy Industry 0 hrs
Students will learn the necessary math skills for application in the electrical industry. Content includes fundamental concepts of algebra, equations, and basic trigonometry that relates to industry scenarios.
CEST 0201 – BIM for Contractors - II 0 hrs
Build more for BIM managers and those individuals who will interact at a higher level with the technology. The recommended Technology would be Navisworks Manage, Sketch up and Revit Architecture.

CEST 0202 – BIM for Contractors - I 0 hrs

CEST 0205 – Navisworks Manage 2011 0 hrs
Autodesk Navisworks Manage provides the most complete Navisworks design project review solution. Includes the functionality of both Autodesk Navisworks Review and Autodesk Navisworks Simulate.

CEST 0206 – Advanced Navisworks Manage 0 hrs
Advanced Navisworks Manage is Continuation of Navisworks I. Hands on lab work exploring the work flow processes of Timeliner, Clash Detective, & Presenter. Attendees will learn through hands-on lab work the necessary work flow process involved in using Timeliner, Clash Detective and Presenter. A basic understanding of Navisworks functions, navigation and tools should be understood before taking the course.

CEST 0211 – Excel Large Worksheets 0 hrs
Cross with CECW 0211 Excel Large Worksheets.

CEST 0212 – Excel Charts & Graphics 0 hrs

CEST 0213 – Excel Database/Pivot Tables 0 hrs
Learn how to take raw data and create valuable management reports.

CEST 0214 – Excel Advanced Functions 0 hrs
Cross with CECW 0214.

CEST 0215 – Excel Templates/Sharing Tools 0 hrs
Learn how to use Excel templates and sharing tools.

CEST 0228 – Quickbooks Professional 0 hrs
This workshop includes QuickBooks Beginning, Intermediate and Advanced workshops.

CEST 0229 – QuickBooks Beginning 0 hrs
This workshop will review general accounting basics and how QuickBooks works.
CEST 0231 – QuickBooks Intermediate 0 hrs
Tracking fixed assets and their associated liabilities, depreciation, prepaid expenses, memorized transactions making deposits not related to receivables, sales tax, bank recons., petty cash etc.

CEST 0232 – QuickBooks Advanced 0 hrs
Setting up and tracking payroll liabilities, adding employees, payroll items, year-to-date issues, additions and deductions, preparing quarterly 941, making payroll tax deposits, process payroll checks, reports.

CEST 0233 – Excel Level I 0 hrs
Module introduces the basic skills necessary for creating, printing and saving Excel workbooks.

CEST 0234 – Word Level I 0 hrs
Module teaches students how to create, format, print and save Word documents.

CEST 0235 – Word Level II 0 hrs
Word Level II

CEST 0236 – Word Level III 0 hrs
This workshop covers several topics that help the student perform tasks more efficiently and working with long documents

CEST 0240 – CNC Design & Metal Fabrication 0 hrs
Using CNC Plasma Cutting Machine, fabricate parts and whole pieces directly from computer, or import and modify files from numerous sources. Discover and Implement project design methods using computerized designing software.

CEST 0251 – Accounting Fundamentals 0 hrs
This course will teach you the basics of double-entry bookkeeping, and how to analyze and record financial transactions and prepare various financial reports.

CEST 0252 – Effective Business Writing 2.4 hrs
If you communicate with others in writing, this course will help you identify and eliminate problem areas, and learn the secrets to developing powerful written documents.

CEST 0301 – Revit MEP 0 hrs
Building Information modeling and the tools for parametric MEP systems design and documentation using Autodesk Revit MEP.

CEST 0302 – Autodesk Revit MEP-HVAC/Plumb 0 hrs
Revit MEP basic specific to HVAC/Plumbing.
CEST 0303 – Autodesk Revit MEP/Electrical  
Revit MEP basics, specific to electrical.

CEST 0304 – Advanced Revit Architecture  
Advanced Revit Architecture, Parametric building modeler for architects that allow changes anytime, anywhere in the design process.

CEST 0346 – Intro to PHP & MySQL  
Learn to build dynamic, data-driven Web site using two of the most popular technologies available: PHP and MySQL.

CEST 0350 – Accounting Fundamentals II  
Give yourself skills that are in high demand by exploring corporate accounting with a veteran instructor.

CEST 0354 – Beginning Writer’s Workshop  
Get a taste of the writers life and improve your writing skills in this introduction to writing creatively.

CEST 0365 – Introduction to Linux  
Six week online course, you’ll master the free Linux desktop system, which can perform all of the functions you currently do with Microsoft Windows or Apple Macintosh.

CEST 0373 – Intro to C# Programming  
Learn the fundamentals of computer programming with the new C# programming language.

CEST 0376 – Work w/Learn Disabled Children  

CEST 0400 – AutoCAD I  
Over 70 percent of the 2D drafting commands is covered. Draw, edit, construct and display drawings. Learn to use layering, dimensioning and text to create simple drawings with notes and title blocks. Finally plot these drawings.

CEST 0401 – Basic Electric for Power Indus  
An overview of basic electrical theory and the National Electric Code in conjunction with practical applications used in the energy industry. Specific topics include: Electrical circuits; DC Electrical Theory; AC Electrical Theory; Basic Electronic Theory; Electrical Test Equipment; and the National Electric Code.
CEST 0405 – Access Level I 0 hrs
This workshop teaches students how to create a MS Access database or how to modify your existing database. Topics include creating tables, creating relationships between tables, setting field properties, filtering and sorting records. You will also learn how to create simple queries and modify query results using Design View and create basic Forms and Reports using the Wizards. Time is reserved for assistance on your specific needs and projects.

CEST 0406 – Access Level II 0 hrs
Cross with CECW 0406.

CEST 0408 – Illustrator Level I 0 hrs
Introduce students to Adobe Illustrator, open a file, identify interface components; Navigate in the artwork window, create a manage files; create & manage files. Create shapes & text; Modify objects use & modify tools. Add colors patterns & gradients to objects. Copy paint attributes between objects.

CEST 0411 – Electrical Distribution Sys 0 hrs
The design and construction of electrical distribution systems will be covered in this course. Topics include substations; overhead and underground transmission and distribution lines; conductors and insulators; high and low-voltage troubleshooting procedures; stringing and live-line procedures.

CEST 0415 – MS PowerPoint 2007 0 hrs

CEST 0425 – Intro to Ms Excel 2007 0 hrs
Learn how Microsoft's powerful database can help you store and manage information you've collected about your business, home, or community.

CEST 0431 – Intro to Ajax Programming 0 hrs
Learn Ajax programming (HTML, JavaScript, XML, PHP, and more) to create Web applications with desktop-like performance.

CEST 0450 – Transformer Basics 0 hrs
This course exposes students to transformer design and operation that emphasizes the installation and maintenance of transformer equipment. Subjects include: three phase transformers; sutotransformers and reactors; safety requirements and troubleshooting.

CEST 0464 – Intermediate Java Programming 0 hrs
Deepen your understanding of the Java programming language, and start writing programs that are more sophisticated and professional.

CEST 0473 – Intermediate C# Programming 0 hrs
Learn to write Graphical User Interface programs in the C# Programming Language.
CEST 0490 – Creating WordPress Websites 0 hrs
Learn how to use WordPress to quickly and easily create attractive blogs and interactive Web sites.

CEST 0500 – A+ Certification 0 hrs
The Computer Support Specialist Program covers system assembly, computer repair, troubleshooting skills, network support, customer service, and software installation.

CEST 0501 – AutoCAD II 0 hrs
AutoCAD Intermediate.

CEST 0502 – Security + Certification 0 hrs
Security + Certification, Securing network services, network devices and network traffic. This course is to prepare for the CompTIA Security + examination.

CEST 0505 – Pole Climbing Ropes & Rigging 0 hrs
Students will learn to identify and implement the proper application of ropes, slings, and rigging for electrical industry applications. Subjects include the care and maintenance of ropes and equipment, and hands-on training leading to proficiency in pole-climbing and rigging tasks.

CEST 0506 – Revit Structure 0 hrs
Learn about building information modeling and the tools for parametric structural design and documentation. Will learn the fundamental features of Revit Structure, Schematic Design, and construction documentation.

CEST 0507 – MS Office Overview 0 hrs
Students will learn the basics of Microsoft Office Suite, including Word, Excel and PowerPoint.

CEST 0510 – MCITP 0 hrs

CEST 0521 – Intermediate MS Word 2010 0 hrs
Learn Microsoft Word’s more advanced features in Intermediate Word, which can make writing easier, faster, and more fun.

CEST 0530 – Mac, Iphone & Ipad Programming 2.4 hrs
Learn to use the free Xcode compiler and the Objective-C programming language to program your own apps that you can sell through Apple’s App Store.
CEST 0550 – GibbsCAM Training 0 hrs
Level 1 Production Milling and Turning Geometry creation/ CAM programming. Level 2 Advanced Milling Solids.

CEST 0564 – Intro to JavaScript 0 hrs
Learn how to add interactivity, such as buttons, picture carousels and collapsible panels to your HTML and CSS websites with JavaScript programming skills.

CEST 0600 – Print Reading 0 hrs
An introductory course in electrical utility blueprint reading which defines the physical and electrical arrangements of equipment including power plants, substations, transmission lines, distribution lines and customer service facilities. This is a critical skill for individuals who operate, maintain, repair or modify utility equipment.

CEST 0602 – Communicating for Results 0 hrs
Communicating for results gives the student the opportunity to explore how communication styles effect overall performance. It improves both verbal and non-verbal communication skills to become more effective in groups or individual communication settings.

CEST 0603 – Dreamweaver 0 hrs
Cross listed with CECW 0603, DreamWeaver.

CEST 0607 – Flash 0 hrs
Cross listed with CECW 0607 Flash.

CEST 0610 – Digital Electronics 0 hrs
An entry level course designed to give the student an understanding of digital electronic devices. The course covers number systems, binary codes, logic gates, Boolean algebra, Kamaugh maps, and combination logic. Course emphasis is on critical logic anaylsis and troubleshooting digital circuits.

CEST 0612 – CSS & XHTML 0 hrs
Tasks include gaining an understanding of HTML and tags that every Web page must have, creating a simple web page, linking to other Web pages within you own page, aligning text, list, formatting text, using graphics/backgrounds.

CEST 0621 – Electromechanical Systems 0 hrs
A study of devices and components that translate electrical energy into mechanical motion. Topics include DC and AC motors and controllers, servo motors, stepping motors, solenoids, linear motors, and actuators. This course also introduces the student to programmable logic controllers, ladder logic, and PID controllers.
CEST 0629 – Taking the HEAT 0 hrs
Students will learn a set of best practices for taking the heat to turn difficult customer situations into positive interactions.

CEST 0630 – Underground Distribution Sys 0 hrs
This course expands on concepts learned from CESG 0441 focusing on underground power systems and practices. Topics include underground distribution, conductors and insulators, and high and low voltage troubleshooting.

CEST 0700 – PhotoShop Level I 0 hrs
Designed to help create images for print and web. Use of Photoshops, palettes and features to create images, retouch photographs and save files using multiple file formats.

CEST 0701 – Publisher 0 hrs
Tasks include exploring Publisher, working with publications, using the Wizard, adding text to a frame, correcting spelling errors, enhancing publication text, printing and publishing presentations.

CEST 0702 – Photoshop Level II 0 hrs
This workshop covers the advanced features and functions of Photoshop. Students will learn how to edit images and create artwork for both print and the Web.

CEST 0703 – BMLI-Setting Performance Expec 0 hrs
This course helps leaders drive performance and accountability by helping people understand what is expected of them and gaining their commitment to achieving it.

CEST 0704 – BMLI-Coaching For Improvement 0 hrs
Helps leaders conduct effective discussions and provide the feedback and ongoing support people need to improve performance.

CEST 0705 – BMLI-Coaching For Success 0 hrs
Develops leaders who help people achieve goals and avoid problems, a positive experience for themselves and those being coached.

CEST 0706 – BMLI-Delegating For Results 0 hrs
In this course, leaders overcome their hesitation to delegate by learning skills for successfully matching people with responsibility and authority.

CEST 0707 – BMLI-Essentials of Leadership 0 hrs
Teaches leaders how to get results through people.
CEST 0708 – BMLI-Starting as a New Leader  
Arms new leaders with the knowledge and skills they need to confront the challenges associated with getting their footing and results as a new leader more quickly.

CEST 0709 – BMLI-Leading Change  
This course focuses on leaders crucial role in initiating change in the workplace.

CEST 0710 – BMLI-Lead High Performing Team  
This course provides team leaders with the tools and skills to perform three primary responsibilities-diagnose, coach and reinforce.

CEST 0711 – BMLI-Resolving Conflict  
This course teaches leaders how to recognize that a conflict is escalating and minimize damage by using the most appropriate resolution tactic.

CEST 0712 – BMLI-Lean Six Sigma Green Belt  
Learn how to identify and implement changes in operation aimed at reducing waste, cost, time and variation.

CEST 0713 – BMLI-Lean Six Sigma Black Belt  
Learn how to lead teams for change and improvement.

CEST 0714 – Project Mngmnt Prof Exam Prep  
Prepares students to successfully pass the PMP exam.

CEST 0715 – BMLI-Developing Others  
Course provides leaders, coaches and mentors with a practical process and the skills necessary to develop talent.

CEST 0717 – BMLI-Intro to Natural Gas Meas  
Intro to Natural Gas Measurement is a pilot course utilizing curriculum developed by the Gas Measurement Training Council. It will provide an overview of the natural gas measurement and transmission industry and the basic skillsets necessary to work as a field technician. Topics will include gas properties, fluid mechanics, gas flow measurement, gas meters, and industry standard safety guidelines.

CEST 0718 – BMLI-Bldg Enviroment of Trust  
New course, allows leaders to creative an environment of trust with their employees as well as between employees.
CEST 0719 – BMLI-Project Management 101
Project Management 101 provides students with an overall understanding of project management by focusing on the basic concepts, definitions, tools, strategies, processes, and phases associated with project management. Students will be able to adapt the generalized knowledge and principles offered to fit within their unique and specific workplace project needs.

CEST 0720 – BMLI-Quality 101
Quality 101 is designed to meet organizational needs for foundational quality knowledge and competence. This course satisfies 6.2 human resource requirements and provides documentation for ISO 9001:2008, TL9000, TS 16949 and AS9000 standards that cover competence, awareness and training. Helps prepare individuals for the Quality Improvement Associate (QIA) certified exam. Introduces quality concepts and terminology to non-quality practitioners involved in Lean Six Sigma initiatives.

CEST 0721 – Build & Deliver Effect Trng
This course focuses on how to build and deliver meaningful training courses and programs within an organization. During this eight-hour session, effective training principles will be covered.

CEST 0722 – BMLI-Customer Service Excellen
This foundational course provides individuals with a powerful set of interaction skills that enables them to communicate more effectively with colleagues and customers, and in the process, build trust, strengthen partnerships, and achieve desired results.

CEST 0723 – Personal Empowerment
This course seeks to change the mindset that empowerment is something that is given. It helps employees see that they can and should look for improvement opportunities. It helps leaders to make their jobs more interesting, motivating, and rewarding and makes them a more valuable asset to their organization.

CEST 0724 – Taking Action to Solve Problem
This course provides leaders, coaches, and mentors with the skills and the practical process necessary to develop talent. Participants will examine the leader's role before, during, and after the development plan.

CEST 0725 – Lean Six Sigma Yellow Belt
Lean Six Sigma Yellow Belt teaches Lean Six Sigma fundamentals, its application, and methods for improving participation of project team members. Yellow Belt team members form an important link in a mature Lean Six Sigma deployment.
CEST 0730 – Autodesk Civil 3D 0 hrs
Students learn to create and edit points, alignments, and profiles, create and analyze surface data. They will perform corridor modeling, create subassemblies and cross-sections, and perform grading operations.

CEST 0735 – Windows Overview 0 hrs
Learn the basics of Personal Computers hardware/software components, Windows features, Start Menu, Taskbar, views and toolbars.

CEST 0800 – AutoDesk Revit Architecture 0 hrs
Learn the tools to create, document and print a parametric building design model.

CEST 0801 – Autodesk Revit Families 0 hrs
Extrusions, blends, reference lines and planes, family categories, labels parameters, type catalogs, constraints and connectors.

CEST 0802 – ESL Level I 0 hrs
English as a second language for medical employees of IHC.

CEST 0803 – ESL-Workplace Lev 2 0 hrs
ESL workplace Level 2.

CEST 0804 – Workplace College Skills 0 hrs
Students will increase their fluency with spoken and written English, primarily as it applies to the work environment.

CEST 0853 – Project Management 0 hrs
Master the skills you need to get started in project management or take your career to the next level.

CEST 0874 – Human Resources Prof 0 hrs

CEST 0880 – Solidworks 0 hrs
3D CAD solution providing data management and communication tools.

CEST 0881 – Advanced Solidworks 0 hrs
A complete 3D CAD solution providing tour design team with all of the data management and communication tools. Learn to work smarter and faster with SolidWorks

CEST 0890 – Autodesk Inventor 0 hrs
Basic Autodesk Inventor features used to create, edit, document and print parts or assemblies.
CEST 0892 – CDL Tractor Training
Tractor Trailer Training. Safe driving trailer backing, parallel parking for small trucks.

CEST 0901 – Employment Law For Managers
The basics of employment law for managers and supervisors.

CEST 0919 – Intro Medical Device Industry
Course provides an overview of the medical device industry, particularly in Utah. Topics include diversity of products, size & scope of industry, current trends & product life cycle—from conception to market approval & distribution.

CEST 0920 – Basic Manufacturing Skills
Course focuses on fundamental principles of measurement, performing measurements, data management & analysis related to medical device mfg. Mastery of these skills is key to a successful career in the medical device/bioscience industry.

CEST 0950 – CPR/ First Aid Certification
This is a national safety and first aid course AED.

CEST 0970 – Autodesk 3DsMax Design
A complete end to end reference that provides users with complete info on all of the features and options available in the latest version of 3DsMax design.

CEST 0980 – Autodesk 3ds Max Design II
A complete end to end reference that provides users a complete info on all of the features and options available in 3ds max design. This is an advanced course.

CEST 0990 – MS Office Special Topics
Special Topics Course

CETG 0010 – Fund. of Supervision & Mgmt. 1
Master the basics of business, learn the people skills required to motivate and delegate, and learn tools for solving problems and resolving conflicts.

CETG 0011 – Fundamentals of Supv & Mgmt 2
Learn how to be an effective manager or supervisor. Master the basics of communicating effectively, and learn tools for developing your own interpersonal skills.

CETG 0012 – Purchasing Fundamentals
Improve your company’s bottom line by mastering the fundamentals of purchasing.
CETG 0013 – Admin Asst Fundamentals 2.4 hrs
Prepare to take advantage of the many new job opportunities in health care, legal services, and other industries.

CETG 0014 – Admin Asst Applications 2.4 hrs
Gain the skills and knowledge you’ll need to prepare for the Certified Administrative Professional exam and begin a rewarding career as an administrative assistant.

CETG 0015 – Employment Law Fundamentals 2.4 hrs
Learn the basics of employment law so you can legally hire, evaluate, and manage employees. Learn basic benefit info, evaluation and termination procedures, and dispute resolution.

CETG 0016 – Supply Chain Management Fund 2.4 hrs
Master the fundamentals of supply chain management and prepare for internationally recognized certification examinations.

CETG 0017 – Project Management Fundamental 2.4 hrs
Gain the skills you’ll need to succeed in the fast growing field of project management.

CETG 0018 – Project Mgmt Applications 2.4 hrs
Experienced project manager teaches you tricks of the project management trade.

CETG 0019 – Six Sigma: Ttl Qualty Fndmntls 2.4 hrs
Learn the basics of total quality management.

CETG 0020 – Six Sigma: Total Quality App’s 2.4 hrs
Learn to apply the elements and methods of Six Sigma to achieve the highest possible quality.

CETG 0021 – PMP Certification Prep 1 2.4 hrs
Begin a well-paying career as a project manager by preparing to take - and pass- the PMP certification exam.

CETG 0022 – PMP Certification Prep 2 2.4 hrs
Prepare to take and pass the Project Management Institutes PMP certification exam.

CETG 0023 – Managing Customer Service 2.4 hrs
Become indispensable to any organization by understanding how to identify and meet customer needs.

CETG 0024 – Intro to NonProfit Mgt 2.4 hrs
Develop the skills and strategies you need to become an integral part of one of Americas fastest growing service sectors.
CETG 0025 – Marketing Your Non-Profit 2.4 hrs
Further the ideals and goals of your nonprofit by learning to compete more effectively for members, media attention, donors, clients, and volunteers.

CETG 0026 – Starting a Non-Profit 2.4 hrs
Industry veteran shows you how to take a non-profit business from vision to reality.

CETG 0027 – Non Profit Fundraising Essen 2.4 hrs
Learn the basics of fundraising for nonprofit organizations, from annual and special fund drives to more advanced projects involving corporate and foundation relations, major gifts, and planned giving.

CETG 0031 – Manufacturing Fundamentals 2.4 hrs
Learn the basic skills required to work in the manufacturing field.

CETG 0032 – Manufacturing Applications 2.4 hrs
Increase efficiencies and productivity by learning to apply the principles and concepts of manufacturing.

CETG 0033 – Distribution & Logistics Mgmt 2.4 hrs
Learn how to improve your company’s distribution and logistics management activities.

CETG 0034 – Understanding Human Res. Funct 2.4 hrs
This course is designed to help people without experience in human resources and prepares managers and business owners to handle human resource functions to ensure good results.

CETG 0035 – Intro to Business Analysis 2.4 hrs
Learn powerful techniques to improve your decision making skills at work.

CETG 0036 – Building Teams that Work 2.4 hrs
Learn the secrets of dynamic team building.

CETG 0037 – Mstry of Business Fundamentals 2.4 hrs
Acquire practical experience in strategic planning, management, and finance without enrolling in an MBA program.

CETG 0038 – High Speed Project Mgmt 2.4 hrs
Break through model for dealing with realities of managing projects at supersonic speeds. Meet and win challenges of truncated timelines, short-staffed project teams, skimpy budgets and crippling risks.

CETG 0100 – Creating Web Pages 2.4 hrs
Learn how to design, create and post your very own website on the Internets WWW. Discover low-cost marketing techniques and search engine strategies.
CETG 0101 – Intro to PC Troubleshooting 2.4 hrs
This class will take you through the typical hardware and operating system problems and teach you how to diagnose and fix the more advanced and nasty problems.

CETG 0120 – Start/Operate Home Business 2.4 hrs
Home-based businesses are the hottest business trend of the decade! Learn how to be your own boss and eliminate the stress of having a job.

CETG 0126 – Start Your Own Consulting Firm 2.4 hrs
Find out how you can earn income by sharing your training or knowledge with others.

CETG 0127 – Write Your Life Story 2.4 hrs
Have you thought about writing your life story but don’t know where to start? This course teaches you how to write your life story. It’s a story only you can tell!

CETG 0129 – Home School W/Success 2.4 hrs
Discover how to home school your children in a way that ensures they get what they need both academically and socially.

CETG 0131 – Travel Writing 2.4 hrs
Learn from a New York Times bestselling author the secrets for turning a book idea into a winning proposal to sell to publishing houses.

CETG 0132 – Basic CompTIA A+ Certification 2.4 hrs
This Hardware 1 course teaches you how to configure and troubleshoot the hardware common to almost every computer, microprocessors, RAM, power supplies, motherboards, drives.

CETG 0133 – Interm CompTIA A+ Cert 2.4 hrs
This course teaches you DOS, DOS memory management, Windows 3.x tweaking and troubleshooting, Windows 9x installation, optimization and troubleshooting.

CETG 0134 – Adv CompTIA A+ Certification 2.4 hrs
This course takes you through an extensive set of technology including SCSI, video, modems, printers, multimedia, portable PCs and networking, completing your understanding.

CETG 0135 – Medical Transcription 2.4 hrs
Learn how to transcribe the medical reports most often used in healthcare today.

CETG 0138 – Blogg and Podcast for Beginner 2.4 hrs
In this course, you’ll join the Web 2.0 world as you learn how to create and maintain your own blog, wiki, and podcast.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Duration</th>
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<tbody>
<tr>
<td>CETG 0139</td>
<td>Medical Terminology</td>
<td>2.4 hrs</td>
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<tr>
<td>CETG 0140</td>
<td>Intro to Natural Health &amp; Heal</td>
<td>2.4 hrs</td>
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<tr>
<td>CETG 0141</td>
<td>Craft of Magazine Writing</td>
<td>2.4 hrs</td>
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<tr>
<td>CETG 0142</td>
<td>Writerific Creativity Training</td>
<td>2.4 hrs</td>
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<td>CETG 0145</td>
<td>Intro to Database Development</td>
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<td>CETG 0146</td>
<td>Introduction to SQL</td>
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<tr>
<td>CETG 0151</td>
<td>Designing Effective Websites</td>
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<td>CETG 0152</td>
<td>Speed Spanish</td>
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<td>CETG 0153</td>
<td>Grammar for ESL</td>
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<tr>
<td>CETG 0154</td>
<td>A to Z Grant Writing</td>
<td>2.4 hrs</td>
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**CETG 0139 – Medical Terminology**  
The Anatomy of Medical Terminology teaches terminology from an anatomical approach using root terms. A student’s learning will allow them to interpret medical notes.

**CETG 0140 – Intro to Natural Health & Heal**  
This course is designed for anyone who wants to learn how to promote wellness, balance and health in their daily lives, and will give students an understanding of natural health.

**CETG 0141 – Craft of Magazine Writing**  
Turn your dreams into bylines and help yourself to a bright future as a magazine writer. It’s a great source of extra income and this class will teach you all the skills you need.

**CETG 0142 – Writerific Creativity Training**  
In this class, you’ll learn lots of tricks from a published writer’s toolbox. Writerific liberates the imagination and the inventive bolts of genius that are in everyone.

**CETG 0145 – Intro to Database Development**  
You will be guided step-by-step through all phases of a system development project to guarantee that the resulting product will not only work as it was designed, but respond to user needs.

**CETG 0146 – Introduction to SQL**  
Learn key concepts of Structured Query Language and knowledge of this database programming language. Learn basic structure of relational databases, how to read and write SQL statements and advanced data manipulation techniques.

**CETG 0151 – Designing Effective Websites**  
This course will teach you powerful graphic design technique that will help you build Web sites that are attractive and highly effective. You’ll also learn what attracts visitors.

**CETG 0152 – Speed Spanish**  
This course is designed for anyone who wants to learn Spanish pronto! You’ll learn six recipes for gluing Spanish words together to form sentences.

**CETG 0153 – Grammar for ESL**  
If English is your second language, this class will provide you with an in-depth analysis of English grammar and structure so that you can communicate better in English.

**CETG 0154 – A to Z Grant Writing**  
This is an invigorating and informative seminar created for executive directors, organizers, board members, volunteers and others who want to learn the grant writing process.
CETG 0155 – Becoming a Grant Writing Consultant
Learn how you can use a basic knowledge of grant or proposal writing to become an expert in the red-hot grant consulting field. Use your creative writing skills to make a difference.

CETG 0158 – Writing Essentials
Excel at business communications, express yourself clearly online, and take your creative literary talents to a new level.

CETG 0160 – Introduction to Stock Options
Learn how to evaluate, buy, sell and profit with investment tools that used to only be for pros. Learn how to protect your portfolio and profit in an up, down or flat market.

CETG 0164 – Intro to Java Programming
Learn Java but don’t need prior programming knowledge. Practical exercises and examples teach you the most important Java concepts including databases and Java Server Pages.

CETG 0168 – Key to Effective Communicating
Lost for words? Don’t be! Learn communication tools to make a good first impression and build rapport. Become more confident to build better personal and work relationships.

CETG 0171 – Success with Difficult People
Learn how to have successful relationships with difficult bosses, co-workers, students, neighbors and family members. Understand communication styles to resolve people problems.

CETG 0172 – Get Assertive!!
Are you tired of being intimidated by others? Learn the skills to be assertive with bosses, co-workers, friends and family members, and how to diffuse anger and avoid criticism.

CETG 0173 – Grammar Refresher
Gain confidence in your ability to write grammatically correct documents or speeches. Using definitions, examples, and reinforcing exercises you’ll cover the basics of grammar.

CETG 0174 – 12 Steps Successful Job Search
Get the job you want quickly and easily in any economy. You’ll learn step-by-step how to build rapport and the six phases of a successful job interview. Increase your confidence, too!

CETG 0175 – Resume Writing Workshop
Create an effective resume, or improve the one you have. Transform your resume into a powerful tool to get that interview! Learn effective styles, persuasive cover letters.
CETG 0176 – Individual Excellence  2.4 hrs
Master 12 career-enhancing skills including goal setting, time management, personal organization, and creativity. Also gain confidence and learn to minimize conflict in your life.

CETG 0177 – Creating a Successful Bus Plan  2.4 hrs
Turn your business ideas into a solid plan for finance and long-term success. Learn the major components and emerge with a draft in hand. You’ll complete that important first step!

CETG 0182 – Write Effective Grant Proposal  2.4 hrs
Learn to prepare proposals that get results for your group or organization. Avoid the mistakes that get worthy proposals tossed into the trash!

CETG 0183 – Understanding Adolescents  2.4 hrs
To know your kids is to love them! This course will help you gain an understanding and appreciation of your adolescents behavior. Learn steps to meet their needs.

CETG 0185 – Achieving Top Search Engine  2.4 hrs
Nearly 90% of web traffic comes from search engines. Learn how to achieve the highest possible position with the major search engines.

CETG 0187 – Keyboarding  2.4 hrs
Using the computer software program FasType for Windows, you will learn the basic skills of touch typing. This course will help you improve your speed and accuracy.

CETG 0188 – Lose Weight & Keep it OFF!  2.4 hrs
Do you want to lose weight and keep it off? Now you can! In this comprehensive course, you’ll discover how to establish a healthy approach to weight loss and weight maintenance. You’ll master how to set and achieve weight-loss and weight-maintenance goals that make sense for you.

CETG 0192 – Discover Digital Photography  2.4 hrs
This course provides an introduction to the fascinating technology of digital photography. You’ll learn the basics of equipment, software, printing, Internet and email use.

CETG 0193 – Guide Your Kids on Internet  2.4 hrs
This essential course for teachers, leaders and parents will give you the confidence you need to help children get the best from the Internet and use its to its full potential.

CETG 0194 – Grow Plants for Fun & Profit  2.4 hrs
This course is a practical guide to licensing, site preparation, equipment, how and where to find supplies, how to select plants and how to market your product.
CETG 0204 – Genealogy Basics 2.4 hrs
In this course, you will explore many Internet sites where you can search for family names. You'll learn where to look, who to contact and how to use research tools.

CETG 0208 – Introduction to Oracle 2.4 hrs
Learn how to use Oracle database management to plan, organize, and manage your data. You will be introduced to Structured Query Language (SQL) and other tools.

CETG 0210 – GED Preparation 2.4 hrs
If you are comfortable reading newspapers and you can add, subtract, multiply and divide without a calculator, this course will help you learn additional skills to pass the GED.

CETG 0211 – SAT/ACT Preparation 1 2.4 hrs
This course prepares you for the Verbal and Science Reasoning sections of the SAT/ACT tests.

CETG 0212 – SAT/ACT Preparation 2 2.4 hrs
In this course, we will analyze each of the quantitative test question areas on the ACT/SAT test. Topics include basic and advanced math, algebraic and geometry concepts.

CETG 0213 – Network+ Certification Prep 2.4 hrs
This course will teach you what you need to know to pass the challenging Network+ certification exam and become a network technician. Also passes as an elective exam for MCSA Cert.

CETG 0220 – Introduction to Networking 2.4 hrs
Learn who networks have become so important, how software and hardware makes networking possible, and how networks function. This is the foundation for CCNA Certification.

CETG 0225 – Computer Skills for Workplace 2.4 hrs
Learn the fundamental computer skills you need to succeed in today's workplace. You'll discover practical applications for email, word processing, spreadsheets and databases.

CETG 0228 – Fundamentals of Tech Writing 2.4 hrs
Discover the secrets of successful technical writers, including technical writing conventions, interviewing skills documentation management and how to get your first job.

CETG 0229 – The Keys to Effective Editing 2.4 hrs
This course will teach you the fundamentals of top-notch editing for both fiction and non-fiction. If you already work as an editor, you'll learn about recent advances.
CETG 0230 – Write Like a Pro 2.4 hrs
Writing a successful novel, screenplay, business report or non-fiction book is easier when you work from a well thought out story outline. You’ll learn story structure techniques.

CETG 0231 – Intro to Internet Writ. Market 2.4 hrs
This course will help you discover a wide variety of new markets for your writing. If you’re a professional writer or just dreaming of being one, this course is for you.

CETG 0238 – Leadership 2.4 hrs
Gain the respect and admiration of others, enjoy success in your career, control your destiny. Use the principles of great leaders to achieve success in every aspect of your life.

CETG 0242 – Intermediate Networking 2.4 hrs
Real-world applications and a full understanding of almost every aspect of networking technology, including virtual private networks, security, and Internet connectivity and then onto training for CCNA certification. Register at http://www.ed2go.com/saltlakecc

CETG 0244 – Secrets of Better Photography 2.4 hrs
Basic technology that all cameras use, helpful information on exposure and lighting. Explore strategies for excellent photos in all types of situations.

CETG 0250 – Accounting Fundamentals 2.4 hrs
This course will teach you the basics of double-entry bookkeeping, and how to analyze and record financial transactions and prepare various financial reports.

CETG 0251 – Effective Business Writing 2.4 hrs
If you communicate with others in writing, this course will help you identify and eliminate problem areas, and learn the secrets to developing powerful written documents.

CETG 0256 – Professional Sales Skills 2.4 hrs
If you’ve dreamed of becoming successful in sales this class is what you need. You’ll learn how to turn prospects into buyers and how to provide excellent customer service.

CETG 0257 – Effective Selling 2.4 hrs
The goal of Effective Selling is to help you discover how you can easily convert a potential customer into a long-term asset. You’ll learn to lay the groundwork for repeat buyers

CETG 0263 – GRE Prep 1 Verbal/Analytical 2.4 hrs
This course covers all the types of questions on the verbal and analytical test, and how to do your best on reading comprehension, analogies, sentence completion, and others.
CETG 0264 – GRE Prep 2 Quantitative 2.4 hrs
This course features a math review and techniques for doing the quantitative comparison, discrete quantitative, and data interpretation question in test two.

CETG 0265 – GMAT Preparation 2.4 hrs
This course will provide you with test-taking techniques and methods for improving your score $ saving time on the GMAT.

CETG 0267 – Business and Marketing Writing 2.4 hrs
Write great marketing copy to improve your companys image and your chances of getting hired or promoted.

CETG 0270 – Drawing - Absolute Beginner 2.4 hrs
Gain a solid foundation in drawing and become the artist youve always dreamed you could be!

CETG 0272 – Solvng Classrm Discipline Prob 2.4 hrs
Veteran teacher reveals the secrets to an orderly classroom. A step-by-step approach to effective, positive discipline.

CETG 0273 – Intro to Veterinary Assisting 2.4 hrs
Practicing veterinarian prepares you to work in a veterinary office or hospital.

CETG 0274 – Math Refresher 2.4 hrs
Gain confidence in your basic math skills and start using math to your advantage.

CETG 0275 – Intro to C++ Programming 2.4 hrs
Learn to program in C++, even if you have no prior programming experience.

CETG 0276 – Creating the Inclusive Classrm 2.4 hrs
Get the training you need to reach the diverse mix of students you face everyday.

CETG 0278 – Beg Conversational French 2.4 hrs
Discover how easy it can be to learn common words and phrases for both leisure and business.

CETG 0282 – Adv Grant Proposal Writing 2.4 hrs
Gain a full understanding of the criteria founders use to determine whether your grant proposal gets funded or rejected.

CETG 0283 – Photograph People w/Dig Camera 2.4 hrs
Expert shows you how to take beautiful pictures of adults, children, and babies.
CETG 0284 – Writtterific2:Adv Creatvty Trng 2.4 hrs
Increase your creativity - whether you're writing for personal satisfaction or to launch a career.

CETG 0288 – Teaching ESL/EFL Grammar 2.4 hrs
Learn new methods for teaching English grammar that will both engage and challenge ESL/EFL students.

CETG 0289 – Teaching ESL/EFL Vocabulary 2.4 hrs
Discover what makes a well-balanced vocabulary course when you're teaching ESL and how to plan one that truly meets your students needs.

CETG 0290 – Beg Guide to Getting Published 2.4 hrs
Published writer shows you how to give yourself the credibility you need to get your books and articles published.

CETG 0292 – Personal Finance 2.4 hrs
Protect your assets and discover how best to achieve all your financial goals.

CETG 0296 – Learn to Buy & Sell on EBay 2.4 hrs
Auction pros teach you how to work from home or earn extra income by buying and selling goods online.

CETG 0299 – Merrill Ream Speed Reading 2.4 hrs
Acclaimed speed reading expert teaches you how to save yourself time by reading faster with better comprehension.

CETG 0303 – Research Methods for Writers 2.4 hrs
Learn the most efficient and effective methods to conduct research for any writing project.

CETG 0305 – Secrets of the Caterer 2.4 hrs
Learn cooking and business secrets from a professional caterer.

CETG 0306 – Enhancing Lang Dev Childhood 2.4 hrs
Enrich the lives of your young children by learning fun and natural ways to help them become proficient speakers and thinkers.

CETG 0307 – Real Estate Investing 2.4 hrs
Build and protect your wealth by investing in real estate.

CETG 0308 – Intermediate Oracle 2.4 hrs
Learn how to write powerful and flexible PL/SQL programs.
CETG 0309 – Handling Medical Emergencies 2.4 hrs
Every second counts during a medical emergency. Learn how to respond if someone needs your help.

CETG 0311 – LSAT Preparation 2.4 hrs
Learn about law school entrance procedures, developing analytical reasoning skills, and improving your test-taking skills (course 1 of 2).

CETG 0312 – LSAT Prep Part 2 2.4 hrs
Improve your reading comprehension and logical reasoning skills, and discover proven approaches for selecting correct exam answers (course 2 of 2).

CETG 0314 – Intro to Adobe Lightroom 4 2.4 hrs
Learn how Lightroom 4 can help you prepare, edit, and organize your photos quickly and effectively.

CETG 0316 – Interpersonal Communication 2.4 hrs
Become aware of the conscious and unconscious codes of meaning we send when communicating with others.

CETG 0317 – Intro to Algebra 2.4 hrs
Understand how algebra is relevant to almost every aspect of your daily life, and become skilled at solving a variety of algebraic problems.

CETG 0331 – Internet in the Classroom 2.4 hrs
Discover how you can use the Internet to make teaching easier for you and more relevant to your students.

CETG 0334 – Wireless Networking 2.4 hrs
Industry expert shows you how wireless networking works, as well as how to plan, deploy, and connect to wireless networks.

CETG 0337 – Intro to Journaling 2.4 hrs
Discover how journaling can help you learn more about yourself.

CETG 0339 – Teaching Students with Autism 2.4 hrs
Develop the skills to counter the difficulties associated with students who have autism spectrum disorders and learn creative strategies to help them succeed in the classroom.

CETG 0342 – Intro to PC Security 2.4 hrs
Security expert teaches the fundamentals of PC and network security.
CETG 0344 – Singapore Mth Stgy:Model Draw 2.4 hrs
Get the training you need to start teaching model drawing, the powerful Singapore Math Strategy.

CETG 0345 – Marketing Bus on the Internet 2.4 hrs
E-commerce expert helps you develop an Internet marketing plan for your business.

CETG 0346 – Intro to PHP and MySQL 2.4 hrs
Learn to build dynamic, data-driven Web site using two of the most popular technologies available: PHP and MySQL.

CETG 0349 – Music Made Easy 2.4 hrs
Learn the fundamentals of music theory. Be able to read, write, and play simple music.

CETG 0350 – Accounting Fundamentals II 2.4 hrs
Give yourself skills that are in high demand by exploring corporate accounting with a veteran instructor.

CETG 0351 – Writing for ESL 2.4 hrs
Learn how to write in English more effectively to succeed in college and at work.

CETG 0352 – Speed Spanish II 2.4 hrs
Clever follow-up to our popular Speed Spanish course. Several new recipes help you quickly build fluency.

CETG 0353 – Writing for Children 2.4 hrs
Published children’s author shows you how to touch the hearts of children by creating books for them.

CETG 0354 – Beginning Writer’s Workshop 2.4 hrs
Get a taste of the writer’s life and improve your writing skills in this introduction to writing creatively.

CETG 0355 – CompTIA Security+Certification 2.4 hrs
Master the terms and concepts you need to pass the CompTIA Security+ exam and earn your Security+ certificate.

CETG 0357 – Keys to Successful Money Mgmt 2.4 hrs
Certified financial planner show you how most wealthy people build their fortunes.

CETG 0364 – Intro to ASP.net 2.4 hrs
Learn how to create powerful, interactive, community-based Web sites with ASP.NET.

CETG 0367 – Where Does All My Money Go? 2.4 hrs
Learn how to get control of your money once and for all.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>CETG 0368</td>
<td>Worker's Compensation</td>
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<tr>
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<td>Gain essential skills and a solid</td>
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<td>understanding of one of the fastest-</td>
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<td>growing areas in law.</td>
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<td>CETG 0369</td>
<td>Real Estate Law</td>
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<td>Learn the basics of real estate law,</td>
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<td>Learn to create state-of-the-art Web</td>
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<td>Practicing veterinarian teaches you</td>
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<td>CETG 0382</td>
<td>Get Grants!</td>
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<td>Learn how to develop successful,</td>
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<td>Using vivid examples from bestselling</td>
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<td>CETG 0385</td>
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<td>CETG 0388</td>
<td>Survival Kit for Teachers</td>
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<td>Veteran instructor shares the secrets</td>
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<td>CETG 0389</td>
<td>Resp Intervntion:Reading Strat</td>
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CETG 0390 – Travel Photography  2.4 hrs
Learn the tricks and techniques digital photographers need to capture scenes from around the world and bring them home.

CETG 0393 – Intro Python 2.5 Programming  2.4 hrs
Learn the fundamentals Python 2.5 programming with topics that include basic decisions and loops, advanced data structures, object-oriented programming, and graphical user interfaces.

CETG 0394 – Start Own Small Business  2.4 hrs
Stop dreaming and learn how to start your own successful small business.

CETG 0396 – Writer’s Guide to Desc Setting  2.4 hrs
Develop your eye for detail and improve your writing with vivid descriptions, memorable settings, and believable characters.

CETG 0397 – Ready, Set Read!  2.4 hrs
A learning specialist shows you how to raise a successful reader and writer.

CETG 0398 – Become an Optical Assistant  2.4 hrs
Learn what it takes to become an optical assistant and discover why its one of todays most popular and fascinating career opportunities.

CETG 0399 – Intro to Teaching ESL/EFL  2.4 hrs
Learn how to be an effective English language teacher from an expert in the field.

CETG 0401 – Intro to MS Outlook 2007  2.4 hrs
Become a productive and confident Microsoft Outlook 2007 user.

CETG 0402 – Skills/Making Great Decisions  2.4 hrs
Learn how to make excellent everyday decisions from an experienced counselor and life coach.

CETG 0403 – Technology in the Classroom  2.4 hrs
Learn the secrets of technology integration in the classroom so you can use tools such as wikis, podcasts, and blogs effectively.

CETG 0407 – Real Estate Investing II  2.4 hrs
Discover the tools professional investors use to crunch numbers and analyze potential deals, and learn how to make better decisions with sophisticated, yet easy-to-use worksheets for doing your own financial analysis.
CETG 0408 – Bus Finance for Non-Fin Person 2.4 hrs
Learn the basics of how a business operates, including how to develop successful business strategies and how to use financial statements to make better business decisions.

CETG 0410 – Prepare for the GED Math Test 2.4 hrs
Master the skills required to successfully pass Test 5 in the GED test series.

CETG 0411 – Conversational Japanese 2.4 hrs
Course makes it easy and enjoyable for beginners to master the essentials of the Japanese language.

CETG 0412 – Intro to Ruby Programming 2.4 hrs
Learn how to create a dynamic Web blog using the Ruby on Rails programming environment and the Ruby programming language

CETG 0416 – What's New in MS 2007 2.4 hrs
Learn the most important new features of Microsoft Office Word, Excel, PowerPoint, and Access 2007.

CETG 0420 – Intro to MS Word 2007 2.4 hrs
Learn how to create and modify documents with the world's most popular work processor.

CETG 0421 – Intermediate MS Word 2007 2.4 hrs
Learn advanced features of MS Word 2007 and create an index, a list of figures, table of contents, do desktop publishing, perform a mail merge, and use timesaving macros.

CETG 0422 – Intro to Adobe Acrobat 9 2.4 hrs
Learn how to bring together a wide range of content from dozens of programs that you can reuse and customize in Acrobat 9 Pro.

CETG 0423 – Intro to MS Excel 2007 2.4 hrs
Work with numbers? You need to know Excel. Learn the secrets of this powerful application.

CETG 0424 – Intermediate MS Excel 2007 2.4 hrs
Master advanced features of MS Excel 2007, including charting and Pivot Tables, and discover how this powerful MS Office program can boost your productivity.

CETG 0425 – MS Access 2007 2.4 hrs
Learn how Microsoft's powerful database can help you store and manage information you've collected about your business, home, or community.
CETG 0426 – HIPAA Compliance
HIPAA Compliance - In this course you’ll learn about the Administrative Simplification portion of HIPAA, ARRA, and HITECH.

CETG 0427 – Intro to MS Project 2007
Learn the important basic skills and concepts you need to take control of your Windows Visa PC.

CETG 0430 – Intro to MS Excel 2007
Discover the advanced features of MS Excel 2007 and find out everything this powerful program can do for you.

CETG 0431 – Intro to Ajax Programming
Learn Ajax programming (HTML, JavaScript, XML, PHP, and more) to create Web applications with desktop-like performance.

CETG 0435 – Intro to MS Publisher 2007
Learn how to design, create, and publish a wide variety of stunning documents using Microsoft Publisher 2007.

CETG 0439 – Explore a Career in Med Coding
Learn how to use the CPT manual and the ICD-9-CM to find medical codes for any disease, condition, treatment, or surgical procedure.

CETG 0442 – Advanced PC Security
Use ethical hacking techniques to locate and close security holes in your own network.

CETG 0446 – Intermediate PHP & MySQL
Learn how to create a dynamic, interactive online store using advanced PHP techniques and a MySQL database server.

CETG 0447 – Luscious, Low-Fat Quick Meals
Join a registered dietitian and discover how easy it can be to prepare meals that are both delicious and nutritious!

CETG 0449 – Spanish-Medical Professionals
Learn medical Spanish quickly and easily, honing your basic conversational skills and mastering key healthcare words and phrases.

CETG 0450 – Singapore Math No.Sense/Comp
Singapore's innovative and practical strategies for solving addition, subtraction, multiplication, and division problems.
CETG 0452 – Speed Spanish III  
Master your ability to speak, understand, and read Spanish by taking the final installment in our unique three-part Speed-Spanish learning series.

CETG 0453 – Explora a Career a Pharm Tech  
Master the skills that will prepare you for an entry-level position as a pharmacy tech or clerk.

CETG 0457 – Quickbooks2010 for Contractors  
Learn how to quickly and efficiently gain control over the financial aspects of your business.

CETG 0458 – Intro to Programming  
Master basic programming concepts and get hands-on practice in writing applications containing GUIs, sound, and graphics.

CETG 0460 – Career as Admin Medical Asst  
Learn all about the in-demand career of medical information management as you explore the job of an administrative medical assistant.

CETG 0462 – MS PowerPoint 2007  
Learn how to use Microsoft PowerPoint 2007 to create impressive, professional-looking slide presentations.

CETG 0464 – Intermediate Java Programming  
Deepen your understanding of the Java programming language, and start writing programs that are more sophisticated and professional.

CETG 0465 – Help for the Help Desk  
Become a customer helpdesk guru by learning how to handle any customer issue quickly and effectively.

CETG 0467 – Start Gift Basket Biz!  
Start Gift Basket Biz! - This course will tell you everything you need to know about starting a gift basket business and running it successfully.

CETG 0468 – Praxis 1 Preparation  
Develop the knowledge and skills you need to pass the Praxis I Exam as you review and prepare for the test.

CETG 0470 – Easy English 1  
Learn the basic English skills you need for real-life activities including shopping, job-hunting, and handling medical emergencies.
CETG 0472 – Intermediate CSS & XHTML 2.4 hrs
Take your CSS and XHTML skills to the next level and learn how to create professional-quality Web sites.

CETG 0473 – Intermediate C# Programming 2.4 hrs
Learn to write Graphical User Interface programs in the C# Programming Language.

CETG 0475 – Veterinary Assistant III 2.4 hrs
Veterinary Assistant III - Learn the practical skills you’ll need to be a valuable veterinary assistant or educated pet owner.

CETG 0477 – Small Bus Mktg on Shoestring 2.4 hrs
Small Bus Mktg on Shoestring - Learn how to use the same marketing tricks the big companies employ—without making a big dent in your wallet.

CETG 0480 – Intermediate MS Access 2.4 hrs
Expand your Microsoft Access 2007 skills to build better, more user-friendly Access databases.

CETG 0484 – Writing & Selling Self/Help Bk 2.4 hrs
Learn from a New York Times bestselling author the secrets for turning a book idea into a winning proposal to sell to publishing houses.

CETG 0485 – Expl a Career Interior Design 2.4 hrs
This course will show you how to transform plain living spaces into beautiful and functional rooms.

CETG 0488 – Assisting Aging Parents 2.4 hrs
This compassionate and comprehensive class will give you the tools, techniques, and insights to help you help your parents transition to their golden years.

CETG 0490 – Creating WordPress Web Sites 2.4 hrs
Learn how to use WordPress to quickly and easily create attractive blogs and interactive Web sites.

CETG 0491 – Intro to Guitar 2.4 hrs
Learn to play guitar, and become the musician you’ve always wanted to be!

CETG 0492 – Intro to Crystal Reports 2.4 hrs
Learn how to use Crystal Reports to create attractive business documents that are easy to read and understand.

CETG 0494 – Start Arts & Crafts Business 2.4 hrs
Learn how to start your own arts and crafts business from a professional artist.
CETG 0499 – Writing Your Adult Fiction 2.4 hrs
Writing Your Adult Fiction - This course provides you with the recipe for creating your own successful young adult story and shows you how to get it published.

CETG 0500 – Advanced Web Pages 2.4 hrs
Advanced Web Pages - Take your Web design skills to the next level! If you want to work as a freelance Web designer or build websites for your organization, this course will give you the advanced tools you need.

CETG 0501 – Intro to Outlook 2010 2.4 hrs
Intro to Outlook 2010 - Harness the power of Microsoft Outlook 2010, and you'll instantly enhance your efficiency and productivity.

CETG 0504 – Create Mobile Apps with HTML5 2.4 hrs
Learn how to imagine, design, build, and optimize a cross-platform mobile app using the very latest HTML5 standards.

CETG 0506 – Intro to Screenwriting 2.4 hrs
Whether you want to write micro-budget indie films or Hollywood blockbusters, this course will teach you everything you need to know to create a script that can sell.

CETG 0507 – Intro Human Anatomy/Physiology 2.4 hrs
This course explains the nature of matter and reviews the principles of chemistry that are important to human physiology.

CETG 0510 – Mastering Public Speaking 2.4 hrs
Learn how to speak confidently and persuasively to both large audiences and small groups.

CETG 0512 – Publish & Sell Your E-Books 2.4 hrs
Become an overnight sensation by learning now to use free tools to turn your manuscript into a professionally published e-book ready for distribution.

CETG 0518 – Intro to Photoshop CS5 2.4 hrs
Learn Adobe Photoshop CS5, the world’s best graphics program, to edit and process photos and create original images.

CETG 0520 – Intro to MS Word 2010 2.4 hrs
Learn how to create and modify documents using Microsoft Word 2010, the world’s most popular word processing program.
CETG 0521 – Intermediate MS Word 2010 2.4 hrs
Learn Microsoft Word’s more advanced features in Intermediate Word, which can make writing easier, faster, and more fun.

CETG 0522 – Intro to Adobe Acrobat X 2.4 hrs
Learn how to use Adobe Acrobat X to create PDF files and take advantage of its many time-saving features, communication options, and forms.

CETG 0523 – Intro to MS Excel 2010 2.4 hrs
Become proficient in using MS Excel 2010 and discover dozens of shortcuts and tricks for setting up fully formatted worksheets quickly and efficiently.

CETG 0524 – Intermediate MS Excel 2010 2.4 hrs
Intermediate MS Excel 2010 - Take your Excel skills to the next level! Master charting, PivotTables, Slicers, Sparklines, and other advanced features of Microsoft Excel 2010.

CETG 0525 – Intro to MS Access 2010 2.4 hrs
Learn to build, edit, and maintain a database in Access 2010.

CETG 0526 – Mastering Your Digital SLR Cam 2.4 hrs
Learn to break through the technology barrier so you can use your digital SLR camera to take beautiful photos.

CETG 0527 – Introduction to MS Project 2.4 hrs
Learn how to effectively plan, implement, and control projects using Microsoft Project 2007.

CETG 0529 – Mac iPhone & iPad Programming 2.4 hrs
Learn to use the free Xcode compiler and the Objective-C programming language to program your own apps that you can sell through Apple’s App Store.

CETG 0530 – Advanced MS Excel 2010 2.4 hrs
Advanced MS Excel 2010 - In this practical and information-packed course, you’ll see how to maximize MS Excel’s functions and capabilities.

CETG 0533 – Intro to Adobe Edge Animate 2.4 hrs
With this new Adobe product, learn to create engaging content and graphics quickly and easily, relying on widely-accepted Web standards and requiring a minimal amount of code.

CETG 0534 – Quickbooks 2013 for Contractor 2.4 hrs
You’ll learn how to use the Premier Contractor Edition of QuickBooks 2013 to run your business more efficiently.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Duration</th>
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<tbody>
<tr>
<td>CETG 0536</td>
<td>Biology Refresher</td>
<td>2.4 hrs</td>
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<tr>
<td>CETG 0537</td>
<td>Intro to Windows 7</td>
<td>2.4 hrs</td>
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<tr>
<td>CETG 0539</td>
<td>Intro to QuickBooks 2013</td>
<td>2.4 hrs</td>
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<tr>
<td>CETG 0544</td>
<td>Intro to Dreamweaver CS5</td>
<td>2.4 hrs</td>
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<td>CETG 0546</td>
<td>Intermediate SQL</td>
<td>2.4 hrs</td>
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<tr>
<td>CETG 0559</td>
<td>Photoshop CS6/ Digital Photog</td>
<td>2.4 hrs</td>
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<tr>
<td>CETG 0561</td>
<td>Photoshop 9/Digital Photo</td>
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<tr>
<td>CETG 0562</td>
<td>Intro to PowerPoint 2010</td>
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<td>CETG 0564</td>
<td>Intro to JavaScript</td>
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<td>CETG 0586</td>
<td>Intro to VB 2008</td>
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<tr>
<td>CETG 0587</td>
<td>Intermediate VB 2008</td>
<td>2.4 hrs</td>
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CETG 0536 – Biology Refresher
This course will help you understand the structure and function of the human body at the level of your tiniest living components--your cells, and more.

CETG 0537 – Intro to Windows 7
Get up to speed quickly on Microsoft Windows 7 with this fun and easy hands-on course for beginners.

CETG 0539 – Intro to QuickBooks 2013
Learn how to quickly and efficiently gain control over the financial aspects of your small business with this powerful accounting software program.

CETG 0544 – Intro to Dreamweaver CS5
Learn to use Adobe Dreamweaver CS5 to design, create, and maintain user-friendly Web sites with professional Web pages.

CETG 0546 – Intermediate SQL
Expand your knowledge of Structured Query Language (SQL), the industry standard database programming language.

CETG 0559 – Photoshop CS6/ Digital Photog
Master techniques to make the most of your digital images and add a professional polish to your work.

CETG 0561 – Photoshop 9/Digital Photo
Learn the secrets of Adobe's Photoshop Elements 9 and bring out the best in your images.

CETG 0562 – Intro to PowerPoint 2010
Take your PowerPoint presentations from “so-so” to sensational! In these lessons, you’ll learn how to use Microsoft PowerPoint 2010 to create professional-quality slide presentations.

CETG 0564 – Intro to JavaScript
Learn how to add interactivity, such as buttons, picture carousels and collapsible panels to your HTML and CSS websites with JavaScript programming skills.

CETG 0586 – Intro to VB 2008
Learn to create Windows applications using the popular and easy-to-master Visual Basic 2008.

CETG 0587 – Intermediate VB 2008
Gain in-demand VB skills writing sophisticated Windows programs that access and modify business databases.
CETG 0590 – Creating WordPress Websites II
Discover how to create and maintain dynamic websites and blogs without technical coding.

CETG 0593 – Intro to Python 3 Programming
Intro to Python 3 Programming - Enhance your résumé by adding Python to your programming skills! This course will give you the tools you need to use Python with skill and confidence.

CETG 0597 – Performing Payroll in QB 2013
Master efficient techniques for creating paychecks, paying liabilities for taxes, and generating dazzling reports quickly and easily.

CETG 0609 – Intro to InDesign CS5
You'll get hands-on desktop publishing training and learn how to use InDesign to design and create professional-quality letterhead, business cards, brochures, and more.

CETG 0614 – Intro to Illustrator CS5
You will learn how to create animated, interactive movies in Adobe Flash CS5.

CETG 0618 – Intro to Photoshop CS6
Learn how to use Photoshop CS6, the world's best graphics program for photographers, to edit photos and create original images.

CETG 0637 – Intro to Windows 8
Learn the basics of Windows 8, which gives you an efficient way to manage all the apps, programs, files, and folders you use regularly for both work and fun.

CETG 0638 – Photograph Nature w/Dig Camera
Learn about the many aspects of outdoor photography as well as how to master your digital camera's controls and features.

CETG 0644 – Singapore Math Strat: Gr 6-9
In this course, you'll master model drawing, a revolutionary technique for teaching problem-solving to middle school math students.

CETG 0645 – Intro to Dreamweaver CS6
Learn how to use Dreamweaver's intuitive tool set to structure text, and investigate the myriad formatting options CSS provides.

CETG 0661 – Photoshop Elements 10
Learn the secrets of Adobe Photoshop Elements 10 and bring out the best in your images.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CETG 0714</td>
<td>Intro to Illustrator CS6</td>
<td>2.4 hrs</td>
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<td>Learn how to use Adobe Illustrator CS6 with the power to</td>
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<td>design, draw, and color images quickly and easily.</td>
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<td>CETG 0718</td>
<td>Intermediate Photoshop CS6</td>
<td>2.4 hrs</td>
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<tr>
<td>CETG 0800</td>
<td>Admin Medical Assistant</td>
<td>0 hrs</td>
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<td>Admin Medical Assistant with Billing, Coding and Term</td>
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<tr>
<td>CETG 0801</td>
<td>Admin Med Spec/Med Bill &amp; Code</td>
<td>0 hrs</td>
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<td></td>
<td>This program offers you the training you need to become</td>
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<td>an Administrative Medical Specialist (AMS), a medical</td>
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<td>receptionist, a scheduler, an insurance specialist, or a</td>
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<td>diagnostic or procedural coder.</td>
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<tr>
<td>CETG 0802</td>
<td>Med Billing, Coding &amp; Terminology</td>
<td>0 hrs</td>
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<td>This course is designed to prepare you for a position as</td>
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<td>a medical coding and billing professional.</td>
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<tr>
<td>CETG 0804</td>
<td>Med Transcription &amp; Terminology</td>
<td>0 hrs</td>
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<td>Gain the ability to transcribe medical reports and learn</td>
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<td>the skills you need to obtain an entry-level position as</td>
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<td>a medical transcriptionist.</td>
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<td>CETG 0805</td>
<td>Medical Transcription</td>
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<td>Gain the skills to transcribe recordings and create</td>
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<td>medical reports.</td>
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<td>CETG 0806</td>
<td>Medical Terminology</td>
<td>0 hrs</td>
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<td>This is a course for client employees to gain a better</td>
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<td>understanding of medical terminology.</td>
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<td>CETG 0807</td>
<td>ICD-10 Medical Coding</td>
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<td>The ICD-10 Medical Coding Online Training Program will</td>
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<td>teach you how to prepare for and implement the massive</td>
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<td>changes to the existing coding system.</td>
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<td>CETG 0809</td>
<td>Advanced Hosp Coding &amp; CCS Prep</td>
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<td>The Advanced Hospital Medical Coding Online Program and</td>
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<td>CCS Test Preparation Training Program will prepare you</td>
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<td>to take the American Health Information Management</td>
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<td>Associations (AHIMA) official certification exam to</td>
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<td>become a Certified Coding Specialist (CCS).</td>
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<tr>
<td>CETG 0810</td>
<td>Admin Dental Assistant</td>
<td>0 hrs</td>
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<tr>
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<td>You'll learn about patient care, as well as how to assist</td>
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<td>with dental administrative duties.</td>
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<tr>
<td>CETG 0812</td>
<td>Personal Trng/Exrcise for Adult</td>
<td>0 hrs</td>
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<td>You'll learn to work with seniors and older adults in the</td>
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<td>health and fitness industry and design specialized</td>
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<td>exercise and wellness programs for older adult clients.</td>
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CETG 0822 – Microsoft Off 2010 Master Cert 0 hrs
Learn basic to advanced skills in Microsoft Word, Excel, PowerPoint, and Outlook 2010 while you prepare for Microsoft Office Specialist (MOS) certification.

CETG 0825 – Microsoft Excel 2010 Cert Tng 0 hrs
This course will help you learn the Microsoft Excel skills you need to be a valuable asset in the workplace and prepare you to earn certification.

CETG 0828 – Microsoft Access 2010 Cert Tra 0 hrs
Participate in the Microsoft Access 2010 course to improve your level of knowledge with Microsoft Access functions, while you prepare to take the Microsoft Certification Exam.

CETG 0829 – MS SharePoint 2010 Cert Train 0 hrs
The Technical Writing Online Training Program is designed for anyone who wishes to develop their technical writing abilities to a professional level.

CETG 0830 – CompTIA A+ Certification 0 hrs
This program will prepare you for CompTIA A+ certification.

CETG 0837 – MS Cert. IT Pro: MCITP 0 hrs
This program will prepare you to administer and manage Windows 2008 Networks and to take the Microsoft 70-640, 70-642 and 70-646 certification exams.

CETG 0840 – Web Design Certificate 0 hrs
Learn how to develop the visual graphic and information design skills required to create compelling Web sites, Adobe Photoshop, Adobe Dreamweaver, Fireworks, and Flash.

CETG 0846 – Multimedia Arts Certificate 0 hrs
The Multimedia Design program will teach you proficiency in the core tools for interactive development: Adobe Photoshop, Flash and After Effects, and you will learn to shoot and edit digital video.

CETG 0851 – Project Mgmt/ MS Project 2007 0 hrs
Learn the basics of project management and master one of the most popular project management scheduling software products available today.

CETG 0852 – Project Mgmt W Ms Project 2010 0 hrs

CETG 0853 – Project Management 0 hrs
Master the skills you need to get started in project management or take your career to the next level.
CETG 0854 – Six Sigma Black Belt 0 hrs
Learn the appropriate tools and concepts at each stage of project deployment.

CETG 0855 – Six Sigma Green Belt 0 hrs
The Six Sigma Green Belt Online Training Program provides you with an overview of the Six Sigma concepts and tools,

CETG 0859 – Freight Broker/ Agent Training 0 hrs
Freight Broker/ Agent Training - From licensing to operations, to sales and marketing, you'll learn the basics of how to run a domestic freight brokerage or agency in the United States.

CETG 0860 – Technical Writing 0 hrs
The Technical Writing Online Training Program is designed for anyone who wishes to develop their technical writing abilities to a professional level.

CETG 0861 – Prof Bookkeep Quickbooks 2010 0 hrs
Prepare for a career in the high-demand field of bookkeeping and accounting as you master QuickBooks 2010—the leading financial software tool for small businesses.

CETG 0864 – Payroll Practice & Management 0 hrs
Get the training to help prepare you for the Certified Payroll Professional (CPP) test given by the American Payroll Association.

CETG 0870 – Digital Arts Certificate 0 hrs
This certificate program will help you develop technical skills and creative artistry in digital imaging, illustration, and photography.

CETG 0872 – Entrepreneurship:Business Mgmt 0 hrs
You'll learn the keys to business planning, communication skills, marketing, and management.

CETG 0883 – Webmaster 0 hrs
This Webmaster Online Training Program will prepare you for a career designing, developing, and maintaining Web sites.

CETG 0900 – AutoCAD 2011 w/AutoCAD 3D 0 hrs
Master basic and advanced design skills as you gain hands-on practice in using the 2D commands and 3D modeling tools in AutoCAD 2011.
CETR 0002 – UDOT Basics of Design II 0 hrs
Use the most up-to-date Project Design Criteria form to identify UDOT standards for design speed, lane width, shoulder width, horizontal alignment, vertical alignment, grades, stopping sight distance, cross slopes, super elevation, structural capacity, bridge width, vertical clearance, and lateral offset to obstruction.

CETR 0003 – UDOT Structures TEP Lev 2 0 hrs
Basic structure types, components and terminology.

CETR 0006 – UDOT OMS TEP Level 3 0 hrs
Basic of MMS. MMS is used for reporting cost associated with maintenance activities.

CETR 0010 – UDOT Environmental TEP Lev 1 0 hrs
Introduce you to environmental issues and how they relate to UDOT construction and maintenance projects. You will learn about UDOTs environmental study process, required permits, clearances, basic principles of erosion and sediment control.

CETR 0013 – UDOT Materials I TEP Lev 1 0 hrs
Theory of design and introduction to pavement and materials.

CETR 0015 – UDOT Materials II 0 hrs
Know where to find applicable reference standards; become familiar with Quality Assurance Concepts. Develop a background in measurements and calculations. Understand field testing techniques. Focus on concrete testing.

CETR 0016 – UDOT Plan Reading TEP Lev 1 0 hrs
Introduce basic UDOT plan reading including, engineering views, section views, standard drawings, special provisions, coordinate systems, stationing, horizontal and vertical curves, drainage features, embankments, and signing.

CETR 0017 – UDOT Plan Reading TEP 2 0 hrs
Builds on plan reading concepts learned in Plan reading I. Topics include: environmental documents, right-of-way, retaining walls, bridge structures, highway lighting, traffic signals and control plans.

CETR 0018 – UTA - ITCLI007 Wlding Intro 0 hrs
Distinguish between different electrodes and wires, setup and operation of LN-25 wire feed machine. Basic safety and setup for SMAW and FCAW and use of welding machine in different positions.
### CETR 0019 – UTA-Basic Welding/Metal Work
Perform basic ox-acetylene cutting, common welding, brazing and soldering operations. Select and use the proper electrodes and weld in flat, horizontal, vertical and overhead positions. Fabricating components from channel angles and tubing. Blueprint reading.

### CETR 0020 – Basic Welding
This course is designed to help students perform basic oxy-acetylene cutting, common welding and braze operations. Incorporate classroom training to actual work.

### CETR 0021 – UDOT MMQA TEP Lev 3
How to properly collect data for the MMQA system.

### CETR 0026 – UDOT Office Inspec TEP Lev 4
Students should be familiar with documentation terms and practices as they apply to construction of UDOT projects. A hands-on approach from the beginning of a project to the end.

### CETR 0030 – UDOT Roadway Advanced III
Alternatives Roadway Development Process, provides an overview of the MVC alternative development process.

### CETR 0034 – UDOT Signal Int Lighting III
Alternatives Signal Lighting Development Process, provides an overview of the MVC alternatives development process.

### CETR 0037 – UDOT Traffic/Safety II
Alternatives Traffic/Safety Development Process, provides an overview of the MVC alternatives development process.

### CETR 0039 – UDOT Equip Mgt TEP Lev 4
Basics of how UDOT keeps track of equipment uses.

### CETR 0040 – SLC Airprt Authrty Electrical
Basic cognitive and psychomotor skills needed to troubleshoot and repair motors, motor controls, and electrical systems. Terminology to electrical wiring, safety devices.

### CETR 0041 – SLC Airprt PLC 500 Maint
A programmable logic controller (PLC) is a specialized computer used to control machines and processes. It uses a programmable memory to store instructions and execute specific functions that include on/off control timing, counting, sequencing, arithmetic and data handling.
CETR 0042 – SLC Airprt 10 Wheel Dump Truck
Train and upgrade the skills of employees for the safe operation of city equipment. A certified trainer will provide training and instruction in the classroom and hands on training.

CETR 0043 – SLC Airport Diversity
Open discussions about diversity and what diversity means to us as individuals, as communities and as a nation.

CETR 0044 – SL Airprt Transportation Truck
Train and upgrade the skills of employees for the safe operation of city equipment. Pre-trip and post-trip inspections, safety in and around the equipment, safe operation of the Transport truck, and understanding the Federal Motor Carrier Safety Admin Cargo rules.

CETR 0045 – SLC Airport Defensive Driving
Attention discipline-exercises on driving around and hazards to look for. Tire blow out recovery from cars to 18 wheel vehicles. Skid control from front wheel to four-wheel drive vehicles.

CETR 0046 – SLC Airport Backhoe Training
Evaluation to determine current knowledge and skill level. Classroom on emphasis backhoe safety principal. On-site hands on training, and post training evaluation.

CETR 0052 – UDOT - English II
Course emphasizes writing skill development through practice writing, with special emphasis on areas such as planning writing, standard abbreviations, footnote techniques, and correction of writing through group analysis.

CETR 0053 – UDOT English Level III
Emphasis in on developing writing skills through using techniques that generate ideas, identify audiences and purposes, construct arguments, and state problems. Review spelling, punctuation, and usage skills.

CETR 0054 – UDOT English IV
Introduce the role of writing and communication in the workplace and daily life. Focus on developing skills in critical thinking, perceptive reading, and writing with purpose, unity and coherence.

CETR 0061 – UDOT - Basic Math
Developmental course in math, designed to help students acquired or renew competency in calculation involving whole numbers, place value and rounding, exponents, order of operations, fractions, decimals, ratio and proportion, percents and basic business math.
CETR 0062 – UDOT Math Level II 0 hrs
Emphasis on factoring and solving linear quadratic equations graphing linear equations, and applied problems and geometry applications.

CETR 0063 – UDOT Math III 0 hrs
Introduce the basics and applications of geometry in preparation for surveying/statics courses. Emphasis on parallels, congruent triangles, circles, trigonometric laws, polygons, surface areas, volumes and vectors.

CETR 0064 – UDOT Math IV 0 hrs
Introduce trigonometric functions and relations, identifies solutions of right angles, oblique triangles, trigonometric equations, and vectors.

CETR 0066 – UDOT Math VI 0 hrs
Covers basic hands-on approach to basic keystrokes of the HP 48-GX graphing calculator that corresponds with the algebraic concepts introduced in the math classes.

CETR 0071 – UDOT Supervisory Management 0 hrs
Management course designed to help managers learn leadership, communication, and performance appraisal skills. Effective communication in a diverse work environment, and conflict resolution.

CETR 0081 – UDOT Office Insp/Doc TEP Lev 1 0 hrs
Introduce office administration procedures including filing, payroll, contractors payroll, PR-1391, vehicle reports, training reports, ticket adding, interviewing, and truck overweights.

CETR 0082 – UDOT Office Inspec TEP Lev 2 0 hrs
Introduce correspondence, change orders, subcontract agreements, stockpile requests and payments, and review procedures from inspectors manual.

CETR 0083 – UDOT Office Inspec TEP Lev 3 0 hrs
Introduces DBE specifications, interviews, bulletin boards, Affirmative Action Plan, and partial estimates, reviews procedures from the inspectors manual.

CETR 0084 – UDOT Office Inspection IV 0 hrs
The process of documenting the construction of a UDOT project, covering the paperwork involved in constructing, finishing, accepting and closing out a project for final payment to contractor.

CETR 0091 – UDOT Surveying I 0 hrs
Covers survey skills including measurements of horizontal distance, leveling, and measurements of angles.
CETR 0092 – UDOT Surveying TEP Lev 2 0 hrs
Covers surveying techniques including, field operations with the Transit or Theodolite, line directions, traverse surveys and computations, and horizontal control networks.

CETR 0093 – UDOT Surveying TEP Lev 3 0 hrs
Covers surveying techniques including, US public land survey state plane coordinates, horizontal and vertical curves, and topographical surveys.

CETR 0094 – UDOT Surveying TEP IV 0 hrs
Introduces basic surface preparation or refinishing, proper utilization of refinishing products and equipments, spray and blending techniques, and the proper mixing ratios for refinishing products.

CETR 0099 – UDOT-Basics Pub Presentations 0 hrs
To teach UDOT engineers the basics of public presentations to community and academic groups. Speech anxiety, audience analysis, organization visual aids, powerpoint and delivery.

CETR 0100 – UDOT Word TEP Level 1 0 hrs
Covers the basic skills used as you create and edit documents in Microsoft Word.

CETR 0101 – UDOT Word TEP Level 2 0 hrs
Covers the basic skills used as you create and edit documents in Microsoft Word.

CETR 0102 – UDOT Excel TEP Level 1 0 hrs
Covers basic skills used as you create and edit documents in Microsoft Excel.

CETR 0103 – UDOT Excel TEP Level 2 0 hrs
Covers the basic skills uses as you create and edit documents in Microsoft Excel.

CETR 0104 – UDOT PowerPoint TEP Lev 4 0 hrs
Microsoft PowerPoint will introduce the basic skills necessary for creating presentations.

CETR 0105 – UDOT-CEMT Contract Admin 0 hrs
Contract administration and resident engineer duties and authority. This class is designed to give a greater understanding of the engineers daily duties and to prepare to better administer a construction project for UDOT.

CETR 0106 – UDOT-CEMT Utilities & Railroad 0 hrs
This class is designed to give an overview of the many things that are expected of a project manager or engineer in working with specifications, state, federal laws, requirements and documentations.
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>CETR 0107</td>
<td>UDOT-CEMT Negotiation/Traffic</td>
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<tr>
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<td>Negotiation and traffic control.</td>
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<tr>
<td>CETR 0108</td>
<td>UDOT-CEMT Materials/Closeout</td>
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<td>This class is designed to give an overview of the many things that are expected of a project manager or engineer in the materials and project closeout areas.</td>
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<tr>
<td>CETR 0109</td>
<td>UDOT-CEMT PDBS/Prjct Estimates</td>
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<td>This class is designed to provide insight into innovative contracting methods and the advantage of using different methods to deliver projects more efficiently and in less time.</td>
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<tr>
<td>CETR 0110</td>
<td>UDOT-CEMT Environmental Resrce</td>
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<td>This class is designed to give an overview of the many things are are expected of a project manager or engineer in the environmental process and resource that impact those areas.</td>
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<tr>
<td>CETR 0111</td>
<td>UDOT-CEMT Civil Rights</td>
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<td>This class is designed to give an overview of external civil rights issues with detailed information and guidance to assist contractors, consultants, and subcontractors.</td>
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<tr>
<td>CETR 0112</td>
<td>KUC Welding Skill Test 1</td>
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<td>New Hires- Kennecott Utah Copper- Welding Skill KUC Test 1. Welding Skill 1- Acceptance Standard: AWS C4.1-77, Sample 2Achieve the proper torch flame for cutting; Cut 1(^{\frac{1}{2}}) Diameter circle; Cut 45 degree bevel; Make straight Cuts; Dimensional Inspection. (1.5 hrs (1hr with (\frac{1}{2}) hr pre-safety required)</td>
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<tr>
<td>CETR 0113</td>
<td>KUC Welding Skill Test 2</td>
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<td>New Hires- Kennecott Utah Copper- Welding Skill KUC Test 2. Welding Skill 2- Acceptance Standard: AWS D1.1/D1.1M Current edition. Visual Examination before back gouging; Visual Examination after back gouging; Visual Examination at completion of all welding; Root Bend: Face Bend (3hrs (2.5 hrs with (\frac{1}{2}) hr pre-safety required)</td>
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<tr>
<td>CETR 0114</td>
<td>KUC Welding Skill Test 3</td>
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<td>New Hires- Kennecott Utah Copper- Welding Skill KUC Test 3. Welding Skill 3- Acceptance Standard: AWS D1.1/D1.1M Current edition. Visual Examination ; Root Bend: Face Bend (1.5 hrs (1 hr with (\frac{1}{2}) hr pre-safety required)only by appointment.</td>
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<tr>
<td>CETR 0115</td>
<td>KUC Welding Skill Test 4</td>
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<td>New Hires- Kennecott Utah Copper- Welding Skill KUC Test 4. Welding Skill 4- Acceptance Standard: AWS D1.1/D1.1M Current edition. Visual Examination ; Radiographic Examination. (3 hrs (2.5 hrs with (\frac{1}{2}) hr pre-safety required) only by appointment.</td>
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CETR 0203 – UTA Basic Refinishing 0 hrs
The goal of this course is to introduce entry-level technicians to the painting and sheet metal process, and build the critical skills and safety needed for a career in bus body repair.

CETR 0204 – UTA Machine Operation 0 hrs
The basic goal of the project is to provide an improved public transportation system in a cost-effective, environmentally sensitive and socially responsible “design to cost” philosophy.

CETR 0205 – UTA 5 Pilars Successful Teams 0 hrs
The Five Pillars of Successful Teams-UTA. This is a hands on, participatory to help ongoing efforts to build and improve their team. Team leadership styles, real team communication, building camaraderie, the dynamics of synergy, the heard of any successful team.

CETR 0300 – UTA Damage Analysis 0 hrs
Introduction to the design criteria and standards to be used for the commuter rail system

CETR 0301 – UTA HVAC (80 hours) 0 hrs
Basic electrical training program is designed for UTA apprentices. By combining theory and practical shop experience, the student will develop the basic cognitive and psychomotor skills needed to troubleshoot and repair.

CETR 0302 – UTA HVAC Heating 1 0 hrs
UTA training for safety, refrigerant certification, controls components, PM troubleshooting, and tools and equipment.

CETR 0400 – ES60 UPRR Basic Welding 0 hrs
Welding safety, setup and operate Oxy-fuel cutting and welding equipment, shielded metal ARC welding (SMAW) equipment.

CETR 0401 – ES20 UPRR Adv Brdge WireFd Wld 0 hrs
Welding safety, setup and operate, review oxy-fuel safety. Identify various joint designs, qualify tests in vertical up (3G) and overhead (4G) position, feed welding. GMAW and FCAW processes using 068-232 wire.

CETR 0402 – ESAW UPRR Adv Welding 0 hrs
Welding safety, Oxy-fuel safety quick review. Equipment Adv. Shielded Metal Arc Welding, filler metals, Joint Design, Welding symbols and quality control. Welding test vertical up (3G) and overhead (4G) positions.
CETR 0411 – ES20 UPRR Adv Bridge Stick Wld 0 hrs
Welding safety, setup and operate, review, oxy-fuel safety, identify various joint designs, qualify test in vertical up (3G) and overhead (4G) position, feed welding GMAW and FCAW processes using 068-232 wire will be thicker on the material. SMAW (Shield Metal Arch Welding) will be used. Advanced Bridge Stick Welding.

CETR 0600 – Conflict Management Skills 0 hrs
This workshop explores the five models people use in dealing with conflict and how to determine which is best. Attendees learn how to diffuse negative situations and promote harmony. It includes exercises designed to help participants constructively engage with and manage conflict rather than avoid it.

CETR 0601 – Help Employees Embrace Change 0 hrs
Participants learn about the emotional impact that both small and large change has on an employee. Session also focuses on the strategies necessary for helping employees embrace and positively promote change.

CETR 0602 – Communicating for Results 0 hrs
Communicating for results gives the student the opportunity to explore how communication styles effect overall performance. It improves both verbal and non-verbal communication skills to become more effective in groups or individual communication settings.

CETR 0603 – Sales for Non-Sales Managers 0 hrs
This valuable workshop focuses on various sales techniques and how they are successfully used by non-sales professionals.

CETR 0604 – Superior Sale Performance 0 hrs
This valuable workshop focuses on various sales techniques and how they are successfully used by non-sales professionals.

CETR 0605 – Peer Today, Boss Tomorrow 0 hrs
Without adequate preparation for the transition from peer to boss, many new managers struggle to reach their full potential. Outlines four strategies to help new managers make successful transitions. Helps new managers address their evolving relationships with colleagues. A vision point seminar.

CETR 0606 – Secrets of Leadership 0 hrs
This insightful and engaging workshop will benefit and motivate managers on all levels. They will understand and have embraced eight often overlooked aspects of leadership.
CETR 0607 – Coaching & Team Bldg for Mgrs 0 hrs
A sports coach cannot win without a team and neither can a business. Learn how to empower a team, give clear directions and set goals. How to handle conflict in a team and build unity. Understand feedback and successful communication when leading or coaching a team.

CETR 0608 – Keep Customers in a Tough Econ 0 hrs
This workshop focuses on customer retention and relationship management. Overcoming short term objections for long term buying habits. Dos and Dons of customer service. Involving your customers in making the company better. Defining Key moments in customer behavior.

CETR 0609 – Topics for Women in Leadership 0 hrs
This leadership development workshop is designed for women in business. Covers topics such as how you can motivate, engage and inspire individuals and teams, lead with self-confidence, and develop strong communication skills. Network with professionals and managers and discuss issues and perceptions unique to women in leadership.

CETR 0610 – Customer Service Phone Skills 0 hrs
This workshop teaches the key skills necessary to provide the best customer service over the phone. Great for both inbound and outbound call center agents, as well as sales professional that do business over the phone.

CETR 0611 – Make Money in the Green Sector 0 hrs
What is a Green industry or occupation? There are many aspects of work that could be considered green, such as new materials, methods, products and services. This workshop gives an overview of the emerging industry and where money can be made.

CETR 0612 – Successful Time Mgt Strategies 0 hrs
Workshop goes beyond the basic Franklin planner training and discusses time wasters, time strategies, and time creation. Great for the busy executive.

CETR 0613 – Turn Social Media into Sales 0 hrs
Learn how to take advantage of the power of social media to build your business. Hands on workshop in a computer lab that focuses on the marketing and sales strategies involving Twitter, LinkedIn and Facebook.

CETR 0614 – Lean Office Boot Camp 0 hrs
Learn how to apply lean operating principles to the office enviroment. Improve productivity and eliminate waste in administrative and other non-manufacturing elements of your business.
CETR 0615 – Human Resource Leadership 0 hrs
HR Leaders need a special set of management and people skills. Learn leadership skills that will quickly improve your performance and those you supervise.

CETR 0616 – Guerilla Mrktng in Todays Econ 0 hrs
Marketing does not have to be complicated or expensive. Tap into marketing that works. Learn how to make a plan and avoid analysis paralysis.

CETR 0617 – Lean Sigma Champion 0 hrs
Overview of Lean principles including the eight forms of waste and the cultural change that must take place. Discuss the role of management in lean. Discuss if Lean is right for your company.

CETR 0618 – Bus Etiquette for Digital Age 0 hrs
Students will learn concepts of etiquette through different generations, and find out why yesterdays rules are no longer effective.

CETR 0619 – Five Pillars Successful Teams 0 hrs
Workshops will guide leaders through the basic principles that go into making a successful team.

CETR 0620 – Beyond Time Management 0 hrs
Students will learn concepts of time management.

CETR 0621 – Stay Positive while Stressed 0 hrs
Students will learn how to stay positive while stressed.

CETR 0622 – Sales for a Non-Sales Prof 0 hrs
Students will learn concepts of successful sales techniques.

CETR 0623 – Power Writing for Today 0 hrs
Students will learn how to use techniques on infusing power into different types of writing.

CETR 0624 – Lang of Whole Brain Leadership 0 hrs
Students will learn how to send concrete messages.

CETR 0625 – Customer Service and Beyond 0 hrs
Students will learn how to use techniques to focus on customer’s needs.

CETR 0626 – IPC-J-STD-001: L3 Comm 0 hrs
Consensus standard for soldering materials, processes using lead-tin and lead-free solder.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CETR 0627</td>
<td>IPC-A-620E: L3 Comm</td>
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<tr>
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<td>Consensus standard for requirements and acceptance for cable and wire harness assemblies.</td>
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<td>CETR 0628</td>
<td>IPC-A-610E: L3 Comm</td>
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<td>Enables students to make correct/accept/reject decisions for appropriate class(es) of electronic assemblies.</td>
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<tr>
<td>CETR 0629</td>
<td>Taking the HEAT</td>
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<td>Students will learn a set of best practices for taking the heat to turn difficult customer situations into positive interactions.</td>
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<tr>
<td>CETR 0630</td>
<td>Mastering Police Report Writing</td>
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<td>Course will teach skills to effectively write informative police reports.</td>
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<tr>
<td>CETR 0700</td>
<td>BMLI-Setting Performance Expect</td>
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<td>This course helps leaders drive performance and accountability by helping people understand what is expected of them and gaining their commitment to achieving it.</td>
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<tr>
<td>CETR 0701</td>
<td>BMLI-Coaching for Improvement</td>
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<td>Helps leaders conduct effective discussions and provide the feedback and ongoing support people need to improve performance.</td>
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<tr>
<td>CETR 0702</td>
<td>BMLI-Coaching For Success</td>
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<td>Develops leaders who help people achieve goals and avoid problems, a positive experience for themselves and those being coached.</td>
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<tr>
<td>CETR 0703</td>
<td>BMLI-Delegating for Results</td>
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<td>In this course, leaders overcome their hesitation to delegate by learning skills for successfully matching people with responsibility and authority.</td>
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<tr>
<td>CETR 0704</td>
<td>BMLI-Essentials Of Leadership</td>
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<td>Teaches leaders how to get results through people.</td>
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<td>CETR 0705</td>
<td>BMLI-Starting as a New Leader</td>
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<td>Arms new leaders with the knowledge and skills they need to confront the challenges associated with getting their footing and results as a new leader more quickly.</td>
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<tr>
<td>CETR 0706</td>
<td>BMLI-Leading Change</td>
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<td>This course focuses on leaders crucial role in initiating change in the workplace.</td>
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CETR 0707 – BMLI-Lead High Performing Team 0 hrs
This course provides team leaders with the tools and skills to perform three primary responsibilities—diagnose, coach and reinforce.

CETR 0708 – Resolving Conflict for Leaders 0 hrs
This course teaches leaders how to recognize that a conflict is escalating and minimize damage by using the most appropriate resolution tactic.

CETR 0709 – BMLI-Lean Six Sigma Green Belt 0 hrs
Learn how to identify and implement changes in operation aimed at reducing waste, cost, time and variation.

CETR 0710 – BMLI-Lean Six Sigma Black Belt 0 hrs
Learn how to lead teams for change and improvement.

CETR 0711 – Project Mngmnt Prof Exam Prep 0 hrs
Prepares students to successfully pass the PMP exam.

CETR 0712 – BMLI-Developing Others 0 hrs
Course provides leaders, coaches and mentors with a practical process and the skills necessary to develop talent.

CETR 0713 – BMLI-Navigating Beynd Conflict 0 hrs
New course, allows leaders to resolves issues within the workplace and then have the necessary tools to move past them.

CETR 0714 – Buildng an Enviroment of Trust 0 hrs
New course, allows leaders to creative an environment of trust with their employees as well as between employees.

CETR 0715 – Lean 101 0 hrs
Lean 101 provides theory tools and an overview of lean tools such as Value Stream, Mapping, Kaisen, etc. Students will learn and understand the meaning of ‘waste’ and how to eliminate it from the working environment.

CETR 0716 – Business Writing for Mangers 0 hrs
Business Writing for Professionals: Provides techniques that apply to any business writing situation.
CETR 0717 – BMLI-Intro to Natural Gas Meas 0 hrs
Intro to Natural Gas Measurement is a pilot course utilizing curriculum developed by the Gas Measurement Training Council. It will provide an overview of the natural gas measurement and transmission industry and the basic skillsets necessary to work as a field technician. Topics will include gas properties, fluid mechanics, gas flow measurement, gas meters, and industry standard safety guidelines.

CETR 0718 – BMLI-Project Management 101 0 hrs
Project Management 101 provides students with an overall understanding of project management by focusing on the basic concepts, definitions, tools, strategies, processes, and phases associated with project management. Students will be able to adapt the generalized knowledge and principles offered to fit within their unique and specific workplace project needs.

CETR 0719 – BMLI-Quality 101 0 hrs
Quality 101 is designed to meet organizational needs for foundational quality knowledge and competence. This course satisfies 6.2 human resource requirements and provides documentation for ISO 9001:2008, TL9000, TS 16949 and AS9000 standards that cover competence, awareness and training. Helps prepare individuals for the Quality Improvement Associate (QIA) certified exam. Introduces quality concepts and terminology to non-quality practitioners involved in Lean Six Sigma initiatives.

CETR 0720 – Build & Deliver Effect Trng 0 hrs
This course focuses on how to build and deliver meaningful training courses and programs within an organization. During this eight-hour session, effective training principles will be covered.

CETR 0721 – BMLI-Customer Service Excellen 0 hrs
This foundational course provides individuals with a powerful set of interaction skills that enables them to communicate more effectively with colleagues and customers, and in the process, build trust, strengthen partnerships, and achieve desired results.

CETR 0722 – Personal Empowerment 0 hrs
This course seeks to change the mindset that empowerment is something that is given. It helps employees see that they can and should look for improvement opportunities. It helps leaders to make their jobs more interesting, motivating, and rewarding and makes them a more valuable asset to their organization.

CETR 0723 – Taking Action to Solve Problem 0 hrs
This course provides leaders, coaches, and mentors with the skills and the practical process necessary to develop talent. Participants will examine the leader’s role before, during, and after the development plan.
CETR 0724 – Lean Six Sigma Yellow Belt 0 hrs
Lean Six Sigma Yellow Belt teaches Lean Six Sigma fundamentals, its application, and methods for improving participation of project team members. Yellow Belt team members form an important link in a mature Lean Six Sigma deployment.

CETR 0802 – IHC-Workplace ESL Level 1: IMC 0 hrs
Students will learn the basics of English language while enhancing their communication skills in the workplace.

CETR 0803 – IHC-Workplace ESL Level :: IMC 0 hrs
Students will learn the basics of English language while enhancing their communication skills in the workplace.

CETR 0804 – IHC-Workplace ESL Level III 0 hrs

CEWB 0001 – WNET 0 hrs
Womens Network for Entrepreneurial training. Mentoring and training initiative of the US SBA, designed to train participants in professional skills that promote positive and profitable business development.

CEWB 0013 – Fast Trac-First Step 0 hrs
Communicating the business concept, gathering information for feasibility, product and services.

CEWB 0100 – WBI-Counseling 0 hrs
One on one counseling with small business owners.

CHE 2000 – Cooperative Education In Chemical Engineering 1-2 cr
Prereq: Sophomore standing, minimum 2.0 GPA, and instructor approval. This is a supervised work experience in a business, industrial, or government environment related to the program major. Credit is award for successful completion of specified learning objectives.

CHE 2300 – Engineering Thermodynamics 2 cr
Prereq: CHEM 1210 and MATH 1220. Recommended prereq: PHYS 2210. First and second law of thermodynamics, internal energy, enthalpy, entropy and open and closed systems are covered. Engineering cycles including Carnot, Otto, Diesel, Brayton and Refrigeration are introduced.

CHE 2450 – Numerical Methods 3 cr
Prereq: ENGR 1030 or 1040; MATH 2250. Recommended prereq: MATH 2210. Numerical techniques used in engineering computing, including: convergence, error accumulation, roots, solution of linear and nonlinear equations, numerical integration and differentiation, and solutions to differential equations.
CHE 2800 – Fundamentals Of Process Engineering 3 cr
Prereq: CHE 2300. Material and energy balances, fundamentals of multicomponent phase properties and phase equilibria, numerical and graphing calculations, degrees of freedom, and applications to process engineering calculations are covered.

CHE 2900 – Special Topics In Chem. Eng 1-3 cr
Special Topics reflecting items of current interest in Chemical Engineering.

CHEF 1110 – Sanitation 3 cr
Develop an understanding of basic principles of sanitation and safety. Be able to apply them in foodservice operations. Reinforce personal hygiene habits, protecting consumer's health. Class is prerequisite/corequisite for any lab class.

CHEF 1120 – Introduction to Hospitality 3 cr
Acquaints the student with the scope and complexity of the hospitality industry by exploring the relationship of lodging, food, and beverage operations. Examines industry opportunities and future trends. Upon completion, students should be able to demonstrate an understanding of the background, context, and career opportunities that exist in the hospitality industry.

CHEF 1130 – Management of Marketing 3 cr
Marketing is the foundation for every successful business. Managers must understand the principles of the marketing cycle; who customers are, what they want and how to set prices. Managers determine goals and track them.

CHEF 1160 – Herb Horticulture 3 cr
Students identify, cultivate and use various herbs. Students plant, maintain, and harvest herbs. Students learn fundamentals of utilizing herbs for culinary purposes, can prepare for jobs in clean/green industries.

CHEF 1210 – Food and Beverage Service 3 cr
The course concentrates on professional standards of performance for dining room personnel. Course may be taught with a Service Learning component.

CHEF 1220 – Beginning Food Preparation 3 cr
Prereq: CHEF 1110 w/C grade or higher, can be taken concurrently or valid ServeSafe Certificate. Coreq: CHEF 1225. This course includes basic classroom and laboratory experiences needed to develop skills in safe knife, tool and equipment handling and apply principles of food preparation to produce a variety of food products. Foundation topics for optionally offered production coursework include breakfast and pantry preparations and stock, soup and sauce cookery.
CHEF 1225 – Beginning Food Preparation Lab 3 cr
Prereq: CHEF 1110 w/C or higher, can be taken concurrently or valid ServeSafe Certificate. Coreq: CHEF 1220. To develop skills in knife, tool and equipment handling and apply principles of food preparation to produce a variety of food products. To operate equipment safely and correctly. To apply knowledge of laws and regulations relating to safety and sanitation in the kitchen. Instruction and learning activities are provided in a laboratory setting using hands-on experiences with the tools, equipment.

CHEF 1299 – Special Studies 2-5 cr
Prereq: Department Approval Designed to assist students to obtain specialized training specific to industry needs. Is taught on an as-needed basis when requested by industry.

CHEF 1310 – Advanced Food Preparation 3 cr
Prereq: CHEF 1110 w/C or higher, can be taken concurrently or valid ServeSafe Certificate and CHEF 1220 and 1225. Coreq: CHEF 1315. The course content centers on preparation management using the decision-making process, meeting health and safety needs in the workplace, preparing and serving food, maximizing resources when planning preparing/serving food, and promoting hospitality in food practices.

CHEF 1315 – Advanced Food Preparation Lab 3 cr
Coreq: CHEF 1310. Instruction and learning activities are provided in a laboratory setting using hands-on experiences with the tools, equipment, and materials appropriate to the course content. Strong emphasis will be given to outcomes in demonstration of personal productivity, basic skills in communication and following instructions, kitchen mathematics, and scientific principles related to the foods industry.

CHEF 1320 – Fundamentals Cost Control (QS) 3 cr
This class introduces students to the need and principles of controlling costs of food and beverages in a hospitality operation. This course also satisfies a General Ed requirement for AAS degrees, certificates and diplomas.

CHEF 1330 – Foundation Wine 3 cr
Prereq: 21 years of age minimum. This course will provide training on the pairing of food and beverages, including wines and other beverages both alcoholic and non-alcoholic.

CHEF 1600 – Herb Horticulture 1 cr
Lecture/Lab Students identify, cultivate and use various herbs. Students plant, maintain, and harvest herbs. Students learn fundamentals of utilizing herbs for culinary purposes, can prepare for jobs in clean/green industries.
CHEF 1810 – Culinary Competitions 101 1 cr
Prereq: CHEF 1110 w/C grade or better, can be taken concurrently or valid ServeSafe Certificate. The course will introduce students to the rigors of professional culinary competition as sanctioned by various organizations including: the American Culinary Federation, the Research Chef’s Association, SkillsUSA, and the Retail Baker’s Association.

CHEF 1815 – Culinary Competitions Lab 2 cr
Prereq: CHEF 1110 w/C grade or better (may be taken concurrently) or ServeSafe Certificate. Coreq: CHEF 1810. This course approximates industry intensity with a dramatic opportunity to apply culinary, organizational & team building skills. Course completion requires participation in an extracurricular sanctioned event that may require additional fundraising & membership in outside organizations.

CHEF 1896 – Capitol Dining 3 cr
Prereq: CHEF 1110 w/C grade or higher, can be taken concurrently or valid ServeSafe Certificate. Capitol Dining courses are designed to offer the student practical culinary production experience to include the study of purchasing and inventory management of foods and other supplies to determine order quantities, formal and informal price comparisons, proper receiving procedures, storage management, and issue procedures. A grade of 2. 8 or better applies towards 2,000 hours needed for graduation.

CHEF 2000 – Baking Co-Op 4 cr
Cooperative education permits the students to gain college credit for the hours spent on the job. Advanced registration and agreement signed between employer, student, and the College must be in place before the semester begins.

CHEF 2001 – Culinary Arts CO-OP 2-4 cr
Cooperative education permits the students to gain college credit for the hours spent on the job. Advanced registration and agreement signed between employer, student, and the College must be in place before the semester begins.

CHEF 2330 – Advanced French Wines 3 cr
Prereq: Must be 21 years of age. The French Wine Scholar program is an official course of study designed for wine trade and enthusiasts. It is endorsed by Wines of France/French National Wine Office and taught by licensed French Wine Academy Instructors. Students will gain in depth understanding of wine in France.

CHEF 2410 – Purchasing 3 cr
Prereq: CHEF 1320 w/C grade or higher. To understand overall concept of purchasing, receiving practices, and regulations governing food products. Receive and store food and non-food items properly.
CHEF 2420 – Baking 3 cr
Prereq: CHEF 1250, 1350, and student must have valid ServeSafe certification or have passed CHEF 1110 w/C grade or better. Coreq: CHEF 2460. An introduction to the principles and techniques used in the preparation of high-quality baked goods and pastries and evaluation of quality characteristics.

CHEF 2460 – Baking Lab 3 cr
Prereq: CHEF 1250, 1350, and student must have valid ServeSafe certification or have passed CHEF 1110 w/C grade or better. Coreq: CHEF 2420. To apply the fundamentals of baking science to the preparation of a variety of products. To use and care for equipment normally found in the bakeshop or baking area. Activities are in a lab setting using hands-on experiences.

CHEF 2510 – Garde Manger 3 cr
Prereq: CHEF 1220, 1225, 1310, and 1315. Coreq: CHEF 2560. Develop skills in producing a variety of cold food products. To prepare items appropriate for buffet presentation including decorative pieces. Strong emphasis will be given to outcomes in demonstration of personal productivity, basic skills in communication & following instructions, kitchen mathematics, & scientific principles related to the foods industry.

CHEF 2520 – Nutrition 3 cr
In this course, students learn about basic nutrients, food labeling, current issues in nutrition, and the application of nutritional principles to menu development.

CHEF 2560 – Garde Manger Lab 3 cr
Prereq: CHEF 1220, 1225, 1310, and 1315. Coreq: CHEF 2510. Develop skills in producing a variety of cold food products. To prepare items appropriate for buffet presentation including decorative pieces. Strong emphasis will be given to outcomes in demonstration of personal productivity, basic skills in communication & following instructions, kitchen mathematics, & scientific principles related to the foods industry.

CHEF 2610 – Menu Design 3 cr
Prereq: CHEF 1320. To apply the principles of menu planning and layout to the development of menus for a variety of types of facilities and service.

CHEF 2620 – Culinary Management 3 cr
Prereq: CHEF 1120. To prepare for the transition from employee to supervisor. To evaluate styles of leadership and develop skills in human relations and personnel management.
CHEF 2680 – Catering Management  
Prereq: CHEF 1110 w/C grade or higher, can be taken concurrently OR student must have valid ServeSafe certification. This class introduces students to the world of catering. Students will study concepts of how to organize and operate a small to mid-size business. A grade of 2.8 or better applies towards 2,000 hours needed for graduation.

CHEM 1010 – Intro to Chemistry (PS)  
Survey of general chemistry: structure, composition, properties and chemical transformations. Course may be taught with a Service Learning component.

CHEM 1100 – Preparatory Chemistry  
Introduction to basic concepts in chemistry. Emphasizes application of math principles, use of computers and other problem-solving methods. Preparation for CHEM 1210 series.

CHEM 1110 – Elementary Chemistry  
Prereq: MATH 1010 or appropriate Accuplacer score (MATH 1020 for Nursing majors). Recommended coreq: CHEM 1115. Introductory course in general inorganic and organic chemistry of hydrocarbons of functional groups. For health science students and other non-chemistry majors.

CHEM 1115 – Elementary Chemistry Lab  
Prereq: MATH 1010 or appropriate Accuplacer score (MATH 1020 for Nursing majors). Recommended coreq: CHEM 1110. Graded laboratory, may be taken concurrently with CHEM 1110.

CHEM 1118 – Elem. Chem. Problem Session  
Problem session for CHEM 1110. Though not required, students are strongly encouraged to register for this session.

CHEM 1120 – Elementary Bioorganic Chem  

CHEM 1125 – Elem. Bioorganic Chemistry Lab  
Prereq: CHEM 1110. Recommended coreq: CHEM 1120. Graded laboratory, may be taken concurrently with CHEM 1120.

Problem session for CHEM 1120. Though not required, students are strongly encouraged to register for this session.
CHEM 1210 – General Chemistry I  
Prereq: MATH 1050 w/C grade or higher, or appropriate Accuplacer score. Recommended coreq: CHEM 1215. Fundamentals of inorganic chemistry. Atomic structure chemical bonding, chemical reactions, solution chemistry, stoichiometry, periodic table, thermochemistry, kinetics, gases, and kinetic molecular theory will be covered.

CHEM 1215 – General Chemistry Lab I  
Prereq: MATH 1050 w/C grade or better, or appropriate Accuplacer score. Recommended coreq: CHEM 1210. Graded laboratory, may be taken concurrently with CHEM 1210.

CHEM 1218 – Gen. Chem. I Problem Session  
Problem session for CHEM 1210. Though not required, students are strongly encouraged to register for this session.

CHEM 1220 – General Chemistry II  
Prereq: CHEM 1210. Recommended coreq: CHEM 1225. Chemical kinetics, equilibria, acids and bases, entropy and free energy, precipitation reactions, electrochemistry, main group chemistry, nuclear chemistry, metallic bonding theories, hybridization, intro to organic chemistry

CHEM 1225 – General Chemistry Lab II  
Prereq: CHEM 1210. Recommended coreq: CHEM 1220. Graded laboratory, may be taken concurrently with CHEM 1220.

CHEM 1228 – Gen. Chem. II Problem Session  
Problem session for CHEM 1220. Though not required, students are strongly encouraged to register for this session.

CHEM 2000 – Chemistry CO-OP  
Prereq: Departmental approval. Cooperative education represents flexibility and alternative opportunities for students to complete portions of their educational goals through new learning associated with study-related internships or employment.

CHEM 2310 – Organic Chemistry I  
Prereq: CHEM 1220 w/C grade or better. Recommended coreq: CHEM 2315. Introduction to concepts of organic chemistry. Structure, bonding, reaction mechanisms. Detailed study of alkanes, alkyl halides, alkenes, alkynes, aromatic compounds, alcohols. Intro to spectroscopy and stereochemistry

CHEM 2315 – Organic Chemistry Lab I  
Prereq: CHEM 1220 w/C grade or better. Recommended coreq: CHEM 2310. Graded laboratory, may be taken concurrently with CHEM 2310.
CHEM 2318 – Organic Chem. I Prob. Session 1 cr
Problem session for CHEM 2310. Though not required, students are strongly encouraged to register for this session.

CHEM 2320 – Organic Chemistry II 4 cr
Prereq: CHEM 2310 w/C grade or better. Recommended coreq: CHEM 2325. Conjugated and aromatic systems, organometallic compounds carbonyl compounds, carboxylic acids and derivatives, amines biological molecules. Mechanistic organic chemistry, functional group transformation and multistep synthesis

CHEM 2325 – Organic Chemistry Lab II 1 cr
Prereq: CHEM 2310 w/C grade or better. Recommended coreq: CHEM 2320. Graded laboratory, may be taken concurrently with CHEM 2320.

CHEM 2328 – Organic Chem. II Prob. Session 1 cr
Problem session for CHEM 2320. Though not required, students are strongly encouraged to register for this session.

CHI 1010 – Beginning Chinese I 5 cr
First in a series of four courses which focus on listening, speaking, reading, writing and culture. Major objective of the first year is to develop functional language ability in the Chinese culture. Lab attendance is required.

CHI 1020 – Beginning Chinese II (LN) 5 cr
Prereq: CHI 1010 or instructor approval. Second in a series of four courses which focus on listening, speaking, reading, writing and culture. Major objective of the first year is to develop functional language ability in the Chinese culture. Lab attendance is required.

CHI 1300 – Beginning Conversation 1 cr
Prereq: CHI 1010 or instructor approval. Course practices currently held conversation skills to increase speaking ability and vocabulary. Includes role-plays, small group work and presentations. Lab attendance may be required. May be repeated for credit.

CHI 1900 – Special Studies in Chinese 1-2 cr
Prereq: Instructor approval. In the course in language and culture, students plan areas of study, Service Learning or travel and work with an instructor on an individual basis. Some work may be done in groups. Lab may be required. May be repeated for credit.
CHI 2010 – Intermediate Chinese I  
Prereq: CHI 1020 or instructor approval. Third in a series of four courses which focus on listening, speaking, reading, writing and culture. Major objective of second year is to increase functional language ability. Emphasis is on proficiency. Lab attendance is required.

CHI 2020 – Intermediate Chinese II  
Prereq: CHI 2010 or instructor approval. Second-year Chinese courses increase functional language ability focusing on listening, speaking, reading, writing as well as increased focus on culture (philosophies, history, geography, literature, etc) Lab attendance is required.

CHI 2300 – Conversation  
Prereq: CHI 1020 or instructor approval. Course practices currently held conversation skills to increase speaking ability and vocabulary. Includes role-plays, small group activities and presentations. Lab attendance required. May be repeated for credit.

CHI 2700 – Introduction to Literature  
Prereq: CHI 1020 or instructor approval. Second year courses focus on improvement of listening, speaking, reading, writing and culture skills. Major objective is to increase functional language ability through holistic approach to literature. Lab attendance required.

CHI 2710 – Intro to Chinese Film  
Prereq: CHI 1020 or instructor approval. Course will aid students in their study of language and culture. Films will be viewed with subtitles and written work and discussions will be in Chinese. Lab attendance required.

CHI 2900 – Special Topics in Chinese  
This is a course designed by faculty which allows students to explore specific interests in Chinese language and culture. Lab attendance required. May be repeated for credit.

CIS 1020 – Computer Essentials (CL)  
A hands-on introduction to problem solving using Computer Tools. Basic hardware and Office software products topics are discussed.

CIS 1130 – Object-Oriented Programming II  
Recommended prereq: CIS 1030. Continuation of CIS 1030. Fundamental concepts of object-oriented design and programming in Java. Classes from the Java API and user-defined classes are used. Topics: GUIs, data collection and manipulation, complex algorithms.
CIS 2430 – Web Programming
Recommended prereq: CIS 1430 and CIS 2420. Students learn to create E-Commerce solutions and Internet applications using XHTML, JavaScript, PHP, and MYSQL. Students will also be introduced to CGI and Java Applets.

CIS 2770 – Java II
Recommended prereq: CIS 2760. Provides student with the required knowledge and skills to build advanced business object-oriented programs using Java. Students learn Java APIs, design and program large-scale programs using various design patterns in the software development life cycle.

CJ 1010 – Introduction To Criminal Justice (SS, DV)
This course exposes students to theories, concepts, and methods used to facilitate understanding, predicting and responding to issues of deviance and crime in America. Also includes development and evolution of components in the American Criminal Justice System, including the history of racial, ethnic and gender discrimination on charging, conviction, incarceration and employment.

CJ 1300 – Introduction to Corrections
Prereq: CJ 1010. This course examines the history, function and administration of corrections in our criminal justice system.

CJ 1330 – Criminal Law
Prereq: CJ 1010. This course examines crimes, defenses and the historical origins and functions of criminal law in our society. Topics include sources of substantive law, classification of crimes parties to crime, and related topics.

CJ 1340 – Criminal Investigations
Prereq: CJ 1010. This course examines the responsibilities of officers in investigation of crimes. Included are investigative techniques in preliminary and follow-up investigation: reports, interviewing, interrogation, obtaining information, locating and arresting suspects and preparing for trial.

CJ 1350 – Intro to Forensic Science
Recommended Prereq: CJ 1340. This covers the importance of locating, collection and the preservation of physical evidence at crime scenes. Included are crime laboratory techniques and services in examination of evidence.

CJ 1900 – Special Studies
This course covers independent study in criminal justice. CJ elective credit may also be earned for POST, EMT, or other training courses offered at SLCC Institute of Public Safety.
CJ 1910 – Special Function/Reserv Office 12 cr
Module I (14 weeks). Must be a United States Citizen before they can be accepted into the Academy and 21 years of age before the Special Function Reserve Officer Training certification exam. Eligible for airport or campus security, corrections, and constable service.

CJ 1920 – Peace Officer Basic 12 cr

CJ 2000 – Criminal Justice Co-op 2-4 cr
Prereq: CJ 1010, CJ 1330, CJ 1340, CJ 1350 & CJ 2350. This course provides for supervised work experience in a public or private agency related to criminal justice. Must complete specific learning objectives related to their program major and employment.

CJ 2020 – Criminal Justice Supervision 3 cr
Prereq: CJ 1010. This course is designed for first line supervisors within criminal justice agencies. Topics covered include work environment, diversity, motivation, discipline, evaluation, planning and leadership. Supervisory report writing is an integral part.

CJ 2060 – Community Corrections 3 cr
Prereq: CJ 1010. This course examines the types of sentences utilized as alternatives to incarceration. Included are probation, parole, substance abuse and other treatment programs, half-way houses, house arrest, electronic monitoring, community service and etc.

CJ 2110 – Introduction to Security 3 cr
Prereq: CJ 1010. This course studies security in the private sector. Covered are personnel investigations, physical security, investigative techniques, security awareness, risk management and internal and external theft and fraud.

CJ 2260 – Contemporary Prison/Jail Issues 3 cr
Prereq: CJ 1010. This course focuses on the various problems encountered in prisons and jails. Topic areas include officer morale and conduct, inmate culture, cultural diversity, custody and control, discipline, treatment, inmate deprivations and violence.

CJ 2300 – Introduction to Policing 3 cr
Prereq: CJ 1010. This course examines the history, function and administration of policing and the role of police in modern society. Special emphasis will be placed on problems and issues confronting police and solutions within an organizational framework.
CJ 2330 – Juvenile Justice 3 cr
Prereq: CJ 1010. This course will examine juvenile crime, trial and sentencing and trying juveniles as adults. Laws regarding child abuse, foster care, termination of parental rights, child custody, adoption and the evolving nature of juvenile law.

CJ 2350 – Laws of Evidence 3 cr
Prereq: CJ 1010 & CJ 1330. This course covers principles and law regarding evidence in criminal cases. Special attention will be placed on the Constitutional limitations on arrest, search and seizure, and impact of the exclusionary rule on law enforcement techniques and practices.

CJ 2390 – Traffic Law/Related Services 3 cr
Prereq: CJ 1010. This course covers the role of law enforcement in traffic safety, traffic law, accident investigation, auto-related crime investigation and other highway related problems.

CJ 2410 – Introduction to Victimology 3 cr
Prereq: CJ 1010. This course examines the science of victimology.

CJ 2420 – Anatomy of Homicide Investigga. 3 cr
Prereq: CJ 1010. This course follows investigative methods utilized in homicide cases.

CJ 2440 – Organized Crime 3 cr
Prereq: CJ 1010. This course examines roots, causes, and operations of organized crime in the United States and around the world from the late 1800's with the beginning of the Mafia to modern gangs and organized criminal elements.

CJ 2450 – Terrorism 3 cr
Prereq: CJ 1010. This course examines the history and development of terrorism in modern society and the destructive methods that terrorists use to accomplish their goals. Also included is a section on bio-terrorism.

CJ 2460 – Psychological Profiling 3 cr
Prereq: CJ 1010. This course examines the technique of criminal investigation analysis and psychological profiling.

CJ 2470 – Introduction to Criminology 3 cr
Prereq: CJ 1010. This course examines the theories and sources of criminal behavior.

CJ 2480 – Crime Scene Processing 3 cr
Prereq: CJ 1010 & CJ 1350. This course covers the duties and responsibilities of the crime scene technicians at the scene of a crime. Includes instruction on the proper collection, handling and securing of evidence.
CJ 2490 – Drug Trafficking 3 cr
Prereq: CJ 1010. This course examines the government's efforts in the war on drugs.

CJ 2500 – Contemporary Violence 3 cr
Prereq: CJ 1010. This course examines violence in our society. Topics covered will be serial killing, mass murder, spree killing and etc.

CJ 2510 – Psychology of Crimin. Behavior 3 cr
Prereq: CJ 1010. This course examines the psychological aspects of criminal behavior.

CJ 2530 – Police Patrol Techniques 3 cr
Prereq: CJ 1010. This course covers the history, dynamics, and principles of police patrol operations and techniques. Special emphasis will be on Directed Patrol, Service-Oriented Policing and cutting-edge approaches to front-line street policing.

CJ 2540 – Careers in Law Enforcement 3 cr
Prereq: CJ 1010. This course provides an insight into the workings and hiring practices of various law enforcement agencies such as ATF, DEA, FBI and local, county and state police agencies. Also available is access to law enforcement guest lectures.

CJ 2560 – Law Enforcement Documentation 3 cr
Prereq: CJ 1010. This course covers specialized communications in Law Enforcement from initial report to courtroom testimony.

CJ 2920 – Special Topics in CJ 3 cr
The specific titles of courses and credit hours will appear in the class schedule. The courses offered under this category are utilized to offer the student educational opportunities in current criminal justice/law enforcement issues.

CMA 1110 – Cement Mason 1A 5 cr
Prereq: APPR 1470 or appropriate Accuplacer score. This course covers the use and characteristics of concrete, materials used, safe use and practices with tools and equipment. Course also covers sub grade preparation and form work.

CMA 1120 – Cement Mason 1B 5 cr
Prereq: CMA 1110 w/C grade or higher. Placement of concrete, finishes including interior, exterior and highway finishes. Curing protection of additives for concrete with tests on strength, slump, and air entrainment.
CMA 1210 – Cement Mason 2A 5 cr
Prereq: CMA 1120 w/C grade or higher. Blue Print reading and estimating of material and labor needed. Practical training in design and layout and continued hands-on with placement and finishes.

CMA 1220 – Cement Mason IIB 5 cr
Prereq: CMA 1210 w/C grade or higher. Level II blueprint reading and estimating with additional curing and additive methods and uses. Surface treatment of concrete and uses of each. Hands-on practical for all phases of concrete construction.

CMA 2310 – Cement Mason IIIA 5 cr
Prereq: CMA 1220 w/C grade or higher. Use and care of tools and equipment including safe operation and handling. Concrete testing and meaning of strength and slump test results as well as air entrainment.

CMA 2320 – Cement Mason IIIB 5 cr
Prereq: CMA 2310 w/C grade or higher. Placement of concrete finishes used and purposes, and decorative and specialty finishes. Safety in the work place and requirements of safety when working with concrete.

CMGT 1045 – Building Construction I 4 cr
Students will learn the concepts of footings, foundations and flatwork. Green build and traditional techniques of structural framing will be taught. Students will layout and construct floors, exterior and interior walls, doors and windows. Sophisticated methods used to maintain a tight building envelope will be used. Stair and roof construction will be introduced. Course is taught 1st half of semester.

CMGT 1100 – Construction Math (QS) 3 cr
Mathematical operations and their practical application will be used to solve typical construction layout problems such as stairways, rafters, handrails, windows, doors, etc. Percents, decimals, fractions, powers and triangle trigonometry will be used to calculate area, volume, spacing, and size. Students will be given opportunity to layout mathematical solutions with hands on experience.

CMGT 1110 – Birth of a Flute (FA) 3 cr
Students will use wood as an artistic medium to create a professional Native American style flute. This course introduces students to flute origins, history, design, symbolism, music and its relevance to Native American culture.

CMGT 1130 – OSHA 30 for Construction 2 cr
In-depth study of OSHA safety practices and its role in the construction industry. Review workers safety procedures and practices used in the construction industry. Attendance is required to be eligible for OSHA 30 completion card.
CMGT 1145 – Interior Finishes I  
This course covers materials and selection that support the responsible use of natural resources. Subjects include hanging doors, installing base, casing, stair treads, skirts and closet organizers. Installation of hardwood floors, handrails and stair caps will be taught. Students will also be introduced to the basics of installing tile floors and shower walls. Course is taught 1st half of semester.

CMGT 1200 – Personal Projects  
Prereq: CMGT 1220 or CMGT 1340 or CMGT 1530 or instructor approval. This course will allow students to plan a special project of their own design. Through consultation with the instructor, design approval and class schedule can be determined. Students are required to follow all safety rules & procedures. Students are encouraged to plan projects that utilize engineered & sustainable lumber products.

CMGT 1220 – Woodworking & Millwork I  
This course explores the basic principles of woodworking. Safety will be discussed in depth. Topics include the theory & hands-on application of joinery, design, cut-lists, stock preparation & assembly. An assigned skill building project utilizing techniques such as frame & panel construction. Includes an introduction to use wood veneers as a sustainable practice. Typical project cost: $100.

CMGT 1225 – Woodworking & Millwork I  
This course explores the basic principles of woodworking. Safety will be discussed in depth. Topics include the theory and hands-on application of joinery, design, cut-lists, stock preparation and assembly. An assigned skill building project utilizing techniques such as frame and panel construction. Includes an introduction to use wood veneers as a sustainable practice. Typical project cost: $100

CMGT 1245 – Cabinetmaking & Renewable Materials I  
This course explores the basics of kitchen design and cabinet construction. Includes the materials and methods that promote the responsible and sustainable use of renewable resources. Theory and hands-on instruction are designed to take students step by step through the cabinetmaking process. Safety will be discussed in depth. This course is taught in the 1st half of a semester.

CMGT 1320 – Building Construction I  
The concepts of footings, foundations & flatwork are studied. Green build & traditional techniques of structural framing are taught. Students layout and construct floors, exterior & interior walls, doors & windows. Current methods for maintaining a tight building envelope will be used. Stair & roof construction is introduced. Course is taught 1st half of semester.

CMGT 1330 – Interior Finishes I  
This course covers materials and selection that support the responsible use of natural resources. Subjects include hanging doors, installing base, casing, stair treads, skirts & closet organizers. Installation of hardwood floors, handrails and stair caps will be taught. Students will also be introduced to the basics of installing tile floors and shower walls. Course is taught 1st half of semester.
CMGT 1340 – Cabinetmaking & Renewable Materials I 4 cr
This course explores the basics of kitchen design and cabinet construction. Includes the materials & methods that promote the responsible and sustainable use of renewable resources. Theory & hands-on instruction are designed to take students step by step through the cabinetmaking process. Safety will be discussed in depth. This course is taught in the 1st half of a semester.

CMGT 1410 – Construction Materials & Methods 2 cr
Course provides students with knowledge of light commercial and residential building techniques and materials. Examines common construction materials, components, and systems related to steel and wood frame structures, emphasizing sustainable building practices. The construction process will be analyzed from site planning to completion.

CMGT 1420 – Building Energy Systems 2 cr
An introduction to energy systems for light commercial and residential construction. Systems include electrical, plumbing, heating, ventilation, air conditioning, air distribution, lighting, solar and alternative energy systems and the application and effect on the building envelope and air quality.

CMGT 1450 – Const Print Reading & Layout 3 cr
A study of light commercial and residential print reading as it pertains to today's construction industry. Course includes the study of architectural symbols, terms, views, sections, and details. Layout methods for building placement will be covered. Electrical & mechanical systems and the use of electronic files such as PDF & DWG files are examined.

CMGT 1530 – Furniture Design & Construction I 3 cr
This course includes the construction of an assigned skill building project that utilizes a variety of joinery relative to case construction. Safety will be discussed in depth. Includes topics such as: sustainability in lumber selection, proper procedures, layout & design, hardware selection & glazing. Traditional wood finishes will be discussed. Typical project cost: $60.

CMGT 1660 – Concrete Technology 2 cr
Current trends, properties, applications, and procedures are evaluated. Course covers physical and mechanical properties, as well as the design and control of concrete mixtures, special Portland cements, admixtures and chemical reactions. Tests on flexure, shear, compression, and strength will be evaluated. Instruction is given relative to ACI certification.

CMGT 2000 – Construction Management CO-OP 3-5 cr
This is a supervised work experience in a business, industrial or government environment related to the program major. Credit is awarded for completion of specific objectives that provide new learning experiences related to the major.
CMGT 2045 – Building Construction II 4 cr
Students will learn advanced techniques of framing in depth, including the details of stair and roof construction. Factors such as insulation, ductwork & vent chases will be considered to minimize heat loss. Exterior decks, railings, doors & windows will be installed. Weatherization techniques will be taught. A continuation of CMGT 1045. Course is taught 2nd half of semester.

CMGT 2120 – Furniture Design & Construction I 3 cr
This course includes the construction of an assigned skill building project that utilizes a variety of joinery relative to case construction. Safety will be discussed in depth. Includes topics such as; sustainability in lumber selection, proper procedures, layout and design, hardware selection and glazing. Traditional wood finishes will be discussed. Typical project cost: $60.

CMGT 2145 – Interior Finishes II 4 cr
Subjects include the technical aspects of layout and installation of floor tile, bathroom shower & tub enclosures, built-in bookcases and fireplace mantles. Students should gain an in depth understanding of the materials that are used to promote sustainable construction. A continuation of CMGT 1145. Course is taught 2nd half of semester.

CMGT 2220 – Woodworking & Millwork II 4 cr
Prereq: CMGT 1220 or CMGT 1530. Students continue with their skills in the construction of a skill building project that will include more advanced joinery than included in CMGT 1220. Students are taught how to create and use veneer as an inclusion of sustainable practices in woodworking. Skills such as bent laminations, tapered legs, mortise & tenon & blind dovetails are discussed. Typical project cost: $100.

CMGT 2235 – Cabinetmaking & Renewable Materials II 4 cr
Students continue to explore the principles of kitchen design utilizing a variety of cabinet design software packages. Course covers the various cabinet construction methods that promote the responsible and sustainable use of renewable resources. Also covers cabinet installation techniques. Course is offered during the 2nd half of a semester as a continuation of CMGT 1245.

CMGT 2310 – Construction Writing 3 cr
This course covers the study of and practice in construction writing. Includes: basic word processing, daily logs, bid proposals, letters, policies, and procedures.

CMGT 2320 – Building Construction II 4 cr
Prereq: CMGT 1320. This course is a continuation of CMGT 1320. Course is taught 2nd half of semester. In depth techniques of advanced framing, including details of stair and roof construction are emphasized. Factors such as insulation, ductwork & vent chases are considered to minimize heat loss. Exterior decks, railings, doors & windows will be installed. Weatherization techniques are taught.
CMGT 2330 – Interior Finishes II 4 cr
Prereq: CMGT 1330. Subjects include the technical aspects of layout and installation of floor tile, bathroom shower & tub enclosures, built-in bookcases and fireplace mantles. Students should gain an in-depth understanding of the materials that are used to promote sustainable construction. A continuation of CMGT 1330. Course is taught 2nd half of semester.

CMGT 2340 – Cabinetmaking & Renewable Materials II 4 cr
Prereq: CMGT 1340. Students continue to explore the principles of kitchen design utilizing a variety of cabinet design software packages. Course covers the various cabinet construction methods that promote the responsible and sustainable use of renewable resources. Also covers cabinet installation techniques. Course is offered during the 2nd half of a semester as a continuation of CMGT 1340.

CMGT 2435 – Woodworking & Millwork II 4 cr
Students will draw upon their knowledge and skills to design and build a project utilizing a variety of woodworking joinery. Consultation with the instructor and theory instruction will ensure that the project will foster skill improvement. An inclusion of sustainable practices in woodworking will be required. Project cost will vary depending upon student's design.

CMGT 2450 – Furniture Design & Const II 3 cr
This course builds upon previous joinery knowledge to construct an assigned skill building project that includes advanced features such as curved components & bent laminations. Conservation of resources will be emphasized as advanced veneering techniques & hand tool use are taught. Typical project cost: $100.

CMGT 2530 – Furniture Design & Construction II 3 cr
Prereq: CMGT 1220 or CMGT 1530. This course builds upon previous joinery knowledge to construct an assigned skill building project that includes advanced features such as curved components & bent laminations. Conservation of resources will be emphasized as advanced veneering techniques & hand tool use are taught. Project costs vary as the option to build an approved personal design are available.

CMGT 2610 – Building Energy Systems 2 cr
An introduction to energy systems for residential and light commercial construction. Systems include electrical, plumbing, heating, ventilation, air conditioning, air distribution, lighting, solar and alternative energy systems and the application and effect on the building envelope and air quality.

CMGT 2640 – Construction Estimating 3 cr
Prereq: CMGT 1410 & CMGT 1450. An introduction to material take-offs, labor cost estimate, equipment cost, price extensions and competitive bidding. Various building systems will be discussed and evaluated. Formulas will be input into software such as Microsoft Excel to provide students with an experience in computerized estimating & takeoffs.
CMGT 2670 – Building Codes & Inspections  2 cr
This course is the study of current commercial and residential building codes. Inspections for code enforcement & compliance, occupancy classifications, area limitation, and life-safety regulations are analyzed. Specific attention is given to energy management code restrictions.

CMGT 2710 – Computer Applications for Cabinetmaking & Woodworking  3 cr
An introduction to software common to the cabinetmaking & woodworking industry such as Cabinet Vision, ArtCAM & others. Programs that can be output to a CNC router will be created. Nested based operations as well as individual part processing will be addressed. Macros & x/y/z axis will be taught.

CMGT 2720 – CNC Operations for Cabinetmaking & Woodworking  1 cr
An introduction to the basic skills needed to operate a CNC woodworking machine. Students learn the difference between nested based machines and other types of CNC machines. Students learn tooling, maintenance, machine software operation & proper load/unloading. Programs written in CMGT 2710 can be used.

CMGT 2810 – Construction Project Management  3 cr
Prereq: CMGT 1410, 1450, 2640 & 2670. This course allows students to work in groups and put into practice aspects of project execution, planning, scheduling, project controls & supervision of light commercial and residential construction projects. Jobsite documents, labor relations & workflow analysis are covered. It is designed to utilize knowledge from all other construction management courses on a final capstone project.

CMGT 2850 – Green Building Standards  1 cr
This course examines and evaluates the current green building standards. Standards include: LEED - U. S. Green Build Council; Energy Star – U. S. Environmental Protection Agency and the Department of Energy; ICC 700 – National Home Builders Association. This course provides initial training for industry certifications.

CMGT 2870 – Construction Law  2 cr

CMGT 2990 – Special Studies  1-20 cr
This course is designed to cover special topics in building construction. This will be developed upon instructor approval. in conjunction with the student.
CMI 1110 – Cement Mason Independent 1A  5 cr  
Prereq: APPR w/C grade or higher, or appropriate Accuplacer score. This course is an introductory course to concrete finishing. Students will gain a basic knowledge of the construction craft and an introductory understanding of properties of concrete.

CMI 1120 – Cement Mason Independent 1B  5 cr  
Prereq: CMI 1110. This course will provide students with knowledge and skills concerning proper grade preparation as well as requirements and methods of placement, finishing, protecting and curing of concrete.

CMI 1210 – Cement Mason Independent 2A  5 cr  
Prereq: CMI 1120. Students will gain an in-depth understanding of concrete properties and the knowledge base to estimate concrete quantities. Various forming requirements for site concrete and architectural finishes will also be covered.

CMI 1220 – Cement Mason Independent 2B  5 cr  
Prereq: CMI 1210. This course provides students with an in-depth understanding of the application of concrete in industrial and superflat floors. Advanced study in surface treatments, quality control issues and repairs are also covered.

COMM 1010 – Elements of Effective Communication (CM,IN)  3 cr  
Communication principles and practice applied in dyadic, group, written, electronic, and oral presentation assignments. Listening, perception, verbal clarity, nonverbal, diversity, conflict management and interviewing in workplace and interpersonal settings.

COMM 1011 – Effective Workplace Communication for Career and Technical Education  1 cr  
Communication theory and skills practice with emphasis on effective interpersonal relationships in workplace settings. Addresses listening, perception, verbal clarity, nonverbal communication, organizational culture, diversity, communication ethics, and interviewing.

COMM 1012 – Effective Teamwork for Career and Technical Education  1 cr  
Communication theory and skills practice with emphasis on effective teamwork in workplace settings. Addresses team relationships, productivity, decision-making, problem-solving, conflict management, leadership, and facilitating & planning meetings.

COMM 1013 – Effective Oral Presentations for Career and Technical Education  1 cr  
Communication theory and skills practice with emphasis on preparing, delivering, and evaluating oral presentations in workplace settings. Addresses anxiety management, audience assessment, organizing ideas, use of sufficient evidence, ethical persuasion, delivery, visual aids, and cultural variations.
COMM 1020 – Prin/Public Speaking (CM, IN) 3 cr
Preparing and delivering speeches for civic and professional occasions. Basic theory and skills practice, including audience analysis, anxiety mgmt, critical listening, supporting claims with evidence, persuasion, motivation, delivery.

COMM 1050 – Elem. of Human Comm. (HU) 3 cr
Survey of the basic issues, theories, and perspectives in the study of human communication, through critical analysis of oral and audio-visual texts.

COMM 1080 – Conflict Mgmt & Divers. (SS, DV) 3 cr
Analyzes conflict communication from the perspectives of marginalized and empowered populations. Explores ethnocentrism, power, anger, inequality, disrespect. Students learn conflict management skills for workplace, community and personal life.

COMM 1120 – Principles of Interviewing 3 cr
Interviewing methods with emphasis on interview design and questioning techniques in business, professional, and journalistic environments.

COMM 1130 – Reporting for the Mass Media 4 cr
Organization and written presentation of facts to a mass audience, with emphasis on reporting and writing news. Development of information-gathering skills for presentation through mass media.

COMM 1140 – Environmental Communication 3 cr
Covers the organization and delivery of facts to a mass audience; specifically communicating about issues related to sustainability. Course offers hands-on experience in both traditional media and new communication technologies.

COMM 1250 – Intro. Performance Studies 3 cr
Investigates Performance Studies from multiple perspectives, including communication and anthropology; explores performance and performativity; integrates theory and practice, to include TV and radio experience.

COMM 1270 – Analysis of Argument (IN) 3 cr
Introduction to the study of argumentation—reasoning, issues, audience analysis—in decision-making contexts.

COMM 1300 – Money & Creative Professionals 1 cr
Basic financial information for creative professionals or students interested in freelance work or setting up a studio. This course is useful for artists working in the areas of fine art, the many forms of design, photography, film/video, music, advertising, the performing arts and creative or technical writing.
COMM 1400 – Copyrights for Creative Professionals 1 cr
This introductory short course focuses on U. S. copyrights given to creative individuals who produce visual, musical, literary works of art or performing arts. The course also covers licensing and trademarking.

COMM 1420 – Salesmanship And Promotion For Creative Professionals 2 cr
This introductory short course will introduce basic sales and self-promotional principles and techniques specifically tailored for creative artists.

COMM 1440 – Building A Creative Business 2 cr
This introductory short course will introduce basic business structures and examine the process of setting up a business for creative professionals working in the areas of music, the many forms of visual design, fine art, animation, film and video, and the literary arts.

COMM 1500 – Intro to Mass Comm (ID) 3 cr
Introductory survey of field of mass communication. Preview of function, performance, and structure of individual mass media and the relationships between media audiences and media and government.

COMM 1515 – Basic Audio Production 3 cr
A broad overview of sound, sound systems, recording, and live sound reinforcement providing basic training in the physics of sound and the hardware and systems used to control and record it. No prerequisites.

COMM 1560 – Radio Performance & Production (ID) 3 cr
Become a better communicator by having your own radio show on the student radio station, RadioSLCC.com. Learn about the radio industry, on-air performance techniques, and commercial writing and production. Use industry practices and concepts along with theories and models from the disciplines of communication, and business to become a better communicator on and off the air.

COMM 1610 – Journalism I Reporting/Writing 3 cr
Prereq: ENGL 1010. This is a basic survey course in journalism, emphasizing fact finding and news writing, including investigative reporting on specific beats. Class members contribute to the student newspaper and/or to other student news media.

COMM 1620 – Journalism II - Editing/Layout 3 cr
Prereq: COMM 1130 or 1610. In-depth study of reporting and news delivery, to include news writing, editing, design and delivery across multiple mass mediums. Members of the class contribute to the Mass Communication Center.
COMM 1800 – Digital Media Tools/Techniques 4 cr
An introduction to digital media fundamentals and the evolving industry. Students obtain a hands-on, in-depth experience with digital media tools, content and production techniques. Industry standard hardware and software tools are used to create and edit images, audio, video, layout, and web media to create powerful media. Copyright and professional responsibility issues and trends are covered.

COMM 1820 – Media Content Management 3 cr
Prereq: COMM/ENGL/FLM 1800 or ART 1800 or concurrently. An introduction to content management systems that include digital and media assets to improve efficiency and lower costs. Types include Internet/web, television/IPTV, radio/podcasts, cell/mobile and print delivery are covered.

COMM 1850 – Portfolio/Career Preparation 2 cr
Prereq: Satisfactory completion of a minimum of two 2000 level courses in Visual Art and Design, Communication, and/or Fine Arts departments An introductory course focused on portfolio and freelance career preparation for all creative artists.

COMM 1900 – Special Studies/ Communication 1-3 cr
Prereq: Department approval. Students plan areas of study and work with an instructor on individual basis.

COMM 2000 – Communication CO-OP/Internship 1-6 cr
Prereq: Department approval. Supervised work experience in a business, industrial, or government environment related to the student's COMM program sequence. Credit awarded for successful completion of specified learning objectives that provide new learning.

COMM 2020 – Persuasion Practices 3 cr
Study and practice of principles of persuasion in public speaking and other forms of communication.

COMM 2110 – Interpersonal Comm (ID,HR) 3 cr
Development of listening skills, situational analysis and participation in various interpersonal contexts through focus on the elements and processes which contribute formation, maintenance and termination of relationships.

COMM 2120 – Small Group Communication 3 cr
Introduces elements of the small group process, focusing on problem-solving and decision-making techniques. Development of students' skills of participation and analysis in decision-making.

COMM 2150 – Intercultural Commun. (ID,DV) 3 cr
Examination of how cultural similarities and differences impede or enhance communication across cultures. Issues of diversity, values, norms among different cultures, as well as issues of cultural diversity, values and norms.
COMM 2170 – Organizational Communication 3 cr
Overview of historical and contemporary perspectives of organizational communication; analysis of current issues and practices of organizational communication; development of communication competence in organizational settings. Internet only.

COMM 2200 – Beginning Video Production 4 cr
Recommended prereq: COMM/ENGL/FLM 1800. Development of basic audio and video production skills for television and online distribution, using individual and group assignments through traditional lecture, hands-on training, field and studio production environments.

COMM 2210 – Television, Film, Video Lighting Essentials - Professional Media Practice 2 cr
Development of basic television, film, and video lighting skills. Using individual and group assignments through traditional lecture, hands-on learning, field and studio production environments.

COMM 2220 – Beginning Editing - Professional Media Practice Workshop 2 cr
Recommended Prereq: COMM/FLM/ENGL 1800. Students develop a basic understanding of non-linear editing using industry standard editing software.

COMM 2250 – Television Studio Production 1 2 cr
Development of basic television studio production skills using assignments through traditional lecture, hands-on learning, studio production environments.

COMM 2260 – Television Field Production 1 2 cr
Development of basic television field production skills. Students work with the Mass Communication Center programs to support production of division and external client multi-camera TV productions. Students also learn TV equipment maintenance, and signal path, and TV engineering basics.

COMM 2300 – Introduction Public Relations 3 cr
Survey of tools, principles, practices and publics of public relations profession. Includes lab component where students are expected to produce public relations documents under a time deadline.

COMM 2310 – Inter. Video Prod. - News 4 cr
Prereq: COMM 2200 or instructor approval and COMM 1130 recommended. Provides production experience for students with television or video production background. Students work independently on weekly news packages and together to produce a live weekly news program -Globe Student News.

COMM 2400 – Social Media Tools and Strategies 4 cr
An introduction to Web 2.0 components such as social network sites, blogs and RSS feeds, wikis, collaboration and virtual teams, media sites, and forums as well as how organizations successfully use these tools for communication.
COMM 2440 – Web Site Design 3 cr
Prereq: COMM/ENGL/FLM 1800 or ART 1800. Students learn the knowledge and skills needed to build and manage professional web sites using Dreamweaver and Fireworks. Students create interactive web sites, graphics, animation, and advanced styling using HTML, CSS, and JavaScript.

COMM 2500 – Elemt/Issues-Digital Media(ID) 4 cr
An introduction to digital media, including an understanding of the history, trends, devices, services, practices, and societal issues associated with the rise and use of communication technologies.

COMM 2510 – Adv. Video Prod. - Documentary 4 cr
Prereq: COMM 2200 or FLM 1055. Provides advanced video production experiences for students who already have significant video production experience. Students work alone to produce short format documentary films and in groups to produce long format film projects.

COMM 2525 – Web Site Promotion 4 cr
Prereq: COMM/ART 2440. Students develop a website promotion campaign which includes search engine optimization, pay-per-click advertising, linking campaigns, email marketing, online publicity, and affiliate strategies to develop a business web strategy.

COMM 2550 – Website Design II 3 cr
Prereq: ART/COMM 2440 w/C grade or better. Continuation of web design principles to create advanced Website designs by integrating animation, video, and audio along with CSS, and JavaScript libraries. Emphasis is placed on interface design principles and concepts.

COMM 2560 – Advanced Radio Performance 3 cr
Prereq: COMM 1560 or equivalent. Advanced instruction and experience in the production of audio programs for radio, including history, career opportunities, issues, techniques of radio and on-air announcing, involving commercial, news and sports on the student radio station.

COMM 2570 – Intro to Visual Comm (FA) 4 cr
Explores Visual communication principles and practices essential to all media. Memorable visual messages have the greatest power to inform, educate, and persuade. Discover why some images are remembered while some are not.

COMM 2580 – Web Animation 3 cr
An introductory course focused on using design software to create effective web page animation. Crosslisted with ART 2580.
COMM 2590 – Advertising Media & Sales  
3 cr  
The course focuses on advertising media planning and media sales, including people and project management. Students learn media formulas and terminology, and work to create media plans and make successful media buys.

COMM 2660 – Visual Effects & Compositing  
3 cr  
Prereq: ART 2640. Overview of the processes used to create and composite 2D and 3D special effects using procedural workflows and various software tools to achieve efficient and flexible results.

COMM 2900 – Special Projects  
3 cr  
Students design and produce a significant capstone video or audio production project, incorporating elements related to their specific interests/specialties and demonstrating a mastery of related competencies and skills. Exam and presentation.

COMM 2920 – Current Topics-Communication  
1-2 cr  
Prereq: Department approval. This course examines selected topics not offered in the regular curriculum. Prerequisites may vary and are dependent upon course content. Consult current class schedule for offering and credits under this course number.

COMM 2990 – Second Year Project  
4 cr  
Prereq: COMM 1560 or COMM 2200. Students design and produce a capstone video or audio production project, incorporating elements related to their specific interests/specialties. Students demonstrate mastery of related production competencies and skills.

CPA 1110 – Carpentry - Computer Skills  
5 cr  
Prereq: MATH 0920 or 0950 or appropriate Accuplacer score or CPA 1470. Applied instruction in carpentry techniques. Tool use and safety, maintenance, sharpening, load rigging and hand signals. First Aid, CPR and OSHA 10-hour safety class. Basic mathematics, fractions, decimals, and conversions.

CPA 1120 – Carpentry - Concrete Forming  
5 cr  
Prereq: CPA 1110. Course provides training in proper methods used in concrete forming including footings, walls, columns, piers, slabs and suspended structures. Mathematics used in class includes measurements, volumes and areas.

CPA 1210 – Carpentry - Wood Framing  
5 cr  

CPA 1220 – Carpentry - Finish, Interior  
5 cr  
Prereq: CPA 1210. Application of siding and exterior trim installation, door and hardware, paneling, trim and moldings. Fabrication and installation of cabinetry and counter tops.
CPA 1470 – Math for the Trades (QS)  5 cr
A customized carpentry course in applied mathematics for the trades including algebraic and trigonometric functions.

CPA 2000 – Carpentry CO-OP  3-6 cr
Prereq: Instructor approval. Permits students to gain college credit for the hours spent on the job. Advanced registration and agreement signed by employer, employee/student and the College.

CPA 2310 – Carpentry - Interior Systems  5 cr
Hands-on application and techniques for installation of metal stud and drywall systems, perfa-taping, suspended ceilings, black iron ceilings, moveable partitions and computer floor installation.

CPA 2320 – Carpentry - Welding  5 cr
Prereq: CPA 2310. This course offers applied instruction in basic welding principles and safety including acetylene burning, cutting and welding. Instruction also includes shielded metal arc-flat, vertical, overhead positions and light gage metal welding.

CPA 2410 – Carpentry - Blueprint Reading  5 cr
Prereq: CPA 2310. Basics in drafting and scaling techniques, numbering systems, elevations, symbols and abbreviations, detail drawing and viewing skills. Introduction to CAD programs and math reviewed.

CPA 2420 – Carpentry Completion  5 cr
Prereq: CPA 2410. Advanced application of transits and leveling instruments. Scheduling and estimating costs, MSDS sheets, concrete testing, leadership skills and computer usage.

CPE 2700 – Fund of Digital System Design  4 cr
Prereq: CS 1600 and PHYS 2200. An introduction to digital systems, Boolean algebra, theory of combinatorial circuits, sequential circuits and finite state machines. Computer aided design (CAD) tools used for schematic capture, simulate, implement and test the circuits.

CPE 2720 – Computer Design  2 cr
Prereq: EE 2700 or CPE 2700, either can be taken concurrently. A design lab providing hands-on experience in designing and testing small computer and logic based electronic systems using Computer Aided Design (CAD) tools and FPGA system board.

CPI 1110 – Carpenter IA  5 cr
Prereq: CPI 1470 or Math 0920 or 0950 w/C grade or better, or appropriate Accuplacer score. This course teaches beginning construction principles including: tool safety, math, basic blueprint information plan layout, OSHA site safety and P. P. E. , and First Aid/CPR certifications.
CPI 1120 – Carpenter IB 5 cr
Prereq: CPI 1110. This course teaches basic concrete principles including: math, tools, basic mixes, basic layout, forming, and finishing.

CPI 1210 – Carpenter IIA 5 cr
Prereq: CPI 1120. This course teaches basic framing principles including: math, tools, layout from blueprints, floors, walls, roofs, insulation and ventilation.

CPI 1220 – Carpenter IIB 5 cr
Prereq: CPI 1210. This course teaches basic finish carpentry including: exterior finishes, roofing, window and door openings, stairs, basic cabinetry and counter tops.

CPI 1470 – Math for the Trades (QS) 5 cr
This is a customized course in applied mathematics for the trades including algebraic and trigonometric functions.

CPI 2000 – Carpentery CO-OP 2-4 cr
College credit for experience on the job site. Arranged in advance. Requirements are determined by the employer.

CPI 2310 – Carpentery IIIA 5 cr
Prereq: CPI 1220. Advanced concrete principles including: commercial blueprints, rigging and lifting, raft and metal slabs, shoring and scaffolding, stairs, chemistry and concrete testing, additives, and advanced estimating.

CPI 2320 – Carpenter IIIB 5 cr
Prereq: CPI 2310. This course teaches advanced framing principles including: scaffold safety for metal stud and drywall work, metal stud framing and layout, installing metal jams and hanging doors fire walls and metal roof decks.

CPI 2410 – Carpenter IVA 5 cr
Prereq: CPI 2320. This course teaches advanced finish carpentry including: equipment setup, jigs and templates, gluing and clamping techniques, advanced cabinetry, installing locksets, remodeling, restoration and refinishing.

CPI 2420 – Carpentery IVB 5 cr
Prereq: CPI 2410. This course teaches construction and administrative skills. Computer Assisted Drafting (CAD), building codes, advanced layout, bidding and estimating, material purchasing, and commercial blueprints will be learned.
**CPS 1000 – Creative Problem Solving-Pers**  
3 cr  
Solving problems is inherent to the human experience. When the right solution to a problem isn’t clear, the skills of creative problem solving help you to correctly identify the problem, provide alternative ways to generate abundant ideas, and execute on a plan for success. Learn the steps and associated tools that have been proven to work for problems of all types, sizes and levels of complexity.

**CPS 1010 – Creative Problem Solving-Team**  
3 cr  
Teams operate best when ideas are allowed to flourish. When the right solution to a problem isn’t clear, the skills of creative problem solving help teams to correctly identify the problem, provide alternative ways to generate abundant ideas, and execute on a plan for success. Learn the steps and associated tools that have been proven to work for problems of all types and sizes.

**CS 1600 – Structured Prog. Using C++**  
4 cr  
Recommended prereq: MATH 1060 or 1080, either can be taken concurrently. Introductory programming course designed to develop a solid foundation in structured programming by developing computer programs to solve scientific and technical problems. Includes a brief introduction to object oriented programming.

**CS 2230 – Database Servers**  
2 cr  

**CSIS 1010 – Beginning Keyboarding**  
3 cr  
During the semester, students will: demonstrate proficiency using the computer; learn the keyboard by touch keying at least 25+ net words a minute on 3-minute timed writings; demonstrate correct keyboarding techniques and be evaluated; operate the alphabetic keys, number row keys, and symbol keys of the main keyboard; operate the ten-key numeric keypad; complete special drills and activities.

**CSIS 1013 – How to Operate a Computer for Beginning Users**  
1 cr  
This course is designed for students who have little or no experience with a computer. Upon completion of the course, students will be able to login to the computer, open various programs, understand some basic computer terminology, use an internet search engine, save a file in different locations, and login to the mypage and Canvas systems of SLCC.

**CSIS 1015 – Word Processing Applications**  
1 cr  
Students will learn basic fundamentals of word processing. Students will learn to create and attach their documents to a e-portfolio.
CSIS 1017 – Presentation Applications 1 cr
Upon completion of this course, students will know the basic fundamentals of Microsoft PowerPoint 2010. Students will learn how to create, format, and display presentations using PowerPoint.

CSIS 1019 – Spreadsheet Applications 2 cr
In this course, students will use various features and use of current spreadsheet software. Students will learn the syntax, use and application of spreadsheet features/tools through tutorial lessons and application exercise problems.

CSIS 1030 – Foundations of Computer Science 3 cr
Understand the world of computing that surrounds you: technology's impact on society, hardware, SOHO networking, threats, Google as a verb, ethics/policy, file management, standards, disaster recovery & remote computing.

CSIS 1032 – Introduction to Linux 3 cr
Recommended Prereq: CSIS 1030. This course covers fundamental Linux skills such as file management and manipulation, text processing, command line use, package management, filesystems, hardware, basic shell scripting and more. Students completing this course will have a solid understanding of basic Linux skills.

CSIS 1050 – Fundamentals of Database Design and Processing 3 cr
Recommended Prereq: CIS 1020. Course provides introduction & broad overview of concepts & basic skills in current database technologies to prepare students for further studies in database programming, application development & administration/management of database systems.

CSIS 1070 – Living in a Digital World (ID) 3 cr
Recommended Prereq: CIS 1020 or computer and internet skills.
This course explores 21st Century business tools needed to prepare learners using web based software with the latest digital media and technology in a real world context to share and communicate knowledge creating a social network.

CSIS 1080 – XML and Declarative Programming 3 cr
Recommended prereq: CIS 1030 or CS 1400 or equivalent programming experience. This course describes how XML is used as both a text based markup language and metalanguages for describing and transmitting data (especially over a network). Other lisp-like metalanguages are also studied for comparison.

CSIS 1110 – Data Cabling Basics 3 cr
The design, installation, termination, testing and troubleshooting of copper and fiber optic cabling. Media characteristics, TIA/EIA standards, grounding, outlets, jacks, labeling, cable scanners and termination tools are also discussed.
CSIS 1121 – CompTIA® A+ Essentials 3 cr
Presents necessary competencies for an IT professional, including configuring, troubleshooting, and performing preventative maintenance of PC hardware and operating systems.

CSIS 1122 – Linux System Administration I 3 cr
This course covers fundamental Linux skills such as file management and manipulation, text processing, command line use, package management, file systems, hardware, and many more. The course also prepares students to take the Linux Professional Institute LPIC-101 exam.

CSIS 1124 – Introduction to Microsoft Windows Desktop 3 cr
Recommended prerequisite: CSIS 1121 or equivalent knowledge. This course provides students with the an overview of the Microsoft desktop operating system. It explores installation, features, and troubleshooting.

CSIS 1129 – Comptia® A+ Certification 6 cr
Presents necessary competencies for an IT professional, including configuring, troubleshooting, & performing preventative maintenance of PC hardware & operating systems.

CSIS 1132 – Linux System Admin I 3 cr
Recommended Prereq: CSIS 1032 or equivalent knowledge. Students completing this course will have an in-depth knowledge of installation, configuration and maintenance of Linux Systems. Topics include Security, user and group administration, networking, FACLS, LVM, task automation, troubleshooting, and more. This course helps prepare students to take Red Hat RHCSA or LPIC 1 exams.

CSIS 1200 – Introduction to Networking 3 cr
This course covers how common network protocols are used within a network. Students will learn how to use Wireshark to capture and analyze network traffic such as: ARP, IP, TCP, UDP, ICMP, DNS, DHCP, HTTP, RIP and EIGRP. Subnetting, VLSM, and CIDR are also covered.

CSIS 1250 – Network Routing and Switching I 3 cr
This course covers material found on the Cisco CCNA Routing and Switching exam as well as the ICND1 exam. Topics covered include: networking fundamentals, connecting to a WAN, basic security and wireless concepts, routing and switching fundamentals, the TCP/IP and OSI models, IP addressing, WAN technologies, configuring IOS devices, static and default routing, and building complex networks.
CSIS 1251 – Network Routing and Switching II 3 cr
Recommended prereq: CSIS 1250. This course provides students the knowledge and skills required to successfully install, operate, and troubleshoot a small to medium size enterprise network. Topics covered include: VLSM and IPv6 addressing, extending switched networks with VLANs, configuring, verifying and troubleshooting VLANs, the VTP, RSTP, OSPF and EIGRP protocols, configuring IP routes, managing traffic with access lists, establishing point-to-point connections, and establishing WAN connections. The course completes the materials needed to pass the CCNA Routing and Switching exam as well as the Cisco ICND2 exam.

CSIS 1340 – Introduction to Programming 3 cr
Recommended prereq: CSIS 1030. A first course in programming. This course introduces the fundamental concepts of programming using an object-oriented language such as Java. No prior programming experience is necessary for successful course completion. Topics include: syntax, control structures, arrays and algorithms.

CSIS 1350 – Apps and Applets: an Introduction to Programming 4 cr
Recommended prereq: CSIS 1030. A first course in computer programming with an emphasis on interactive and graphical components. No prior programming experience is required for this course. Students will create a wide variety of interactive, interesting programs from business applications to game playing. Some software will be developed and simulated as apps in a mobile environment.

CSIS 1400 – Fundamentals of Programming 4 cr
Recommended prereq: CSIS 1030. Object oriented design using UML: problem statement and glossary, use case diagram and scenarios, activity diagram, role/object mapping, and class diagrams. Introduction to Java: data types, control structures, methods and classes, arrays and introduction to the Java API.

CSIS 1410 – Object-Oriented Programming 4 cr
Recommended Prereq: CSIS 1400 or CSIS 1350 or CSIS 1340. Essentials of object oriented programming in Java: creating classes, data validation, generics, packages, exception handling, unit testing, inheritance, polymorphism, file handling, basic Swing, and a subset of the Java API are covered.

CSIS 1430 – Internet & XHTML Fundamentals (ID) 3 cr
Recommended prereq: CIS 1020. Students should have basic computer skills. Students will learn to use the Internet & create Websites. Topics include basic Internet applications & HTML, XHTML, CSS, XML, JavaScript & layout techniques. The Internet’s social & legal impacts will also be studied.

CSIS 1440 – Object Oriented Analysis and Design 3 cr
Recommended Prereq: CSIS 1410. Provides practical experience designing the construction of object-oriented software. Topics include finding classes, identifying attributes and methods, UML, CRC cards, use-case scenarios. Software tools will be used.
CSIS 1520 – Operating Systems 3 cr
Recommended prereq: CIS 1020. This course introduces the fundamental concepts of operating systems. Command-based & graphical OS¿s are examined. Concepts include: History of OS, Mac OS X, Linux, Windows, and Network OS.

CSIS 1550 – SQL Programming 3 cr
Recommended Prereq: CIS 1020. The course provides students with a comprehensive understanding and hands-on experience in SQL, a database computer language designed for the retrieval and management of data in relational database management systems (RDBMS).

CSIS 1600 – C++ Programming 4 cr
Recommended Prereq or Coreq: MATH 1060. Introductory programming course designed to develop a solid foundation in structured programming by developing computer programs to solve scientific and technical problems. Includes a brief introduction to object oriented programming.

CSIS 1850 – Object-Oriented Programming for Visual Art 2 cr
Recommended prereq: ART 1800. A course designed to teach the basics of computer programming skills for visual art production. Emphasis will be placed on the design and implementation of complex projects between art and programming applications.

CSIS 2000 – Co-Op Education 1-4 cr
A supervised work experience in a business, industrial, or government environment related to a computer sciences and information systems major. Credit is awarded for successful completion of specific learning objectives.

CSIS 2010 – Business Computer Proficiency ¿ Spreadsheets and Databases 3 cr
Recommended Prereq: CIS 1020. Course covers various features and functions of spreadsheet and database software for business applications. Class consists of lectures and demonstrations of how specific software tools can be used and correct formula and function syntax. Students will develop knowledge and skills using spreadsheet and database software as business problem solving tools.

CSIS 2040 – Advanced Spreadsheet Applications 3 cr
Prereq: CSIS 2010. The course provides significant problem solving experiences in a wide range of business-focused spreadsheet application problems using spreadsheet software.

CSIS 2050 – Advanced Database Applications 3 cr
Prereq: CSIS 2010. The course provides significant problem solving experiences in a wide range of business-focused database application problems using database software.
CSIS 2060 – Decision Support Systems 3 cr
Prereq: CSIS 2010. This course provides students with learning activities to apply database and spreadsheet software effectively and efficiently to solve real-world business decision support system (DSS) problems.

CSIS 2110 – Microsoft Server I 3 cr
Installing and configuring Windows Server services. Topics include roles and features, name resolution, network access, Hyper-V, Active Directory, and Group Policy.

CSIS 2120 – Microsoft Server II 3 cr

CSIS 2130 – Microsoft Server III 3 cr
This course covers configuring and managing high availability including failover clustering, VM movement, and Network load balancing. Other topics include file storage solutions, backup and disaster recovery, DHCP and advanced DNS, Certificate services.

CSIS 2132 – Linux System Admin II 3 cr
Recommended prereq: CSIS 1132 or equivalent knowledge. Students completing this course will have an in-depth knowledge of installation, configuration and maintenance of Linux Systems. Topics include Security, user and group administration, networking, FACLs, LVM, task automation, troubleshooting, and more. This course helps prepare students to take Red Hat RHCSA or LPIC 1 exams.

CSIS 2310 – Wireless Networking 3 cr
Recommended prereq: CSIS 1200. This course prepares students to configure wireless networks from layers 1-4 of the OSI model. It includes wireless security, encryption, RF fundamentals, antenna design, Wi-Fi and more. Students setup WLANs and secure them. It uses the CWNA curriculum.

CSIS 2320 – Computer and Network Security 3 cr
Recommended prereq: CSIS 1200. This course covers network security and maps to the CompTIA Security+ exam. CompTIA Security+ is an international, vendor-neutral certification that demonstrates competency in: Network security, compliance and operational security, threats and vulnerabilities, application, data and host security, access control and identity management, and Cryptography.

CSIS 2330 – Penetration Testing 3 cr
Recommended prereqs: CSIS 1032 and CSIS 1200. Students learn how to secure computer networks from attacks by learning the tools and tactics employed by hackers to penetrate networks and compromise hosts computers. Topics include Using the Linux distribution Backtrack for pen-testing, network security and ethical hacking.
CSIS 2420 – Algorithms & Data Structures 4 cr
Recommended Prereq: CSIS 1410. Topics include data structures (stacks, queues, linked lists, heaps, hash tables, trees, graphs); Java Collections framework; algorithmic analysis (Big O, profiling); and common algorithms (recursion, searching, sorting, traversals).

CSIS 2430 – Discrete Structures 4 cr
Recommended prerequisite: CSIS 2420. An introduction to discrete mathematics and algebraic structures as applied to computer science. Proposition and logic, finite sets, relations, functions, graph theory, analysis of algorithms and state machines are taught.

CSIS 2440 – Web Programming 3 cr
Recommended Prereq: CSIS 1430. This course teaches how to program web pages based on the three-tier model. Both client side and server side languages as well as tools such as XHTML, JavaScript, PHP, and MySQL are taught.

CSIS 2450 – Software Engineering 3 cr
Recommended Prereq: CSIS 1410. Presents concepts, methodology and best-practices necessary to develop large scale software projects. Includes reqts., analysis, design, implementation and testing. Emphasizes current "real world" industry best-practices and tools.

CSIS 2470 – Advanced JavaScript and JSP 3 cr
Recommended Prereq: CSIS 2440. This course is a continuation of CSIS 2440. It will teach advanced JavaScript techniques and JSP for use in the THREE TIER MODEL. Advanced skills will be taught to allow the student to build complex web sites suitable for E-Commerce.

CSIS 2530 – Intermediate Programming in C# 3 cr
Recommended Prereq: CSIS 1410. This intermediate programming course focuses on C# and the .NET platform. Syntax, data structures, file i/o, .NET library, XML, class structure, GUI design, and web/database projects will be discussed.

CSIS 2570 – Advanced Java Programming 3 cr
Recommended Prereq: CSIS 1410. Students will learn skills to design, code, and publish applications using advanced concepts in the Java Programming Language. Topics may include; SQL Database Access, Networks Communications, Multithreading, Parallel Programming, Servlets, Multimedia, Java Beans, Socket Programming and Advanced GUI interfaces using Menus, Toolbars, and Dialogs.

CSIS 2630 – Android Application Development 3 cr
Recommended prerequisite: CIS 1130 or CS 1410 or equivalent. Students will learn the skills required to design, code, and publish applications for mobile devices running the Android operating system. Topics include IDEs and emulators, Java as it relates to Android, XML layouts and resource files, SQLite, and the Android Market. During the semester, students will code and publish a complete mobile application.
CSIS 2640 – Mobile iOS Application Development 3 cr
Recommended: CIS 1130 or CS 1410 or equivalent. Students will learn the skills to design, code, and publish applications for mobile devices running Apple's iOS operating system. Current devices include the iPhone and iPad. Topics include Apple's IDE and iOS simulator, the Objective C programming language, memory management, wireless communication, and the iTunes market.

CSIS 2700 – Projects for Industry 3 cr
Recommended Prereq: CSIS 2570. Students will implement skills learned in previous CSIS design and programming classes and gain real world experience through service learning. Each class will work together as a team to design and program and computer system that meets the needs of an approved client from the community.

CSIS 2810 – Computer Architecture 4 cr
Recommended prereq: CSIS 1410. Computer architecture explores the language of the computer, computer arithmetic, assessing & understanding performance, datapath and control, pipelining, memory hierarchies, and interfacing processors and peripherals. The course emphasizes how these topics influence the physical and functional relationships between computer hardware and software.

CSIS 2900 – Current Topics in Computer Sciences and Information Systems 1-4 cr
This course covers current topics in computer science that meet student needs and industry demands.

CTEL 1010 – Leadership & Teambuilding (HR) 3 cr
Students will discover and develop their strengths in leadership and teambuilding. Career-building strategies will be explored. Students will develop human relations skills that will help them to thrive in a diverse society.

CTEL 1020 – Career Speech Skills (CM) 3 cr
Students will build their speaking, listening, non-verbal and visual presentation skills for industry applications. Students will critically plan and evaluate messages for diverse audiences using sound theoretical models.

CTEL 1030 – Leadership Lab 1 cr
Prepares learners to compete in leadership events sponsored by national student leadership organizations. May also be taken for self-improvement.

DANC 1010 – Dance and Culture (FA,DV) 3 cr
An introduction to dance as a means of cultural expression. Multi-cultural dance in America is explored, with analysis of how divergent traditions have survived in spite of social and cultural pressures. No dance experience required.
DANC 1090 – Bridging the Arts (FA) 3 cr
Course examines the interconnectedness of art, dance, music and theatre by investigating the artistic elements and common threads within the creative processes to develop an informed appreciation for one's own artistic values.

DANC 1100 – Introduction to Ballet I (FA) 3 cr
An introduction to basic ballet movement, technique, theory, history and terminology. Reading, writing, and concert attendance are part of this course.

DANC 1110 – Ballet II (LW) 2 cr
Recommended prereq: DANC 1100 or instructor approval. The second semester study of ballet technique, theory, and terminology. Emphasis is on learning and applying kinesiological basics for lifelong participation in dance.

DANC 1200 – Intro to Modern Dance I (FA) 3 cr
Intro to modern dance movement, technique, theory and history. Basic dance elements of time, space, shape, and energy are introduced with emphasis on locomotor skills and movement expression. Reading, writing, and concert attendance required.

DANC 1210 – Modern Dance II (LW) 2 cr
Recommended prereq: DANC 1200 or instructor approval. The second semester study of modern dance technique, theory, and terminology. Emphasis is on learning and applying kinesiological basics for lifelong participation in dance.

DANC 1500 – Intro to Jazz Dance I (FA) 3 cr
An introduction to jazz movement, technique, terminology and history. Classical and contemporary jazz rhythm and style are explored. Reading, writing, and concert attendance are part of this course.

DANC 1510 – Jazz Dance II (LW) 2 cr
Recommended prereq: DANC 1500 or instructor approval. The second semester study of jazz dance technique, theory, and terminology. Emphasis is on learning and applying kinesiological basics for lifelong participation in dance.

DANC 1580 – Intro to Tap Dance I (FA) 3 cr
An introduction to the fundamental technical skills, terminology, and history of tap dance. Rhythm, coordination and precision of sound are emphasized. Reading, writing, and concert attendance are part of this course.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
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</thead>
<tbody>
<tr>
<td>DANC 1590</td>
<td>Tap Dance II (LW)</td>
<td>2 cr</td>
<td>Recommended prereq: DANC 1580 or instructor approval. The second semester study of tap dance technique, theory, and terminology. Emphasis is on learning and applying kinesiological basics for lifelong participation in dance.</td>
</tr>
<tr>
<td>DANC 1700</td>
<td>Dance Improv/Choreography I</td>
<td>1 cr</td>
<td>Recommended prereq: DANC 1200 or instructor approval. Guided exploration in the elements of dance for the creative development of personal movement repertoire, spontaneous group interaction and choreographic skills.</td>
</tr>
<tr>
<td>DANC 1800</td>
<td>Dance Company</td>
<td>1 cr</td>
<td>Prereq: By audition. Offers experience and opportunity in performance, choreography, and production for the enjoyment and creative expression of the members, and for the enrichment and entertainment of the College and community.</td>
</tr>
<tr>
<td>DANC 1900</td>
<td>Special Projects</td>
<td>1-2 cr</td>
<td>Prereq: Department approval. Students plan their areas of study, choreography, or performance with the instructor on an individual basis.</td>
</tr>
<tr>
<td>DANC 2100</td>
<td>Ballet III</td>
<td>2 cr</td>
<td>Recommended prereq: DANC 1110 or instructor approval. The third semester study of ballet technique, theory, and terminology.</td>
</tr>
<tr>
<td>DANC 2110</td>
<td>Ballet IV</td>
<td>2 cr</td>
<td>Recommended Prereq: DANC 2100 or instructor approval. The fourth semester study of ballet technique, theory, and terminology.</td>
</tr>
<tr>
<td>DANC 2200</td>
<td>Modern Dance III</td>
<td>2 cr</td>
<td>Recommended prereq: DANC 1210 or instructor approval. This is the third semester study of modern dance movement, technique, and theory.</td>
</tr>
<tr>
<td>DANC 2210</td>
<td>Modern Dance IV</td>
<td>2 cr</td>
<td>Recommended Prereq: DANC 2200 or instructor approval. This is the fourth semester study of modern dance movement, technique and theory.</td>
</tr>
<tr>
<td>DANC 2500</td>
<td>Jazz Dance III</td>
<td>2 cr</td>
<td>Recommended Prereq: DANC 1510 or instructor approval. This is the third semester study of jazz movement, technique, and terminology.</td>
</tr>
</tbody>
</table>
DANC 2510 – Jazz Dance IV
Recommended prereq: DANC 2500 or instructor approval. This is the fourth semester study of jazz movement, technique, and terminology.

DANC 2580 – Tap Dance III
Recommended prereq: DANC 1590 or instructor approval. The third semester study of tap dance technique, theory, rhythms and terminology. Emphases is on increasingly complex rhythms, time steps and movement phrases.

DANC 2700 – Dance Improv/Choreography II
Recommended prereq: DANC 1700. This is the second semester exploration of the elements of dance for the creative development of personal and group movement repertoire and choreographic skills.

DANC 2800 – Dance Company II
Prereq: By audition. Second year experience and opportunity in performance, choreography, and production for the enjoyment and creative expression of the members, and for the enrichment and entertainment of the college and community.

DANC 2900 – Special Topics
Prereq: Department approval. Students will learn specific areas of study in current trends within the dance field.

DANC 2990 – Performing Arts Connection
Prereq: Department approval. This is a collaboration of dance, music, and/or theatre. Students will create individual works to be performed in the Performing Arts Showcase.

DE 0910 – Language Arts for the Deaf
Year developmental course teaches English through American Sign Language. Strengthens ASL skills as well. Vocabulary, idioms, figurative language, grammar, critical thinking, study skills, reading, writing.

DE 0950 – College Vocabulary
Prereq: 72-83 score on the LOEP test or Accuplacer placement into RDG/ WRTG 0900 or higher. Students will increase their academic vocabulary by studying and learning how to proficiently use over 200 general, technical, academic, and professional English words and phrases.

DE 0990 – Life Skills
This class teaches students the basic fundamentals of cooking, clothing care, grocery shopping, personal finance, housekeeping, basic home care, basic car care, and roommate survival skills.
DH 1050 – Dental Radiology 2 cr
Prereq: Admission into program. Coreq: DH1060. Study of physical behavior, biological effects, methods of control, safety and techniques for exposing, processing and mounting radiographs. Included is interpretation, recognition and identification of significant findings.

DH 1060 – Dental Radiology Lab 1 cr
Prereq: Admission into program. Laboratory experience in dental radiography procedures and techniques. Treatment planning, exposure, interpretation and evaluation of dental radiographs with emphasis on client management techniques and their application.

DH 1100 – Dental Hygiene Theory I 3 cr

DH 1110 – Clinical Dental Hygiene I 2 cr
Prereq: Admission into program. Coreq: DH 1100. Students will demonstrate basic dental hygiene skills and procedures. Skill development is attained through practice sessions and performance evaluations.

DH 1140 – Dental Materials 1 cr
Prereq: DH 1050, DH 1060, DH 1100, DH 1110, DH 1330, DH 1340, and DH 1350. Coreq: DH1150. Study of chemical and physical composition and uses of dental materials. Emphasis on effects of various materials in the oral environment and why specific materials are used. There is an accompanying lab.

DH 1150 – Dental Materials Lab 1 cr
Prereq: Acceptance into the Dental Hygiene Program, DH 1100, DH 1110, DH 1050, DH 1060, DH 1330, and DH 1340. Coreq: DH1140. Students receive the opportunity to develop manipulative skills and practice procedures with various materials used in dentistry and dental hygiene.

DH 1330 – Head and Neck Anatomy 2 cr
Prereq: Admission into program. This course covers the study of head, neck and oral anatomy, with emphasis on terminology. Lab is included.

DH 1340 – Dental Anatomy 1 cr
Prereq: Admission into program. This is the comprehensive presentation of structures of the oral cavity, including oral anatomy, tooth development anatomy and occlusion. Lab is included.

DH 1350 – Dental Embryology/Histology 1 cr
Prereq: Admission into program. This is a comprehensive presentation of embryonic, fetal and postnatal development of tissues and structures of the head and oral cavity.
DH 1400 – Dental Hygiene Theory II 3 cr
Prereq: DH 1100 and DH 1110. Coreq: DH1410. Continuance of DH Theory I. Comprehensive patient care will be required in various problem solving and decision making skills involving the assessment, planning, implementation and evaluation of direct care to the public.

DH 1410 – Clinical Dental Hygiene II 3 cr

DH 1540 – Pharmacology 3 cr
Prereq: DH 1100. Course emphasizes pharmacodynamics of drug action, modes of administration, biotransformation, excretion, drug side effects and interactions. Focus on impact various medications have in dental and dental hygiene treatment.

DH 1640 – Compromised Patient Spcl Needs 2 cr
Prereq: DH 1100. Course offers in-depth study of problems, unusual health conditions and/or factors that may complicate routine dental hygiene care.

DH 2050 – General and Oral Pathology 3 cr
Prereq: DH 1400 and DH 1640. Course focuses on fundamentals of oral pathology and disease processes. An overview of oral pathology emphasizes recognition and identification of pathologic conditions within the oral cavity.

DH 2200 – Dental Hygiene Theory III 3 cr
Prereq: DH 1400. Coreq: DH2210. Course of study in theory and practice of dental hygiene. Focus will be on advanced instrumentation, implementation of advanced dental hygiene care, case studies and table clinics.

DH 2210 – Clinical Dental Hygiene III 4 cr

DH 2220 – Community Dental Health 3 cr
Prereq: DH 1640. Principles and practice of public health methods and plans are taught examining biostatistics and epidemiology. Students design, implement and evaluate programs with community focus.
DH 2340 – Local Anesthesia 2 cr
Prereq: DH 1540. Coreq: DH 2341. Pain control in the dental office setting including administration of local anesthetic/nitrous oxide and anxiety management. Completion of this course qualifies students to take WREB for local area anesthesia. Lab is included.

DH 2341 – Local Anesthesia Lab 1 cr
Prereq: DH 1540. Coreq: DH 2340. Demonstration and administration of all local regional blocks are experienced in a supervised lab setting. Minimum competence is verified through successful completion of proficiency evaluations.

DH 2450 – Periodontology I 2 cr
Prereq: DH 1410 and DH 1640. Anatomy/physiology, histopathology, microbiology specific to dental disease, etiology and clinical features of gingival/ periodontal infections are taught. Emphasis is placed on recognition and treatment planning for periodontal clients.

DH 2600 – Dental Hygiene Theory IV 3 cr
Prereq: DH 2200. Coreq: DH2610. This course offers advanced techniques for treatment of periodontal disease including various modes of treatment and wound healing. Emphasis is placed on the role of the dental hygienist as a periodontal co-therapist. This course continues the study of dental hygiene treatment of patients with special needs using case-based learning tools.

DH 2610 – Clinical Dental Hygiene IV 5 cr
Prereq: DH 2210. Coreq: DH2600. Clinical expertise is refined. Time management and patient care are emphasized, preparing students for clinical licensing board examinations.

DH 2800 – Practice Management 2 cr
Prerequisite: DH 2200. This course provides a study of principles and procedures related to management of the dental practice; the philosophy of dental practice and the business of dentistry. Emphasis is placed on dental jurisprudence and ethical issues, and applied interpersonal communication both written and oral. Students develop skills in interviewing, writing letters of application and resumes.

DISP 1500 – Dispatch Applications 7 cr
Prereq: PILT 1100, 1400, & 2050. May be taken concurrently with PILT 1400 and PILT 2050. Course will cover applicable federal regulations, aircraft flight & general operating manuals, performance & systems, and emergency procedures as it applies to dispatching. Students will apply proper flight dispatch applications under FAR Part 121 from flight prep to departure w/ flight following & arrival.
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>DMS 1010</td>
<td>Patient Care</td>
<td>2 cr</td>
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<td>Prereq: Admission to DMS program.</td>
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<td>This online course prepares</td>
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<td>students to provide basic care to</td>
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<td>patients. Includes patient</td>
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<td>interactions, history taking,</td>
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<td>transfer techniques, vitals signs</td>
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<td>and oxygen, infection control,</td>
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<td>aseptic/nonaseptic techniques,</td>
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<td>ethics, medical law, etc.</td>
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<td>DMS 1020</td>
<td>Abdominal Sonography</td>
<td>4 cr</td>
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<td>Prereq: Admission to DMS program.</td>
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<td>Clinical aspects of abdominal</td>
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<td>sonography. Emphasizes pertinent</td>
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<td>laboratory tests, other imaging</td>
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<td>modalities and physical signs and</td>
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<td>symptoms of disease with focus on</td>
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<td>performing and interpreting</td>
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<td>abdominal exams.</td>
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<td>DMS 1030</td>
<td>Physics/Instrumentation</td>
<td>3 cr</td>
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<td>Prereq: Admission to DMS program.</td>
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<td>Fundamental knowledge of physical</td>
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<td>principles and instrumentation of</td>
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<td>diagnostic ultrasound. Explains</td>
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<td>how diagnostic ultrasound works</td>
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<td>and helps student properly handle</td>
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<td>artifacts, scan safely and</td>
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<td>evaluate instruments.</td>
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<td>DMS 1040</td>
<td>Ultrasound Lab</td>
<td>2 cr</td>
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<td>Prereq: Admission to DMS program.</td>
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<td>Compliments didactic course</td>
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<td>instruction. Students will observe</td>
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<td>scanning equipment, techniques,</td>
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<td>and have a hands-on opportunity</td>
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<td>to perform basic skills necessary</td>
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<td>of a sonographer.</td>
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<tr>
<td>DMS 1110</td>
<td>OB/GYN</td>
<td>4 cr</td>
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<td>Prereq: DMS 1030. Comprehensive</td>
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<td></td>
<td>discussion of obstetrical and</td>
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<td>gynecologic diagnostic ultrasound.</td>
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<td>Provides information of anatomy,</td>
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<td>pathophysiology, sonographic</td>
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<td></td>
<td>theory, and sonographic technique.</td>
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<tr>
<td>DMS 1120</td>
<td>Pathophysiology</td>
<td>4 cr</td>
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<td>Prereq: DMS 1020. Basics of</td>
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<td></td>
<td>pathophysiology Includes most</td>
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<td></td>
<td>common diseases for each body</td>
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<td>system, including study of the</td>
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<td>cell, underlying processes of</td>
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<td>disease and a systematic survey</td>
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<td>of disease within body systems.</td>
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<tr>
<td>DMS 1130</td>
<td>Clinical I</td>
<td>4 cr</td>
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<td>Prereq: DMS 1040. Students attend</td>
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<td>a clinical setting 24 hours each</td>
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<td>week. Emphasis is on professional</td>
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<td>qualities required of a sonographer</td>
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<td>and the basics of performing</td>
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<td>sonographic examinations. Clinical</td>
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<td>rotation schedules will be</td>
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<td>determined by the clinical site.</td>
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<tr>
<td>DMS 1210</td>
<td>Sectional Anatomy</td>
<td>3 cr</td>
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<tr>
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<td>Prereq: DMS 1110. This course is</td>
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<td>taught primarily online. Students</td>
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<tr>
<td></td>
<td>access a website for course</td>
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<td>instructions, lectures, assignments</td>
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<td>and materials, and to communicate</td>
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<td>with the instructor and with other</td>
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<td>students.</td>
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</tbody>
</table>
DMS 1230 – Clinical II 4 cr
Prereq: DMS 1130. Students attend a clinical setting 24 hours each week. Emphasis is on expanding the scanning proficiency and range of the student. Professional growth is continued. Activities are guided by a competency based system.

DMS 2010 – Vascular Ultrasound 3 cr
Prereq: DMS 1210. Principles and practice of vascular ultrasound, including basic theory and instrumentation. Understanding the function of scanner controls to obtain optimal images.

DMS 2030 – Clinical III 5 cr
Prereq: DMS 1230. Students attend a clinical setting 32 hours each week. Emphasis is on expanding the scanning proficiency and range of the student. Clinical rotation schedules will be determined by the clinical site.

DMS 2040 – Ethics in Healthcare 4 cr
This online course will examine ethical dilemmas facing clinicians and non-clinician healthcare workers. Students will cover a wide variety of issues including the ethics and morality behind patient care, and patient confidentiality.

DMS 2110 – Fetal Anomalies 4 cr
Prereq: DMS 2010.

DMS 2130 – Clinical IV 5 cr
Prereq: DMS 2030. Students attend a clinical setting 32 hours each week. Emphasis is on expanding the scanning proficiency and range of the student. Professional growth is continued. Activities are guided by a competency based system.

DMS 2210 – Comp. Sonography 3 cr
Prereq: DMS 2110. Review of material learned in all previous program courses. Students work in groups to organize and re-examine all course content.

DMS 2230 – Clinical V 4 cr
Prereq: DMS 2130. Students attend a clinical setting 24 hours each week. Students gain the skills necessary to enter the workforce. Emphasis is on efficiency and accuracy. Activities are guided by a competency based system.

DST 1010 – Safety and Basic Shop Skills 1 cr
This course covers the introduction to basic shop safety and basic shop skills. It should give you, the student, the background and working knowledge of safety that is required by industry.
DST 1045 – Basic Diesel 4 cr
Theory and practical experience in disassembly, inspection, and reassembly of both 2 and 4 cycle diesel engines; subassemblies for different engine systems; running and tuning up engines from different manufacturers. Safety will be stressed.

DST 1065 – Basic Engine Performance 4 cr
Theory and practical experience in troubleshooting and repair of both 2 and 4 cycle diesel engines. Parts nomenclature, hydro mechanical fuel-injection system design and operation, and engine maintenance will also be covered. Safety will be stressed.

DST 1145 – P M Brakes 4 cr
Theory and practical experience in preventive maintenance and servicing of heavy duty trucks and equipment. A. B. C. and D. inspections will be included. Safety procedures and shop practices will be stressed.

DST 1165 – P M Electrical 4 cr
Theory and practical experience in preventive maintenance and servicing of heavy-duty trucks and equipment. Includes batteries and electrical systems, driveline, chassis and suspension. Shop safety procedures and practices will be stressed.

DST 1199 – Specialty Training HDM 1-7 cr
This is a course designed to help students obtain specialized training specific to industry. It is taught as requested by industry.

DST 1245 – Drivetrains Fluid Drives 4 cr
Classroom instruction and practical laboratory experience in torque converter operation and troubleshooting, power shift, and automatic transmission design, operation and troubleshooting. Electronically controlled transmissions and diagnostics will be covered.

DST 1265 – Drivetrains Gear Drives 4 cr
Classroom instruction and practical laboratory experience in clutch operation and adjusting. Manual transmissions, Twin Countershaft transmission both manual and automated. Differential theory and operation, and final drives. We will also cover track type undercarriages.

DST 1299 – Specialty Training HDM 1-7 cr
To help students obtain specialized training specific to industry. Students must register for 1-7 credits in the DST program. It is taught as requested by industry.
DST 2045 – Advanced Engines & Electronics 4 cr
Prereq: DST 1045 and DST 1065. Practical experience in diesel engine fuel systems operation, troubleshooting, repair, and maintenance for both 2 and 4 cycle engines. Electronic fuel injection theory, operation and troubleshooting will be covered, as well as computer based diagnostics.

DST 2065 – Advanced Engines & Electronics 4 cr
Prereq: DST 1045, DST 1065, and DST 2045. Classroom instruction and practical laboratory experience in electronic fuel injection, engine performance, and exhaust emissions. Troubleshooting, repair, and maintenance of both 2 and 4 cycle engines will be demonstrated by instructors and experienced by students.

DST 2145 – H. D. Hydraulic Controls 4 cr
Theory and practical experience in principals of fluid power transmission, force, energy, pumps, valves, cylinders, and motors as applied to mobile hydraulic systems. Shop procedures and safety will be stressed.

DST 2165 – H.D. Hydraulic Functions 4 cr
Theory and practical experience in principles of fluid power transmission of force and energy, interactive CD training, electronic controls, Air conditioning functions and principles. Shop procedures and safety will be stressed.

DST 2245 – H. D. Elec. Circuits 4 cr
Theory and practical experience in basic electrical circuits, principals of magnetism, charging and cranking systems, maintenance, testing, troubleshooting of all electrical applications. Safety will be stressed.

DST 2265 – H.D. Electrical Lighting 4 cr
Theory and practical experience in basic electrical fundamentals, ignition circuits, lighting and accessories, maintenance, computer diagnostics, testing troubleshooting of all electrical applications. Safety will be stressed.

DSTA 1100 – Safety and Basic Engines 2 cr
Coreq: DSTA 1111. Instruction in safety, theory, operation, troubleshooting and repair maintenance. Includes part nomenclature for both 2-cycle and 4-cycle diesel engines as well as tear down and rebuilding of these engines.

DSTA 1111 – Safety and Basic Engines Lab 4 cr
Coreq: DSTA 1100. Practical experience in safety, theory, operation, troubleshooting and repair maintenance and parts nomenclature of both the 2-cycle and 4-cycle diesel engines.
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>DSTA 1120</td>
<td>Preventive Maintenance</td>
<td>2 cr</td>
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<tr>
<td>DSTA 1121</td>
<td>Preventive Maintenance Lab</td>
<td>4 cr</td>
</tr>
<tr>
<td>Prereq: DSTA 1100 and DSTA 1111. Coreq: DSTA 1120. Practical performance based experience in PM servicing of heavy duty trucks and equipment, including PM inspections, proper servicing procedures, troubleshooting and repair of heavy duty systems. Shop safety.</td>
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<tr>
<td>DSTA 1130</td>
<td>Heavy-Duty Drivetrains</td>
<td>2 cr</td>
</tr>
<tr>
<td>Prereq: DSTA 1120 and DSTA 1121. Coreq: DSTA 1131. Classroom instruction in clutch, manual transmission, differential, torque converter, automatic transmission, final drive, theory and operation will be covered. Track type undercarriage will also be covered.</td>
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<tr>
<td>DSTA 1131</td>
<td>Heavy-Duty Drivetrains Lab</td>
<td>4 cr</td>
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<tr>
<td>DSTA 1200</td>
<td>Advanced Engines &amp; Electronics</td>
<td>2 cr</td>
</tr>
<tr>
<td>Prereq: DSTA 1130 and DSTA 1131. Coreq: DSTA 1211. Classroom instruction in tune-up, troubleshooting, and maintenance of 2-cycle and 4-cycle diesel engines with emphasis on all systems.</td>
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<tr>
<td>DSTA 1211</td>
<td>Adv. Engine &amp; Electronics Lab</td>
<td>4 cr</td>
</tr>
<tr>
<td>Prereq: DSTA 1130 and DSTA 1131. Coreq: DSTA 1200. Stresses lab application in the tune-up, troubleshooting maintenance of 2-cycle and 4-cycle diesel engines with emphasis on all systems, including operation, diagnostics, repair of electronic and computerized-engine controls.</td>
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<tr>
<td>DSTA 1220</td>
<td>Heavy-Duty Hydraulics</td>
<td>2 cr</td>
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<tr>
<td>Prereq: DSTA 1200 and DSTA 1211. Coreq: DSTA 1221. Classroom instruction in fundamentals and principles of fluid power and the transmission of force and energy, using pumps, actuators, valves, accumulators, cylinders, and motors as applied to mobile hydraulics systems. Shop safety.</td>
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<tr>
<td>DSTA 1221</td>
<td>Heavy-Duty Hydraulics Lab</td>
<td>4 cr</td>
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</tbody>
</table>
DSTA 1230 – Heavy-Duty Electrical 2 cr
Prereq: DSTA 1220 and DSTA 1221. Coreq: DSTA 1231. Classroom instruction in basic electronics, magnetism, electronic controls, operation, maintenance, testing, troubleshooting and repair of all electrical units. Basic operation, maintenance and repair of air conditioning units.

DSTA 1231 – Heavy-Duty Electrical Lab 4 cr
Prereq: DSTA 1220 and DSTA 1221. Coreq: DSTA 1230. Practical experience in operation, maintenance, testing troubleshooting, and repair of electronic and electrical units in the heavy duty field. Basic operation, maintenance, and repair of air conditioning units.

DSTA 1299 – Diesel Systems Special Studies 1-7 cr
Prereq: Instructor approval. To help students obtain specialized training specific to industry. Students must register for 1-7 credits in the DSTA program. It is taught as requested by industry.

DSTA 2000 – Heavy Duty Repair CO-OP 2-4 cr
College credit for experience on the job site. Arranged in advance. Requirements are determined by the employer.

ECON 1010 – Economics as Soc. Science (SS) 3 cr
Studies the role of economics in understanding social problems. It is designed as a general information course for all individuals despite major, and satisfies the social science component of general education.

ECON 1400 – Economic History of Am. Labor 3 cr
Survey of the development of the labor movement and unions in America. Includes profile of working class, early trade unions, the rise of industrial trade unions, AFL-CIO, and contemporary labor developments and issues.

ECON 1600 – Intro to Economic Systems (SS) 3 cr
Educates students in economic systems such as capitalism, socialism, and mixed economic systems. Basic economic concepts will be used to understand and analyze social, political, and cultural influences on such systems.

ECON 1740 – Economic History of U.S. (AI) 3 cr
Prereq: RDG 0990 w/C grade or better, or appropriate Accuplacer score. Explores the historical foundations of American economic growth and development from colonial times to the present. The study of economic history provides scholars the opportunity to understand and analyze, from a historical perspective, the impact of institutional and structural changes within the American economy.
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ECON 2010</td>
<td>Principles of Microeconomics (SS)</td>
<td>3 cr</td>
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<tr>
<td>ECON 2020</td>
<td>Principles of Macroeconomics (SS)</td>
<td>3 cr</td>
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<tr>
<td>ECON 2100</td>
<td>Labor Economics</td>
<td>3 cr</td>
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<tr>
<td>ECON 2200</td>
<td>Money &amp; Banking</td>
<td>3 cr</td>
</tr>
<tr>
<td>ECON 2250</td>
<td>Environmental Economics</td>
<td>3 cr</td>
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<tr>
<td>ECON 2400</td>
<td>International Econ/Finance</td>
<td>3 cr</td>
</tr>
<tr>
<td>ECON 2990</td>
<td>Special Studies in Economics</td>
<td>1-3 cr</td>
</tr>
<tr>
<td>EDDT 1010</td>
<td>Technical Drafting I</td>
<td>3 cr</td>
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</tbody>
</table>

**ECON 2010 – Principles of Microeconomics (SS) 3 cr**
This course studies consumer and producer behavior, and the role specific economic units play in market development. Elasticity, consumer choice, production costs, and profits are examined relative to different levels of competition.

**ECON 2020 – Principles of Macroeconomics (SS) 3 cr**
This course studies the economy as a whole. Concepts of scarcity, Aggregate demand and Aggregate supply, output and income, growth, inflation, unemployment, interest rates, money and banking are all examined. Current events are used as examples.

**ECON 2100 – Labor Economics 3 cr**
Prereq: ECON 2010. Studies the economics of the American labor market, wage theory, labor mobility and migration, human resource development, history and role of unions, collective bargaining, and employment data studies.

**ECON 2200 – Money & Banking 3 cr**
This course examines financial institutions and markets and their impact on the economy. This course explores such institutions from the perspective of monetary economic theory, practice, and policy.

**ECON 2250 – Environmental Economics 3 cr**
Students will evaluate costs of environmental degradation and determine their point of impact. They will recommend best economic measures for minimizing costs to society. Economic sustainability will be considered.

**ECON 2400 – International Econ/Finance 3 cr**
Prereq: ECON 2010 or ECON 2020, either can be taken concurrently. This course is on economic topics pertaining to international trade and finance. This course develops theory, practice and the policy in the global context.

**ECON 2990 – Special Studies in Economics 1-3 cr**
Prereq: Instructor approval. Under the supervision of the instructor, students develop and follow an individualized curriculum.

**EDDT 1010 – Technical Drafting I 3 cr**
Lab practice in board drafting techniques, use of drafting tools, lettering, geometric construction, orthographic and isometric sketching, projection techniques, section views, and dimensioning standards.
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<tr>
<th>Course Code</th>
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<th>Credits</th>
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<tr>
<td>EDDT 1040</td>
<td>Introduction to AutoCAD</td>
<td>3 cr</td>
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<td>Basic skills using AutoCad for drawing applications are taught. The course includes: draw and modify commands, geometric construction, dimensions, templates, blocks and libraries, hatching, layers, scales, and plotting.</td>
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<tr>
<td>EDDT 1100</td>
<td>Advanced AutoCAD</td>
<td>2 cr</td>
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<td></td>
<td>Prereq: EDDT 1040. Advanced skills using AutoCAD. Includes: introduction to detail and assembly drawings, advanced geometric construction, isometric drawing, auxiliary views, advanced dimensioning, dynamic blocks with attributes, and AutoCAD 3D Modeling.</td>
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<tr>
<td>EDDT 1200</td>
<td>Technical Drafting II</td>
<td>4 cr</td>
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<td></td>
<td>Prereq: EDDT 1010 and EDDT 1100 or both concurrently. Overview of technical drafting disciplines: mechanical details and assemblies, fits and tolerances, flat pattern layout, electronic diagrams, structural steel including welds, civil, and piping. Students will create industry design and working drawings.</td>
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<tr>
<td>EDDT 1420</td>
<td>Basic MicroStation</td>
<td>2 cr</td>
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<td></td>
<td>This course teaches drafting skills using MicroStation CAD software and includes: geometric construction, drawing and modification commands, dimensioning, cell libraries, plots, working units, patterning, seed files, and reference files.</td>
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<tr>
<td>EDDT 2160</td>
<td>Statics and Strength of Matls</td>
<td>5 cr</td>
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<td>Prereq: MATH 1060 or 1080 or appropriate Accuplacer score. Focuses on the fundamentals of material statics and strength, theory of forces, moments, and deflection, stresses, centroids and moment of Inertia, principles of design, problem-solving and application.</td>
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<tr>
<td>EDDT 2180</td>
<td>Electronics Drafting</td>
<td>3 cr</td>
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<td>Prereq: EDDT 1100. Drafting and design techniques used in the electronics industry including: electronics symbols, schematic and logic diagrams, electro-mechanical design, printed circuit board design, artwork layout, and related industry standards. Students will be using PADS which is a circuit board layout software package and AutoCAD.</td>
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<tr>
<td>EDDT 2190</td>
<td>Civil Drafting</td>
<td>2 cr</td>
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<td>Prereq: EDDT 1040 and EDDT 1420. The study of the various types of civil drafting: plats, contour maps, profiles, road design, and site layout. Includes mapping terminology, symbols and standard formats. Taught using MicroStation and AutoCAD Civil 3D.</td>
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<tr>
<td>EDDT 2240</td>
<td>Steel Detailing</td>
<td>3 cr</td>
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<td></td>
<td>Prereq: EDDT 1040 and MATH 1010. Use of the AISC manual to calculate stresses and design simple steel structures with welded and bolted connections. Layouts and drawings of details required for fabrication using appropriate industry standards and formats.</td>
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</tbody>
</table>
EDDT 2340 – Manufacturing Processes 2 cr
Prereq: EDDT 1040 or concurrently. Coreq: EDDT 2350. A broad analysis of industrial materials and processes used in manufacturing as related to design. Topics include: metal forming, casting, machining, non-metals, finishing and assembly, and the principles of material behavior.

EDDT 2350 – Manufacturing Processes Lab 1 cr
Coreq: EDDT 2340. Lab practice in the processes used to change material shape and condition for industrial use and the principles of material behavior. Topics include: metal forming, casting, injection molding, heat treatment, equipment selection, design criteria, shop and safety procedures.

EDDT 2360 – Pipe Drafting 2 cr
Prereq: EDDT 1040 or EDDT 1420. This is specialized training in the drafting principles for piping layouts and drawings. It includes: symbols, fittings, controls, parts specifications, diagrams, and detail drawings using appropriate industry standards and formats.

EDDT 2420 – Advanced MicroStation 2 cr
Prereq: EDDT 1420. Advanced techniques with MicroStation software mainly as it is used in civil design disciplines. Topics include customization, drawing management and advanced detailing tools.

EDDT 2540 – Geometric Dimension & Tolerance 2 cr
Prereq: EDDT 1040. Study of the application and interpretation of geometric dimensioning and tolerancing per the latest ASME Y 14.5 standard.

EDDT 2600 – Modeling with SolidWorks 3 cr
Prereq: EDDT 1040 or CAD experience. Use of SolidWorks software in the creation of 3D models to aid in the analysis and design of mechanical parts and assemblies. Topics include construction, extraction of engineering data, assemblies and mates, and related drawings.

EDDT 2700 – Advanced SolidWorks 2 cr
Prereq: EDDT 2600 or equivalent experience. This course covers advanced techniques in solid modeling using SolidWorks and PhotoView for solving complex design problems. SimulationXpress for design and stress analysis will also be taught.

EDDT 2710 – AutoDesk Inventor 3D Modeling 2 cr
Prereq: AutoCAD experience. Solid modeling with AutoDesk Inventor will be taught. Topics include sketch planes, part construction, extraction of engineering data, assemblies and mating parts, parametric design and related drawings. The Design Center will also be used.

EDDT 2990 – Special Topics 1-5 cr
Prereq: Instructor approval. This course is designed so the student can work on special individualized projects under the supervision of the instructor.
EDU 1010 – Orientation to Education 3 cr
Teaching as a career - challenges and rewards, history, philosophies, social issues, legal issues, job availability, and governance. Preparation for acceptance into a teacher education program. Field experience required.

EDU 1020 – Essentials College Study (ID) 3 cr
Orientation to prepare students for college study. Greater knowledge & skills to assist in academic objectives. Nature of adult learner, planning, testing, communication, study, library use, issues. Service learning component likely.

EDU 1400 – Study of Disabilities (SS,DV) 3 cr
Examines social dynamic between non-disabled majority and disabled minority cultural groups. Historical, ethical, legal, and attitudinal perspectives relating to disability issues will be addressed. Course may be taught with a Service Learning component.

EDU 1900 – Individual Studies in Educa. 1-3 cr
Prereq: Instructor approval. Students plan areas of study, service learning or travel and work with an instructor on an individual basis. The course may involve readings, discussion, research, Service Learning, intensive writing or other skills deemed appropriate.

EDU 2000 – CO-OP Education 1-2 cr
Prereq: FHS 1500 and EDU 1010. Supervised work experience in a school or other equivalent setting. Requires the ability to apply teaching/learning theory while working with children. Credit is awarded for successful completion of specific learning objectives.

EDU 2010 – Intro. to Special Education 3 cr
Historical overview of legal, ethical, and social issues related to a free, appropriate education. Levels of inclusion. Developmentally Appropriate Practice (DAP). Individualized Education Programs (IEPs). Community resources. Working with parents and specialists.

EDU 2011 – Inclusive Classrooms 3 cr
Prospective general and special educators develop an understanding of the educational needs of children with disabilities and study a variety of instructional and organizational techniques for an inclusive classroom.

EDU 2030 – Research/Inquiry in Education 3 cr
Examines the general principles and methods used to explain social phenomena. Topics include research design, measurement, sampling, experiments, surveys, data analysis, association and causation, ethics, and the uses of research.
EDU 2110 – Ed Psych Learning & Literacy  
Development, application, and assessment of learning; how theory guides classroom instruction; how assessments determine instructional effectiveness.

EDU 2140 – Technology in the Classroom  
Examines the fundamental concepts, knowledge, skills, and attitudes for technology in the elementary classroom.

EDU 2150 – Intro to Multicultural Ed.  
Students explore historical and theoretical aspects of diversity in elementary and secondary classrooms. Students learn how to create a climate for understanding and acceptance.

EDU 2410 – Educational Law and Policy  
Introduces laws and policies affecting professional educators in elementary and secondary schools.

EDU 2800 – Inst., Tech., Assess., & Plan  
Prereq: ARL candidates only. The teacher will learn to use a variety of instructional strategies to encourage students development of critical thinking, problem solving and performance skills. Teachers will create an electronic portfolio.

The Text book that will be used: "The Art and Science of Teaching" by Robert J. Marzano.

EDU 2820 – Creating A Learning Environmnt  
Prereq: ARL candidates only. The teacher will learn how children learn and develop and will learn to provide learning opportunities that support their intellectual, social, and personal development.

EDU 2840 – Literacy Strategies  
Prereq: ARL candidates only. This course will focus on fundamentals of reading comprehension of students and decisions teachers make concerning methods, materials, and procedures based on those fundamentals.

Prereq: ARL candidates only. This course will explore the rationale, concepts, theory, and practice of teaching diverse populations from cultural, linguistic and socio-economic diverse backgrounds in pluralistic schools and societies.

EDU 2900 – Special Topics in Education  
An in-depth study of a particular topic in elementary or secondary education. The course may involve readings, discussion, research, Service Learning, intensive writing, or other skills deemed appropriate.
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<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EE 1010</td>
<td>Introduction To Laboratory Instruments And Methods</td>
<td>1 cr</td>
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<td>This course is an introduction to Electrical Engineering</td>
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<td>and Electrical Engineering Technology. The use of</td>
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<td></td>
<td>electrical lab equipment is used to construct and test</td>
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<td>electrical systems. Students will be exposed to</td>
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<td>career paths in both electrical engineering and</td>
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<td>electrical engineering technology and the education</td>
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<td>pathways for each.</td>
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<tr>
<td>EE 1020</td>
<td>Elect. Eng. Problem w/Matlab</td>
<td>1 cr</td>
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<td>Prereq: MATH 1060 or 1080, either can be taken concurrently. EE introduction using MatLab Design of prototype communications systems using script and function, files, math functions, commands for array construction and manipulation, string expressions, logical operators, control flow and graphics.</td>
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<tr>
<td>EE 1030</td>
<td>UNIX for ELECT Engr Students</td>
<td>1 cr</td>
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<td>Topics for this course include the X windows systems,</td>
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<td>UNIX shell commands, file system issues, text editing</td>
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<td>with Emacs, accessing the World Wide Web with Netscape,</td>
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<td>and electronic mail.</td>
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<tr>
<td>EE 1270</td>
<td>Intro to Electrical Circuits I</td>
<td>4 cr</td>
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<td></td>
<td>Prereq: MATH 1210, PHYS 2210, EE 1010, EE 1020 or</td>
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<td></td>
<td>ENGR 1030 or ENGR 1040 (any may be taken concurrently).</td>
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<td></td>
<td>Basic concepts of analog circuits including voltage,</td>
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<td>current power, resistance, capacitance and inductance.</td>
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<td>Ohm’s, Kirchhoff’s Laws, node voltages, branch, mesh</td>
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<td>currents, equivalent circuits and design projects are</td>
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<td>included.</td>
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<tr>
<td>EE 2000</td>
<td>Cooperative Education In Electrical Engineering</td>
<td>1-2 cr</td>
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<td></td>
<td>Prereq: Sophomore standing, minimum 2.0 GPA, and</td>
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<td>instructor approval. Supervised work experience in a</td>
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<td></td>
<td>business, industrial or governmental environment related</td>
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<td>to the program major. Credit is awarded for completion</td>
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<td>of specific objectives that provide new learning related</td>
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<td>to the program major.</td>
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<tr>
<td>EE 2200</td>
<td>Elect. Eng. for Civil Engineer</td>
<td>1.5 cr</td>
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<td></td>
<td>Prereq: PHYS 2210; MATH 2250 (can be taken concurrently).</td>
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<td></td>
<td>Fundamentals of electrical engineering topics for Civil</td>
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<td>Engineering majors. Fundamentals of DC and AC theory,</td>
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<td>power, motors, transformers, and design projects are</td>
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<td>included.</td>
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<tr>
<td>EE 2210</td>
<td>Elect. Eng. For Non-EE Majors</td>
<td>3 cr</td>
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<tr>
<td></td>
<td>Prereq: PHYS 2210; MATH 2250 (can be taken concurrently).</td>
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<tr>
<td></td>
<td>Fundamentals of electrical engineering topics for students who are not electrical engineering majors. Fundamentals of DC and AC theory, semiconductor devices, power, motors, transformers, transducers, actuators and design projects are included.</td>
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<tr>
<td>EE 2260</td>
<td>Fund of Electrical Circuits II</td>
<td>4 cr</td>
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<td></td>
<td>Prereq: EE 1270 and PHYS 2220. Basic concepts of Natural</td>
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<td>and step Response of RCL Circuits, Sinusoidal Steady-State</td>
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<td>Power, Three Phase Circuits, Filters, Frequency selective</td>
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<td>circuits, Fourier Series and Laplace Transforms, Bode</td>
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<td>plots and design projects are included.</td>
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</tbody>
</table>
EE 2280 – Fundament. of Eng. Electronics  
Prereq: EE 1270, MATH 2250, and PHYS 2220. Fundamentals of semiconductor devices, electronic circuits and components, network models of amplifiers, diodes, BJTs and MOSFETs, biasing, feedback, stability and frequency response are covered. Design projects and simulation are included.

EE 2700 – Fundamentals of Digital System Design  
Prereq: CSIS 1400 and PHYS 2220. An introduction to digital systems, Boolean algebra, theory of combinatorial circuits, sequential circuits and finite state machines. Computer aided design (CAD) tools used for schematic capture, simulate, implement and test the circuits.

EE 2900 – Special Topics in Electrical Engineering  
Special Topics reflecting items of current interest in Electrical Engineering.

EET 1130 – Digital Systems  
Prereq: MATH 1010 (may be taken concurrently) Introduction to digital electronics, integrated circuits, numbering systems, Boolean algebra, gates, flip-flops, multiplexers, sequential circuits, combinational circuits, programmable logic devices, and computer architecture. Lecture and lab combination. Laboratory activities to include the design, construction, analysis, and measurement of basic digital systems. Simulation will be emphasized.

EET 1140 – AC and DC Circuits  
Prereq: MATH 1060 or MATH 1080 (may be taken concurrently). Introduction to AC and DC circuit fundamentals, analysis, theorems, laws, components, measuring devices, and equipment. The introduction and use of measuring instruments, power supplies, and signal generators. Lecture and lab combination with simulation emphasis. Laboratory activities to include circuit design, construction, and analysis of AC/DC circuits.

EGMT 1010 – Intro to Energy Management  
Provides an overview of the energy management field and defines the need for energy management as an integral part of society. Course also presents various vocational opportunities through lectures/guest speakers/site visits.

EGMT 1110 – Heating Ventilation Air Conditioning Energy Analysis I  
Prereq: EGMT 1010. Course introduces HVAC fundamentals including applications to residential and light commercial energy use. Topics include HVAC functions, units and measurements, heat transfer and loads, thermodynamics, heating and cooling systems, building envelopes, blower doors, indoor air quality, and basics of electricity. All subjects are related to their HVAC applications.
EGMT 1120 – Commercial Energy Analysis  
3 cr  
Prereq: EGMT 1210 and MATH 1010. Analysis of energy use and management in light commercial buildings, preparing for and performing walk through audits in apartments, restaurants, and retail/office complexes. Emphasis on analyzing data obtained from field experience.

EGMT 1130 – Building Energy Simulations  
3 cr  
Prereq: EGMT 1120. Course reviews computer programs available for analyzing commercial buildings. Topics include code and output format, BIN methodology, hourly simulations and current programs on market. Students perform simulations under supervision.

EGMT 1210 – Heating Ventilation Air Conditioning Energy Analysis II  
2 cr  
Prereq: EGMT 1110 and PHYS 1010. An overview of the refrigeration cycle, HVAC system types, tuning, operating and maintenance (TOM), air duct design, psychrometrics and energy conserving retrofit options.

EGMT 1220 – Commercial A/C Sys Analysis  
2 cr  
Prereq: EGMT 1210 and MATH 1010. Course will explore A/C systems commonly found in the commercial environment. Site visits and discussions will help students identify system types and conservation opportunities associated with each technology.

EGMT 1230 – Energy Control Strategies  
3 cr  
Prereq: EGMT 1220, 1240, and 1700 or instructor approval. Course covers devices used to regulate energy use in buildings, pneumatic/electric/electronic; from manual to auto, simple switches to microprocessors. Emphasis on control/calibration problems and re-designing for energy efficiency.

EGMT 1240 – Energy Efficiency Methods  
2 cr  
Prereq: EGMT 1110 and PHYS 1010. Emphasis on energy management calculation methods using computerized spreadsheets, focusing on energy conversion factors, dimensional analysis and documentation standards. Fundamental effective calculations practiced for combustion motors and refrigeration.

EGMT 1310 – Lighting Fundamentals  
2 cr  
Prereq: EGMT 1110, PHYS 1010, and EGMT 1700 or instructor approval. Course assesses quantity and quality of light, light sources and controls, luminaries, manufacturer lamp and ballast specifications, lighting power density and HVAC interactions, retrofit opportunities, cost saving analysis, lighting codes/regs., lighting audit project.

EGMT 1320 – Lighting Applications  
2 cr  
Prereq: EGMT 1310 and MATH 1010. Students will review terminology and lighting fundamentals, IES illuminance selection procedures, evaluate lighting systems, luminaries and associated components, perform illuminance calcs. including point by point, lumen and computerized procedures.
EGMT 1410 – Energy Investment Analysis 2 cr
Prereq: EGMT 1210, 1240, 1310 and MATH 1010. What is/isn't appropriate energy efficiency measure investment? Utility rate schedules, simple payback analysis, compound interest, time value of money, cost estimating, life cycle cost analysis (LCCA), simulation tools reviewed. LCCA project req.

EGMT 1420 – Energy Accounting 2 cr
Prereq: CSIS 1019. Course will review energy units, data gathering for energy accounting utility rates and schedules, energy data organization, acj. baselines, cost avoidance, load factor, data analysis, data presentation, ENACT software and spreadsheet development.

EGMT 1540 – Alt. Energy Technologies 2 cr
Survey of sources of energy that may be used to increase energy supply in the Mountain West region including: wind, geothermal, solar and biomass. Environmental, social and economic advantages of each source are assessed.

EGMT 1700 – Basic Electrical Theory 3 cr
This course is designed to provide students with a basic understanding of electricity and the NEC Code. With subjects including: electron theory; magnetism; electromagnetism; Ohms Law; series, parallel and multi-wire circuits; protection devices; DC/AC theory; capacitance; inductance; motor, transformer, and generator theory; NEC Code navigation; voltage drop; and wire sizing.

EGMT 1710 – Basic Photovoltaics Systems 3 cr
Prereq: EGMT 1700. This course introduces students to the basic principles of utility interactive photovoltaic system design. Through classroom and hands on instruction this course provides the knowledge to: conduct site evaluations; prepare a basic electrical and mechanical design; select appropriate components; perform a financial benefit analysis; prepare a proposal; and work safely with PV systems.

EGMT 1720 – Adv. Photovoltaic Systems 3 cr
Prereq: EGMT 1710. This course teaches students to: properly conduct site assessments with inter row shading; adapt electrical designs according to NEC and best trade practices; working safely with PV; perform system checkouts and inspections; design, install, maintain and troubleshoot commercial and off-grid photovoltaic, battery based and hybrid systems.

EGMT 2060 – Energy Management Seminar I 1 cr
Seminar is a pathway for students to increase their understanding of industry expectations, as well as develop job search tools/skills. Designed to transition students from classroom to co-op to professional careers.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGMT 2065</td>
<td>Energy Management Seminar II</td>
<td>1 cr</td>
</tr>
<tr>
<td></td>
<td>Seminar is a pathway for students to increase their understanding of industry expectations, as well as develop job search tools/skills. Designed to transition students from classroom to co-op to professional careers.</td>
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<tr>
<td>EGMT 2800</td>
<td>Energy Management Internship</td>
<td>4 cr</td>
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<tr>
<td></td>
<td>Recommended Prereq: Completion of all major course requirements. This course provides relevant field experience integrating theory and practice while providing opportunities to develop skills, explore career options through networking with professionals and employers in the energy management field.</td>
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<tr>
<td>ELI 1110</td>
<td>Electricity I A</td>
<td>5 cr</td>
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<tr>
<td></td>
<td>Prereq: MATH 0990 or ELI 1470 (either w/C grade or better) or appropriate Accuplacer score. Electrical materials and devices, safety on the job site and handling of tools and equipment. Math for electricians and electrical code including definitions and basic direct current fundamentals.</td>
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<tr>
<td>ELI 1120</td>
<td>Electricity I B</td>
<td>5 cr</td>
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<tr>
<td></td>
<td>Prereq: ELI 1110. Direct current fundamentals with application and study of the National Electrical Code including theory and definitions, circuits, direct current motors and generators. Introduction to Alternating Current is included.</td>
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<tr>
<td>ELI 1210</td>
<td>Electricity II A</td>
<td>5 cr</td>
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<tr>
<td></td>
<td>Prereq: ELI 1120. This is the continued study of direct current fundamentals and theory. It includes applied math for electricians, capacitance and impedance, series circuits and resistance.</td>
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<tr>
<td>ELI 1220</td>
<td>Electricity II B</td>
<td>5 cr</td>
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<tr>
<td></td>
<td>Prereq: ELI 1210. This course provides continued instruction in alternating current fundamentals and applied math for electricians. Instruction includes theory and application in transformers, alternating current methods and motor controls.</td>
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<tr>
<td>ELI 1470</td>
<td>Math for the Trades (QS)</td>
<td>5 cr</td>
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<tr>
<td></td>
<td>This is a customized electricians' course in applied mathematics for the trades including algebraic and trigonometric functions.</td>
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<tr>
<td>ELI 2000</td>
<td>Electrical CO-OP</td>
<td>3-6 cr</td>
</tr>
<tr>
<td></td>
<td>Prereq: Instructor approval. College credit for experience on the job site. Arranged in advance. Requirements are determined by the employee.</td>
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<tr>
<td>ELI 2310</td>
<td>Electricity III A</td>
<td>5 cr</td>
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<tr>
<td></td>
<td>Prereq: ELI 1220. This course provides instruction in heating and air conditioning, continued math for electricians and introduces instrumentation. Further instruction in National Electrical Code and testing equipment is provided.</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
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<tr>
<td>ELI 2320</td>
<td>Electricity III B</td>
<td>5 cr</td>
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<tr>
<td></td>
<td>Prereq: ELI 2310. This course covers advanced motor controls theory and application, transformers and specialty applications. Instruction also is provided in electronics and continuation of math for electricians.</td>
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<tr>
<td>ELI 2410</td>
<td>Electricity IV A</td>
<td>5 cr</td>
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<td></td>
<td>Prereq: ELI 2320. This is a study of atomic theory, electricity and magnetism and series-parallel circuits. Continued application and study of math for electricians and the National Electrical Code is included.</td>
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<tr>
<td>ELI 2420</td>
<td>Electricity IV B</td>
<td>5 cr</td>
</tr>
<tr>
<td>ELI 2510</td>
<td>Electricity V A</td>
<td>5 cr</td>
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<tr>
<td></td>
<td>Direct current and alternating current theory fundamentals, applied math and application of motors, motor controls and the National Electrical Code. Elective class to prepare journeymen for Master's Examination.</td>
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<tr>
<td>ELI 2520</td>
<td>Electricity V B</td>
<td>5 cr</td>
</tr>
<tr>
<td></td>
<td>Direct current and alternating current theory fundamentals, applied math and application of motors, motor controls and the National Electrical Code. Elective class to prepare journeymen for Master's Examination.</td>
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<tr>
<td>ELI 2990</td>
<td>Electrical Special Studies</td>
<td>5 cr</td>
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<tr>
<td></td>
<td>Special course requested by the Utah State Licensing Board for applicant electricians to review lab projects prior to retaking practical journeyman’s exam.</td>
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<tr>
<td>ELI 2991</td>
<td>Electrical Special Studies II</td>
<td>5 cr</td>
</tr>
<tr>
<td></td>
<td>Special course requested by the Utah State Licensing Board for applicant electricians to review theory prior to retaking journeyman’s examination.</td>
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<tr>
<td>ELTA 2000</td>
<td>Elec/Comp Technology CO-OP</td>
<td>1-8 cr</td>
</tr>
<tr>
<td></td>
<td>Prereq: Instructor approval. College credit awarded for on-the-job experience. Arranged in advance with requirements determined by the employer, employee, and instructor.</td>
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<tr>
<td>ELTR 1010</td>
<td>DC/AC Basic Electronics</td>
<td>6 cr</td>
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<tr>
<td></td>
<td>Prereq: ELTR 1040. Coreq: ELTR 1050. Covers basic electronics theory, DC and AC fundamentals, circuit analysis and troubleshooting. Students learn the use of electronics equipment such as meters, oscilloscopes, and function generators.</td>
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</tbody>
</table>
ELTR 1030 – Active Devices 6 cr
Prereq: ELTA 1010 or ELTR 1010 and ELTA 2010 or ELTR 2010. Fundamentals of active devices—diodes, bipolar junction and field effect transistors, thyristor family, opto electronic family, biasing techniques, basic amplifier classes, configurations, and basic power supplies.

ELTR 1040 – Technical Basic 2 cr
Coreq: ELTR 1010. Covers MSDOS, Windows applications, and introduction to structured programming using QBASIC. Focus on practical applications that electronics and other technology students may encounter in the industry.

ELTR 1050 – Electronics Math 3 cr
Prereq: MATH 1010 or appropriate Accuplacer score. Covers basic arithmetic, algebraic operations, and plane trigonometry required for electronics training program. Graphical solutions, determinants, circular solutions, and systems equations are covered.

ELTR 1080 – Electronic Assembly Skills 2 cr
A project-oriented course that provides basic soldering and assembly skills required of electronic technicians. The focus is on thru-hole soldering to industry specifications. Students receive an industry recognized certification.

ELTR 1100 – Linear Circuits 4 cr
Prereq: ELTR 1010 and ELTR 1050. Course covers active devices such as diodes, transistors, thyroidstors, and opto-electric devices. Amplifier biasing and categories are covered, including linear and non-linear circuits. Troubleshooting concepts are emphasized.

ELTR 1130 – Digital Circuits 4 cr
Covers basic theory of digital circuits, binary, octal, and hexadecimal number systems, truth tables, gates, counters, and logical devices. AC/DC and DC/AC conversion is covered and lab projects emphasize troubleshooting.

ELTR 2000 – Elec/Comp Technology Co-op 1-8 cr
Prereq: Instructor approval. College credit awarded for on-the-job experience. Arranged in advance with requirements determined by the employer, employee, and instructor.

ELTR 2010 – Advanced Circuit Analysis 2 cr
Prereq: ELTR 1010 and ELTR 1100. Covers advanced electronic network theory including Thevenin's, Norton's, Millman's and superposition. Analysis of the effects of input and output impedances and loading effects on circuit performance are taught.
ELTR 2020 – Technician Certification  
2 cr  
Prereq: ELTR 1100 and ELTR 1130. Review of electronics theory, applications to practical problems, and solutions. Computerized tutorial prepares students for industry-recognized associate level exams (National Assoc. of Radio and Telecom Engineers (NARTE)).

ELTR 2100 – Advanced Linear Circuits  
6 cr  
Prereq: ELTR 1010 and ELTR 1100. Advanced applications of linear circuits. Analysis of active filters, frequency effects on amplifiers, analysis of amplifying systems and computer simulation of linear circuits are covered.

ELTR 2140 – Advanced Digital Circuits  
6 cr  
Prereq: ELTR 1130 or ELTA 1130. Course covers advanced digital topics, including Karnaugh maps, advanced logic circuits, advanced counters, shift registers, memory systems, and fundamentals of microprocessor architecture.

ELTR 2150 – Communication Systems  
6 cr  
Prereq: ELTR 1100, ELTR 1130. Principles of AM, FM phase, and pulse modulation, applications, tuned, RF and power amplifiers, transmission lines and antennae. Also covers receiver and transmitter fundamentals. Students prepare for 1st FCC exam.

ELTR 2300 – Microprocessor Programs  
6 cr  
Prereq: Instructor approval. Concepts of the basic computer system architecture, 68HC11 architecture, machine language and assembly language programming, debugging and trouble shooting. Hands-on training and program problem solving.

ELTR 2350 – Microprocessor Applications  
6 cr  
Prereq: ELTR 2300. Introduces students to microprocessor interfacing including; data and control-in, and data and control out. Using PIA Interface adapter and writing control programs to operate and control external devices. Intro to robotics also taught.

ELTR 2480 – FCC License Preparation  
4 cr  
Prereq: Instructor approval. Principles of AM, FM, phase and pulse modulation, applications, tuned, RF and power amplifiers, transmission lines and antennae. Also covers receiver and transmitter fundamentals. Students prepare for 1st class FCC exam.

ELTR 2900 – Special Topics in Electronics  
4 cr  
Special Studies allows students to pursue special interests offered elsewhere in the program. Credit hours and course of study will be based on department approval. Course syllabus will outline requirements for each student.
ENGL 1010 – Intro to Writing (EN) 3 cr
Prereq: WRTG 0990 w/C grade or better, or appropriate Accuplacer score. Development of critical literacies—reading, writing and thinking using methods of knowledge-making. Promotes awareness of rhetorical strategies as they apply to a variety of socio-cultural contexts.

ENGL 1030 – Writing in Professions (HR) 3 cr
Prereq: ENGL 1010. Course examines theoretical principles, practical applications and ethical approaches of public and professional writing and places these concepts in experience-specific settings and contexts with the focus on writing as human interaction.

ENGL 1050 – Intr/Rdg Diverse Cultur(HU,DV) 3 cr
Study of written and visual genres about diverse U.S. culture in order to explore the structures that serve to the advantage of certain social groups and to the disadvantage of others.

ENGL 1070 – Diversity /Pop US Lit (HU,DV) 3 cr
Course examines popular American genres as sites of cultural struggle. Students study how popular American writing preserves cultural values and reinforces imbalances of power along lines of race, class, gender, and sexual orientation.

ENGL 1200 – Intro to Ling./Stdy of Lang. 3 cr
Introduces students to the study of language. Students explore the sound, structure and social role of language in immediate and distant cultures. Natural language events will be observed, collected, interpreted and analyzed.

ENGL 1250 – Effective Revision and Editing 2 cr
Students, individually and in groups, learn strategies to revise and edit the personal school and workplace writing they bring to class. They see how issues of correctness, like spelling, relate to purpose, audience, content, and process.

ENGL 1260 – Efficient Reading 3 cr
Prereq: RDG 0990 w/C grade or better or appropriate placement. This course emphasizes improving reading speed, recall and comprehension for college-level materials.

ENGL 1800 – Digital Media Essentials 4 cr
Introduction to software and hardware used to create multimedia productions. Hands-on experience using hardware, software to create 2D/3D graphics, sound, animation, and video. Discussion of the multimedia market, copyright, and ethics in mass media.
ENGL 1810 – Mentoring Writers 3 cr
Introduces students to the theory, practice, and pedagogy of mentoring writers and provides practical experience through Service Learning opportunities at SLCC’s Student Writing Center (SWC) and Community Writing Center (CWC).

ENGL 1820 – Publication Studies 3 cr
Introduces students to the theory and practice of production, circulation, and distribution of printed and digital writing. Provides experience with publication software and equipment. Students will assist peers with production.

ENGL 1900 – Special Studies 1-3 cr
Prereq: ENGL 1010 or instructor approval. Students propose a possible writing project for example, genre-based-fiction or poetry-or technical writing, then meet with the instructor a number of times throughout the semester to create and revise the project.

ENGL 1910 – WCC Capstone 1 cr
Course examines practical documentation, creation and application of the Writing Certificate of Completion Program, including the WCC e-Portfolio, resume writing and revision of signature assignments. The grade for this course is given after the ePortfolio is graded at the end of the program.

ENGL 2000 – English CO-OP Education 2-4 cr
Prereq: Sophomore standing, minimum 2.0 GPA and study-related employment. Supervised work experience in a business, industrial or government environment related to the program. Credit for successful completion of specific learning objectives that provide new learning related to the job and the program.

ENGL 2010 – Intermediate Writing (EN) 3 cr
Prereq: ENGL 1010 w/C grade or better. Extends principles of rhetorical awareness and knowledge making introduced in English 1010 and increases the ideological engagement within the classroom. Interrogates socioeconomic and political issues. Course may be taught with a Service Learning component.

ENGL 2030 – Language in US Society (HU,DV) 3 cr
Prereq: ENGL 1010 w/C grade or better. Through a study of the patterns and functions of language in U. S. society, this course addresses how language establishes cultural identities and social allegiances, creates and disseminates knowledge, and develops and maintains power.
ENGL 2100 – Technical Writing (EN) 3 cr
Prereq: ENGL 1010 w/C grade or better. Professional writing in technical fields, contextualizing assignments in real-life work situations. Adaptation of writing strategies to cultural, social, and political contexts. Composing of diverse workplace documents. Course may be taught with a Service Learning component.

ENGL 2250 – Intro/ Imaginative Wrtg (HU) 3 cr
Introduction to various practices and genres of imaginative writing. The course invites writers to explore the rich resources of language at play in all kinds of writing. Students prepare a portfolio of their revised work.

ENGL 2260 – Intro to Writing Poetry (HU) 3 cr
Introduction to forms and meta-forms of poetry. The course invites student writers to take up historic and modern forms and to engage with poetry's history. Students prepare a portfolio of their revised work.

ENGL 2270 – Intro to Writing Fiction (HU) 3 cr
Fiction will be examined as to its originations, conventions and effects on audience. Investigation of where distinctions of fiction, autobiography and other prose writing become ambiguous. Cultural assumptions and influences discussed.

ENGL 2280 – Intro Creative Nonfiction (HU) 3 cr
Introduction to the conventions the creative nonfiction genre. Students read, analyze, and practice various forms of the essay. Creative non-fiction invites writers to make connections between personal experiences and the larger world.

ENGL 2290 – Intro Novel Writing 3 cr
Introduction to the history and conventions of the novel. Students will read, analyze, and practice various genres. Course invites writers to explore various structures.

ENGL 2300 – Intro to Shakespeare 3 cr
Prereq: ENGL 1010 w/C grade or better. Interpretive strategies for reading Shakespeare. Approach from traditional critical positions, moving to current social cultural and political re interpretations. Students examine contemporary retellings of the plays.

ENGL 2330 – Children`s Literature 3 cr
Prereq: ENGL 1010 w/C grade or better. This course explores texts written for children through the elementary level. Emphasis is placed on scope, artistic merit, and selection.
ENGL 2500 – Grammar and Style 3 cr
A study of prose style through the lens of grammar, focusing on shaping sentences, paragraphs, and longer discourses for rhetorical effect, elegance, clarity, readability, and coherence. Students will gain practical abilities to edit their own and others prose.

ENGL 2600 – Critical Intro Literature (HU) 3 cr
Course introduces and analyzes various genres of literature in light of a variety of critical and theoretical approaches.

ENGL 2610 – Diversity in Amer. Lit (HU,DV) 3 cr
Prereq: ENGL 1010 w/C grade or better. Course interrogates historical, political and cultural ideas suggested and sustained within representative American texts, some classic, others newly emerging. Materials include both traditional and popular readings.

ENGL 2630 – Global Literatures (HU) 3 cr
This course surveys literature from all parts of the world with a goal to promote an understanding of global/international literary works in their cultural/historical contexts and with an understanding of the enduring human values that unite different literary traditions.

ENGL 2640 – Writing and Social Justice (HU) 3 cr
Prereq: WRTG 0900; RDG 0900 or placement into RDG 0990. Examine how writing can activate a reader's moral imagination and can function as an act of social justice. Using narrative theory, explore the ways in which multiple genres address social justice through reading and writing. Discuss theories and conceptual frameworks of social justice as well as multiple issues: racism, sexism, classism and ableism.

ENGL 2700 – Introduction Critical Theory 3 cr
Prereq: ENGL 2600. This course outlines, and challenges, the central orthodoxies of cultural criticism in the 20th century. Includes linguistics, Marxism, feminism, and various post-structuralisms. Includes film and pop-cultural texts.

ENGL 2710 – Intro to Folklore (HU) 3 cr
Study of the importance of ordinary people and their constructions of cultural meanings. Popular creation of material goods, oral traditions, customs, and meaning-making are examined through numerous academic and hands-on methods.

ENGL 2760 – Gender/Cultural Studies(HU,DV) 3 cr
Examines texts (literature, film, theory) to understand social constructs in the US. Studies the power of language to preserve cultural values and reinforce imbalances of power based on gender as well as race, class, and sexual orientation, etc.
ENGL 2810 – Native Am Lit & Exp (HU,DV) 3 cr
Prereq: ENGL 1010 w/C grade or better. This course explores Native American Experiences, including a survey of histories, literatures, cultural patterns and contemporary experiences, examined within the framework of cross-cultural interactions and competing world views.

ENGL 2830 – Diverse Women Writers (HU,DV) 3 cr
Course examines the range of U.S. women's voices and explores how racism, sexism, and cultural imperialism affect identity formation and relations between the powered and the disempowered.

ENGL 2850 – Intro to Queer Studies (HU,DV) 3 cr
Introduction to postmodern and queer theories (challenging the idea of "normal"), societal gender construction as seen in literature & film, beginning with the history of heterosexism and questioning modern US. society's treatment of Gay, Lesbian, Bisexual, & Transgendered people. ENROLLMENT IN THIS COURSE IMPLIES NOTHING ABOUT THE STUDENT'S SEXUAL ORIENTATION.

ENGL 2900 – Special Topics in English 1-3 cr
In-depth study of a particular topic in English Studies. It involves readings, discussion, research, and intensive writing.

ENGR 1030 – MATLAB Problem Solving 3 cr
Prereq: MATH 1060 or 1080. An introduction to engineering problem-solving using MATLAB. Course work includes interactive computing, data analysis, and graphics.

ENGR 1040 – Engineering Computing 3 cr
Prereq: MATH 1060 or 1080. A first course in engineering problem solving, this course introduces MATLAB and C++. Problems are drawn from the various disciplines in engineering. No previous experience with computer programming is assumed.

ENGR 1050 – Intro to Nanotechnology (PS) 3 cr
Nanoscience sits at the intersection of the basic scientific disciplines. This technology has far reaching implications in healthcare, environment, business, and society, and has wide ranging ethical impacts in the world today. This course introduces the basic concepts of nanoscience and explores how it is changing our world.

ENGR 1600 – Engineering the Guitar (ID) 3 cr
Students will construct and take home an electric guitar. Engineering concepts related to manufacturing processes and scientific concepts related to the behavior of musical instruments will be explored. Students will be introduced to basic fingering and will learn simple chords on their new instrument. This course emphasizes the inter-relationships between science, engineering and art.
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENGR 2050</td>
<td>Nano II - Properties of Nanomaterials</td>
<td>3 cr</td>
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<tr>
<td></td>
<td>Prereq: MATH 1050 W/C grade or better, or appropriate Accuplacer score. ENGR 1050 W/C grade or better. This course teaches students concepts associated with nanomaterial properties including; electronic structure, colloidal chemistry, magnetism, and photonics.</td>
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<tr>
<td>ENGR 2070</td>
<td>Micro and Nanoscale Fabrication Processes</td>
<td>2 cr</td>
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<tr>
<td></td>
<td>Prereq: MATH 1050 W/C grade or better, or appropriate Accuplacer score. ENGR 1050 w/C grade or better. This course teaches students about the various micro and nano fabrication procedures associated with deposition, patterning, and etching.</td>
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<tr>
<td>ENGR 2900</td>
<td>Special Topics in Engineering</td>
<td>1-3 cr</td>
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<td></td>
<td>Special Topics reflecting items of current interest in Engineering.</td>
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<tr>
<td>ENGR 2950</td>
<td>Engineering Forum</td>
<td>1 cr</td>
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<td>Exploration of Engineering through Guest Lecturers and Field Trips to industry.</td>
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<tr>
<td>ENVT 1010</td>
<td>Race to Save Planet (ID)</td>
<td>3 cr</td>
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<td>Interdisciplinary elective giving students an understanding of the connections between people and the environment. Environmental problems from Utah and around the world are discussion issues. Course may be taught with a Service Learning component.</td>
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<tr>
<td>ENVT 2200</td>
<td>Laws/Policy for Sustainability</td>
<td>3 cr</td>
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<td>Prereq: ENVT 1010. Explore the laws and policies in the US which affect sustainability. Discuss policies and applications for sustainability includes a project connecting laws, regulations, policies, treaties and science to a major sustainability issue.</td>
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<tr>
<td>ESL 1010</td>
<td>College Listening and Speaking</td>
<td>7 cr</td>
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<td>Prereq: LOEP&gt;72/ TOEFL 133-172/&gt;450. Prepares students to participate in college classes. Note taking from college lectures, student presentations, are covered.</td>
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<tr>
<td>ESL 1020</td>
<td>College Reading and Writing</td>
<td>8 cr</td>
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<td>Prereq: LOEP&gt;72/TOEFL 133-172/&gt;450. Course includes comfort and fluency in writing, academic essays, college textbook reading, and vocabulary building.</td>
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<tr>
<td>ESL 1030</td>
<td>ESL Conversation</td>
<td>3 cr</td>
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<td></td>
<td>Prereq: LOEP&gt;72/TOEFL 133-172/&gt;450. Helps students improve general English conversation skills through intensive practice.</td>
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</tbody>
</table>
ESL 1040 – ESL Grammar 3 cr
Prereq: LOEP>72/TOEFL 133-172/>450. Provides instruction and practice in the accurate use of English grammar, including verb tenses, articles, word order, sentence connections, adverbials, and prepositions.

ESL 1050 – ESL Vocabulary 3 cr
Prereq: LOEP>72/TOEFL 133-172/>450. Encourages students to increase their vocabulary and to accurately use academic and conversational words and idiomatic phrases in speaking and writing.

ESL 1060 – ESL Pronunciation 3 cr
Prereq: LOEP>72/TOEFL 133-172/>450. Assist students in improving all levels of pronunciation, including individual sounds, word stress and sentence intonation.

ESL 1070 – TOEFL Preparation 3 cr
Prepares student to take the Test of English as a Foreign Language.

ESL 1080 – Business English for ESL 3 cr
Prereq: LOEP>72/TOEFL 133-172/>450. Introduces students to the proper use of English in business situations, including job interviews and resume writing.

ESL 1900 – Special Studies - ESL 1-4 cr
Seminars and workshops for students learning English as a Second Language.

ETHS 2410 – African Amer. Culture (SS,DV) 3 cr
Intro to historical, political, social and cultural experiences of African Americans in U.S. society including the impact of privilege and discrimination; use of social work frameworks to increase competency in complex cultural and community issues.

ETHS 2420 – Asian American Culture (SS,DV) 3 cr
Intro to historical, political, social and cultural experiences of diverse Asian Americans in U.S. society including the impact of privilege and discrimination; use of social work frameworks to increase competency in complex cultural and community issues.

ETHS 2430 – Mexican Amer. Culture (SS,DV) 3 cr
Intro to historical, political, social and cultural experiences of Mexican Americans in U.S. society including the impact of privilege and discrimination; use of social work frameworks to increase competency in complex cultural and community issues.
ETHS 2440 – Native Amer. Culture (SS,DV) 3 cr
Intro to historical, political, social and cultural experiences of Native American groups in U.S. society including the impact of privilege and discrimination; use of social work frameworks to increase competency in complex cultural and community issues.

EVNT 1010 – Intro to Event & Mtg Planning 2 cr
This introductory online course acquaints students with the common components of well executed meetings and events. This course introduces site selection, food and beverage, audio visual, contracts, industry overview and career possibilities.

EVNT 1100 – Site Selection/Negotiation/Law 2 cr
This course outlines the key elements to successful site selection, negotiation issues/techniques, contract provisions/analysis and diverse industry contracts. Legal issues unique to the meeting industry will be identified.

EVNT 1200 – Transportation & Housing 2 cr
The logistics of air and ground transportation and hotel arrangements will be discussed. Students will learn trade strategies to make informed decisions leading to a successful meeting experience.

EVNT 1300 – Event Registration 2 cr
This course introduces students to the various registration systems and keys to selecting the best registration method. Students will learn the process to make informed decisions.

EVNT 1400 – Food and Beverage Management 2 cr
Learn a systematic approach to evaluating meeting objectives and group needs as they relate to menu design, pricing structures, guarantee strategies, negotiation items and overall information about food and beverage services.

EVNT 1500 – Hotel Sales & Operation 2 cr
This online course introduces students to the principles and procedures of hotel sales and operation by taking part in learn-by-doing activities. Networking, building internal and external relationships and selling techniques will also be taught.

EVNT 1600 – Special Events 2 cr
Students will be provided with the tools needed to hold effective special events. Venues including meetings, conferences, exhibits, fairs, trade shows, international events, weddings, etc. will be addressed.
EVNT 1700 – Non-Profit Event Planning 2 cr
This online course focuses on planning successful special events for non-profit organizations. Students will explore fund-raising breakfasts, black tie galas, festivals, auctions, golf tournaments, fashion shows, concerts and soirees.

EVNT 1800 – Money Management for Event Planners 2 cr
This online course introduces students to the essential tools needed to prepare a budget for events of all sizes, information gathering, analyzing goals/objectives and preparing and communicating presentations to clients.

FA 1025 – Human Relations and Collaboration in the Performing Arts (HR) 3 cr
Students study the theory and practice of human relations associated with professional production of the performing arts, commercial music and film. Skills developed include: Self-concept, interpersonal skills, teamwork and collaboration, communication, networking, conflict resolution, career development, cross-cultural & gender relations, and portfolio development.

FA 1080 – Basic Metal Sculpting (FA) 3 cr
Enable students to develop and appreciate the human imagination and understand the value of personal creativity through metal sculpting using welding techniques and design.

FA 1090 – Bridging the Arts (FA) 3 cr
Course examines the interconnectedness of art, dance, music and theatre by investigating the artistic elements and common threads within the creative process to develop an informed appreciation for one's own artistic values.

FASH 1010 – Introduction to Fashion 3 cr
Students will gain a general understanding of the many facets of the fashion industry including career opportunities and specialization areas such as history, merchandising, design, fashion coordinating and textile technology.

FASH 1100 – Pattern Drafting Essentials 3 cr
Prereq: Knowledge of basic sewing helpful. This technical course introduces the theory and application of flat pattern drafting. Students learn to draft various components of garments and to construct muslin samples from drafted pattern from sketch.

FASH 1150 – Pattern by Measurements 3 cr
Prereq: Knowledge of sewing helpful. Students will learn to create patterns for individuals of all shapes and sizes with fewer fittings.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>FASH 1200</td>
<td>The Art of Fashion</td>
<td>3</td>
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<tr>
<td></td>
<td>Review of the social, psychological and economic aspects of fashion from a historical perspective. Students will examine styles and approaches to fashion in contemporary culture.</td>
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<tr>
<td>FASH 1210</td>
<td>Fashion Illustration I</td>
<td>3</td>
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<tr>
<td></td>
<td>Students will learn to draw articles of clothing in correct proportion using a guide figure. They will learn to illustrate textures and the use of color to graphically illustrate individual designs.</td>
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<tr>
<td>FASH 1240</td>
<td>Fashion Buying and Management</td>
<td>3</td>
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<tr>
<td></td>
<td>This class will explore all aspects of buying and management as they relate to the fashion industry. The class focus includes pricing, planning assortment, customer service, selling skills and inventory issues.</td>
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<tr>
<td>FASH 1250</td>
<td>Textiles</td>
<td>3</td>
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<tr>
<td></td>
<td>Students will learn the process of fabric construction; analyze fibers, yarns, fabrics, finishes, and the fabric choices in the design of clothing.</td>
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<tr>
<td>FASH 1260</td>
<td>Fashion Forecasting</td>
<td>3</td>
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<td></td>
<td>Students will learn how to predict trends in fashion by evaluating popular designer collections, surveying fashion publications, catalogs and design services, researching sales statistics and studying market conditions.</td>
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<tr>
<td>FASH 1300</td>
<td>Visual Merchandising</td>
<td>3</td>
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<tr>
<td></td>
<td>An introduction to the principles and elements of design as it relates to merchant displays. Students will create displays emphasizing line, balance, color and harmony.</td>
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<tr>
<td>FASH 1320</td>
<td>Apparel Analysis</td>
<td>3</td>
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<td></td>
<td>An overview of the apparel production cycle: how apparel products are designed, created and distributed. Style terminology, sizing, price points, fabric choices, sustainability and other factors in apparel production are discussed.</td>
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<tr>
<td>FASH 1350</td>
<td>History of Costume</td>
<td>3</td>
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<tr>
<td></td>
<td>A study of historical fashion from 4000 BC to the 20th century and how that history affects current fashion design.</td>
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<tr>
<td>FASH 1370</td>
<td>20th Century Fashion</td>
<td>3</td>
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<td></td>
<td>Prereq: FASH 1350. This course is designed for students to gain an appreciation for the fashions and fashion icons of the 20th Century and their impact on current fashion trends.</td>
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</tr>
</tbody>
</table>
FASH 1400 – Copyrights for Creative Professionals 1 cr
This introductory short course focuses on U.S. copyrights given to creative individuals who produce visual, musical, literary works of art or performing arts. The course also covers licensing and trademarking.

FASH 1420 – Salesmanship And Promotion For Creative Professionals 2 cr
This introductory short course will introduce basic sales and self-promotional principles and techniques specifically tailored for creative artists.

FASH 1440 – Building A Creative Business 2 cr
This introductory short course will introduce basic business structures and examine the process of setting up a business for creative professionals working in the areas of music, the many forms of visual design, fine art, animation, film and video, and the literary arts.

FASH 1500 – Beginning Sewing 3 cr
Students begin their knowledge of construction techniques through demonstration, sample book of skill building construction techniques and two sewn projects.

FASH 1505 – Intermediate Sewing 3 cr
Prereq: FASH 1500 or instructor approval. This class teaches students intermediate-level sewing techniques through a combination of practical exercises and the creation of skill-building samples and finished garments including cuffs, collars, and plackets.

FASH 1550 – Alterations 3 cr
Prereq: FASH 1500 or knowledge of basic sewing. Students will learn techniques necessary to alter ready-made garments, preparing them for employment in retail stores and theater costume shops.

FASH 1610 – Knitwear Design 3 cr
Prereq: FASH 1100. Students will learn construction techniques for making knit garments.

FASH 1630 – Outerwear & Performn. Apparel 3 cr
Prereq: FASH 1505, FASH 1100 and FASH 1660. A study of special techniques will enable students to understand the construction of specialized apparel used in cold climates.

FASH 1640 – Millinery 3 cr
Prereq: FASH 1500 or basic knowledge of sewing. Students will work with felt and straw using hat blocks. Students will also learn couture finishing techniques free form sculpting using steam and added objects to create shape.
FASH 1650 – Embellishments  
A study of embellishment techniques for clothing including decorative machine stitching, appliqué, piping, beading and other fabric embellishments.

FASH 1660 – Pattern Drafting Procedures  
Prereq: FASH 1100. This course is a continuation of FASH 1100. Students will draft their own basic pattern set and use this set as the basis for actual product construction.

FASH 1670 – Intimate Apparel & Swimwear  
Prereq: FASH 1610. This course introduces students to the construction techniques involved in the development of intimate apparel products. Students create a prototype from a sloper, using professional sewing methods and application techniques. This is the Advanced Knitwear class.

FASH 1680 – Digital Pattern Making  
Prereq: FASH 1100. This course introduces the students to computer pattern making. They will learn to transfer pattern drafts to computer with industry standard software.

FASH 1700 – Tailoring Techniques  
Prereq: FASH 1505. Overview of the techniques that are applied to the construction of suits and coats. Students will learn how to select fabrics for specific garments, alter patterns for proper fit, and construct a tailored jacket.

FASH 1850 – Fashion Show Production  
Students will learn the processes and procedures of producing fashion shows. The class will culminate with the production of a fashion show featuring original designs from FASH 2400 students.

FASH 1900 – Special Projects  
Prereq: Instructor approval. Students will have the opportunity to specialize in areas that are not available in class format. Students, with instructor approval and supervision will work on individual projects.

FASH 1950 – Corset Making Techniques  
Prereq: FASH 1505. Students learn different components of making a corset including: spiral boning and placement, coutil underlining, grommets, tipped lacing, bias binding techniques, bias making tools and couture style hand finishing techniques.

FASH 2000 – Fashion Internship  
Prereq: FASH 1100 and FASH 1505. Students will have the opportunity to work as interns in the fashion industry as patternmakers, designers, and fashion merchandisers. They will work under the combined supervision of an on-site supervisor and an SLCC instructor.
SLCC COURSE DESCRIPTIONS

FASH 2030 – Advanced Sewing 3 cr
Prereq: FASH 1505. Students will learn to master the necessary construction skills to produce professional quality garments.

FASH 2050 – Pattern Alterations and Fit 3 cr
Prereq: FASH 1100 and FASH 1505. Pattern Alterations and Fit is designed to teach the techniques in fitting readymade garments correctly, and altering patterns to fit each individual body according to their measurements and body type before the garment is constructed.

FASH 2150 – Draping Fundamentals 3 cr
Prereq: FASH 1505 and FASH 1210. Three-dimensional draping approach to executing garment design. Through critiqued design development on the dress form, students develop their own sense of proportion, silhouette, line, style, while exploring current market trends.

FASH 2220 – Fashion Illustration II 3 cr
Prereq: FASH 1210. Students will develop their own style of illustration and broaden their knowledge of professional designers and illustrators. Students will learn Adobe Illustrator and Photoshop for fashion design.

FASH 2280 – Bridal Design / Evening Wear 3 cr
Prereq: FASH 1505 and FASH 1660. Students will learn the art of Bridal and Eveningwear Dressmaking in a methodical, step-by-step fashion that will culminate in a finished garment.

FASH 2300 – Design Outreach 3 cr
Prereq: Instructor approval. Students will design clothing, create patterns, and sew a fashion collection that will be sold in a local retail boutique shop.

FASH 2350 – Costuming 3 cr
Prereq: FASH 1350, FASH 1505 and FASH 2010. Overview of techniques applied to the construction of costumes for the theater. Students will participate in all aspects of costume preparation, including: alterations, pattern making, fittings, construction, and accessories.

FASH 2410 – Collection Development 3 cr
Prereq: FASH 1505, FASH 1220 and FASH 2100. This course is for second year students. Students make an initial selection of color and fabric, develop design ideas, and determine the fashion direction of their collections for the Raw Couture Fashion Show.

FASH 2440 – Collection Production 3 cr
Prereq: FASH 2410. This course is for second year students. Students continue to develop a collection for our fashion show, perfect muslin samples of their designs, begin construction of garments, and fit finished garments on a professional model.
FASH 2450 – Portfolio Development 3 cr
Prereq: Instructor approval. Focus on the process of evaluating portfolios. Students will create a portfolio that can be used for employment interviews or applications for advanced education.

FASH 2500 – Fashion Entrepreneurship 3 cr
Prereq: Instructor approval. Students will explore entrepreneurial opportunities and learn business skills necessary to succeed as small business owners in the apparel and sewn products industry.

FASH 2550 – Fashion Production & Sourcing 3 cr
Prereq: FASH 2450 and FASH 2500. Emphasis is on creating a sample, negotiating, developing, merchandising, producing the sample, and analyzing the choices for materials and garment construction, and how choices affect the price of a garment.

FHS 0010 – Intro to Early Child. Ed. Lab 0 cr
Coreq: FHS 2500, 2600, or 2620. A lab experience in which students complete two or more hours per week (depending on coreq course) of supervised interaction with children at the Eccles Lab School.

FHS 0011 – Child Guidance - Lab 0 cr
Coreq: FHS 2610. A lab experience in which students complete two hours per week of supervised interactions with children at the Eccles Lab School.

FHS 1230 – Adolescent Growth & Dev. 3 cr
Studies the growth and development of adolescents. Principles and issues that affect adolescents' daily lives in the home, school, and society are discussed.

FHS 1500 – Lifespan Human Dev (SS) 3 cr
Fundamentals of growth and development from before conception to old age and death are explored. The domains of physical, cognitive, and social-emotional growth for each age in the life cycle are explored in a variety of contexts.

FHS 1900 – Individual Studies in FHS 1-3 cr
Prereq: Instructor approval. Students plan areas of study, Service Learning, or travel and work with an instructor on an individual basis. The course may involve readings, discussion, research, service learning, intensive writing, or other skills deemed appropriate.

FHS 2000 – Co-op Education in FHS 1-2 cr
Prereq: Instructor approval. This course is designed to accommodate the needs of students who are working at least 20 hours per week in a professional environment that provides direct care to young children. Credit varies (1-2 hours).
FHS 2020 – Special Studies-CDA Completion 3 cr
Individually who have been awarded the CDA Credential will be awarded credit.

FHS 2300 – Administration of Early Childhood Programs 3 cr
This course focuses on the working world of a child care center director. Through readings, hands-on projects and discussions with other students in the course, students will explore decision-making from a program’s inception, funding, and staffing. This class examines basic management principles in directing a preschool or child care program.

FHS 2340 – Creating Environments for Young Children 3 cr
Focuses on the preparation of indoor & outdoor learning environments for children in early childhood settings, developmentally and culturally appropriate materials, equipment & technological resources, and the importance of play as the primary vehicle through which young children learn. Emphasis is placed on how to provide learning environments that support and enhance all areas of development.

FHS 2400 – Marriage and Family Rela. (ID) 3 cr
Introduction to marriage and the family. Family relationships and dynamics are examined within the context of societal change. Emphasis is placed on the connection between the family and individuals' personal choices in a changing society.

FHS 2450 – Intro. to Human Sexuality (ID) 3 cr
Integration of biological, behavioral, and socio-cultural factors in human sexuality and relationships. Personal and social-sexual issues are explored as they relate to sexual decision-making/behavior and sexual health.

FHS 2500 – Child Development: Birth-Eight 3 cr
Prereq: FHS 1500, FHS 2600, and FHS 2610 (can be taken concurrently), all w/C grade or better. Coreq: FHS 0010. The study of child development. Emphasis on curriculum development and developmentally appropriate practices. Methods of teaching children are examined and practiced. Includes observation and participation in a supervised lab experience.

FHS 2550 – Infant and Toddler Development 3 cr
The total development of the infant from birth to 24 months. Emphasis on observation, assessment, developmentally appropriate practices and professional infant care. Research on experimental learning will be reviewed.

FHS 2570 – Growth & Dev. of Children 6-12 3 cr
Studies the growth and development of children ages 6 to 12 years. Principles and issues that impact the child's daily life in the home, school, and community are discussed.
### FHS 2600 – Intro. to Early Childhood Ed. 3 cr
Coreq: FHS 0010. Recommended Prereq: FHS 1500. An introduction to the field of Early Childhood Education. The basics for shaping curriculum for young children are introduced. Observation and participation in a supervised lab experience (FHS 0010) is a key element of the course.

### FHS 2610 – Child Guidance 3 cr
Coreq: FHS 0011. Recommended Prereq: FHS 1500. This is an introduction to effective strategies for guiding children in individual and large group settings. It includes observations and participation in a supervised lab experience (FHS 0011).

### FHS 2620 – Creative Learning 4 cr
Prereq: FHS 1500, 2500, FHS 2600, and FHS 2610, all w/C grade or better. Coreq: FHS 0010 (a specified section of FHS 0010 must be taken with this course please contact the department for more information). Capstone course for FHS AS degree. Emphasizes creative process in planning, implementing curriculum and self discovery. Assessment, home and school communication, professional ethics included. Department capstone project and e-portfolio required. Two weekly labs required.

### FHS 2640 – Home, School & Comm. Relations 3 cr
The relationship between home, school and the community are explored. Emphasis is placed on building effective communication between parents and teachers.

### FHS 2645 – Early Childhood Integrated Curriculum 3 cr
Provides students with a practical framework for building effective and meaningful curriculum for young children. Students will study, participate in and practice methods in planning and implementing an integrated early childhood curriculum.

### FHS 2800 – Practicum Teaching 5 cr
Prereq: FHS 2620 (may be taken concurrently) w/C grade or better and instructor approval. Coreq: FHS 2820. Supervised classroom practicum experience in the Eccles Lab School. In collaboration with lead teacher, students plan and implement lesson plans and activities for a large group of children. Community placement module included.

### FHS 2820 – Teaching Seminar 2 cr
Prereq: FHS 2620 (may be taken concurrently) w/C grade or better and instructor approval. Coreq: FHS 2800. Examines child development concepts and how they apply to teaching young children. Focuses on building teaching competencies. Seminar format. Discussion of strengths and challenges associated with practicum teaching experience.
FHS 2900 – Special Topics in FHS 1-3 cr
An in depth study of a particular topic in early childhood, family or human studies. The course may involve readings, discussion, research, intensive writing or other skills deemed appropriate. Course may be taught with a Service Learning component.

FIN 1050 – Personal Finance (ID) 3 cr
Study of financial skills essential for economic success. Subjects: Financial planning, financial services, income taxes, consumer buying, insurance, retirement planning and estate planning.

FIN 1210 – Principles of Banking 2 cr
Evolution of American banking; deposit, credit and payment functions; loans and investment; liquidity, safety and income; bank language, documents, accounting and pricing; regulation and examination; personnel, marketing and security; trust services.

FIN 1380 – Financial Mathematics (QS) 3 cr
Prereq: MATH 0990 or appropriate Accuplacer score. This course studies time value of money applications in both business and individual settings. Topics include simple and compound interest, annuities, installment loans, savings programs, and APR, APY, NPV, IRR calculations.

FIN 2000 – Finance and CO-OP Education 1-3 cr
Prereq: Minimum 2.0 GPA with 20 hours/week study-related work. This is supervised work experience in business, industrial, or governmental environment related to the program major. Credit is awarded for completion of specific new learning objectives related to the job and program major.

FIN 2040 – Financial Management 3 cr
Prereq: ACCT 2020. This course studies concepts essential to business success. Planning and analysis, leverage, asset management, stock valuation, and debt financing are all examined. Problem-solving with financial calculators and computer applications is taught.

FIN 2100 – Introduction to Investments 3 cr

FIN 2150 – Mutual Funds 3 cr
Prereq: Recommended FIN 1050. Mutual funds are a widely-held investment product. Topics include financial intermediaries, marketing to investors, portfolio management, technology and internationalization. Case studies are used for analysis.
FIN 2200 – Personal Financial Plan 3 cr
Prereq: Recommended FIN 1050. Real-life case studies; questioning and decision making; basic principles of financial planning, cash budgets, taxes, management of assets and debts; insurance review (life, health, property and liability), major investment vehicles, retirement and estate planning.

FIN 2210 – Principles of Business Credit 3 cr
Prereq: Recommended ACCT1110 or ACCT2010. Business and Consumer credit; credit management, developing credit information, financial systems analysis, decision making, collection practices & procedures; credit reporting agencies, credit department organization and policies, international trade credit, and government use and regulations.

FIN 2220 – Financial Statement Analysis 2 cr
Prereq: ACCT 1120 or 2010 (can be taken concurrently) and FIN 2210 (can be taken concurrently). Analysis of company financial statements to identify and evaluate credit risk. Analysis leads students to conclusions about a firm's financial condition and credit worthiness.

FIN 2240 – Credit Law 2 cr
Prereq: Recommended FIN 2210. Legal aspects of credit and collections. Subjects: Credit laws, civil procedure, secured claims and bankruptcy.

FIN 2600 – Securities Trading I 3 cr
Prereq: Recommended FIN 1050. Analysis, application and practice of trading philosophy, trading planning, trading rules, technical analysis, fundamental analysis, and portfolio analysis in the stock, options, currency and commodities markets.

FIN 2950 – Business Leaders Forum 1 cr
Corporate, industry, and government leaders share their experiences in finance, management, and economics. Students benefit from wisdom acquired through practical business experience and learn about events affecting local and national businesses/economies.

FIN 2990 – Special Studies in Finance 1-3 cr
Prereq: Instructor approval. Under the supervision of the instructor, students develop and follow an individualized curriculum.

FLM 1023 – Introduction to Film (FA) 4 cr
Introduces students with no previous film training to historical, technical, and aesthetic developments of film within its cultural context. Film genres examined. Some materials presented are R-rated. Also listed as THEA 1023.
FLM 1045 – Beginning Film Production  
An intensive workshop experience in which students, crewing in their area of specialization, complete the shooting and post-production of projects up to 15 minutes in length. Required for film majors.

FLM 1055 – Intermediate Film Production  
Prereq: FLM 1045. An intensive workshop experience in which students complete pre-production building toward a final project which they will cast, staff, and shoot, producing a 15 to 20 minute short film. Required for film majors.

FLM 1070 – Film and Culture (FA,DV)  
Course intended to raise diversity awareness through aesthetic, critical, and interdisciplinary examination of our American Cultural Identity through film. Presents film as an art form, as an industry, and ultimately a system of cultural representation and communication.

FLM 1075 – Screenwriting  
Introduces professional screenwriting techniques, with focus on properly formatting screenplays for film, including narrative style projects. The student will be required to develop a script using professional screenplay software.

FLM 1080 – Music In Film  
Prereq: FLM 1023 or concurrently, or instructor approval. Instruction and discussion in the role of music in film. Students will examine the scores of historical and present-day films to learn different approaches to film scoring and the different roles music can play in film, and will learn about the process of creating music for film from the spotting session through the final audio mix.

FLM 1100 – Acting for the Camera I  
Acting for the camera focuses on discovering and developing strong acting techniques common to both stage and camera, on the relationship between actors and directors, and on developing basic camera techniques.

FLM 1101 – Acting for the Camera I Lab  
This lab course allows for practice time in both solo and interactive performances for the camera.

FLM 1110 – Voice & Speech for the Actors  
Principles of diction, voice development and improvement, vocal variety and expressiveness. Focus on various aspects of using the voice effectively including volume and projection, rate and phrasing, inflection, and resonance.
FLM 1200 – Acting for the Camera II 1 cr
Prereq: FLM 1100. Hands-on study of the camera actor's craft. Emphasis on more advanced camera acting theories, auditioning techniques, practice of various camera techniques and the study of methods used by Film/TV actors.

FLM 1201 – Acting for the Camera II Lab 3 cr
Prereq: FLM 1101. This lab course allows for practice time in both solo and interactive performances for the camera.

FLM 1300 – Money & Creative Professionals 1 cr
Basic financial information for creative professionals or students interested in freelance work or setting up a studio. This course is useful for artists working in the areas of fine art, the many forms of design, photography, film/video, music, advertising, the performing arts and creative or technical writing.

FLM 1400 – Copyrights for Creative Professionals 1 cr
This introductory short course focuses on U.S. copyrights given to creative individuals who produce visual, musical, literary works of art or performing arts. The course also covers licensing and trademarking.

FLM 1420 – Salesmanship And Promotion For Creative Professionals 2 cr
This introductory short course will introduce basic sales and self-promotional principles and techniques specifically tailored for creative artists.

FLM 1440 – Building A Creative Business 2 cr
This introductory short course will introduce basic business structures and examine the process of setting up a business for creative professionals working in the areas of music, the many forms of visual design, fine art, animation, film and video, and the literary arts.

FLM 1515 – Basic Audio Production 3 cr
A broad overview of sound, sound systems, recording, and live sound reinforcement providing basic training in the physics of sound and the hardware and systems used to control and record it. No prerequisites.

FLM 1800 – Digital Media Tools/Techniques 4 cr
An introduction to digital media fundamentals and the evolving industry. Students obtain a hands-on, in-depth experience with digital media tools, content and production techniques. Industry standard hardware and software tools are used to create and edit images, audio, video, layout, and web media to create powerful media. Copyright and professional responsibility issues and trends are covered.
FLM 1900 – Independent Studies 1-2 cr
Prereq: Instructor approval. Students will plan their areas of study, performance and/or technical work with full-time instructor on an individual basis.

FLM 2015 – Film Directing And Techniques 4 cr
Prereq: FLM 1045, FLM 1055, or instructor approval. This course teaches film directing techniques and theory. Students will explore film directing history; film terminology, language and grammar; and story structure and basic acting theory. Students will: perform script analysis; prepare a shot list; diagram and block a scene; learn and exhibit methods to shoot and cover a scene; understand how to work with actors; learn to work with departments and crew.

FLM 2045 – Commercial Film Production 4 cr
Prereq: FLM 1045 and FLM 1055 both w/C grade or better. This course presents professional instruction in digital, industrial, and commercial production techniques for Film and broadcast. Required for film majors.

FLM 2065 – Motion Picture Sound 4 cr
Prereq: FLM 1515. Sound as a creative tool for enhanced story telling in film production. Use of proper equipment and techniques for acquisition of production sound; tools techniques and practices of audio post production.

FLM 2075 – Advanced Video Editing And Postproduction 3 cr
Prereq: FLM 1045 & FLM 1055. This course teaches advanced video editing techniques and theory utilizing the industry standard editing software. Students will understand the use of color correction technique. Students will utilize keyframes, motion effects and advanced compositing techniques.

FLM 2200 – Introduction to Film Criticism 4 cr
Prereq: THEA 1013, THEA/FLM 1023, or THEA/FLM 1070. Film or theatre majors explore in-depth critical aspects of film including aesthetic and technical developments that have influenced film from its inception to present day. Students will view key films. Some R-rated films presented.

FLM 2500 – Bootcamp: Advanced Film Production Techniques 4 cr
The Bootcamp course provides the student with an experience comparable to a large-scale professional film shoot. Students are assigned to departments, including camera, sound, production, etc. working as a team to produce a 15-20 minute film.

FLM 2510 – Adv Video Prod - Documentary 4 cr
Prereq: COMM 2200 or FILM 1055. Provides advanced video production experiences for students who already have significant video production experience. Students work alone to produce short format documentary films and in groups to produce long format film projects.
FLM 2715 – Cinematography 4 cr
Prereq: FLM 1045, FLM 1055, ART 1310. This course covers advanced lighting techniques and camera technology for digital cinematography. Through lab demonstrations, studio projects and location settings, students will utilize professional motion-picture equipment to develop various compositional and technical skills. Digital camera equipment, lighting, filters, and other film technology will be explored.

FLM 2750 – Film Prod. Techn. Internship 1-3 cr
Prereq: Instructor approval. Students participate in Film Production internships through approved employers. Students learn practical work experience as it applies to their career in the Film Production Industry.

FLM 2800 – Film Acting for Directors 1 cr
Coreq: FLM 2801. Course demystifies the actor's craft and develops a range of techniques through scene study, improvisations, exercises and script analysis. Techniques are invaluable to directors and writers.

FLM 2801 – Film Acting for Directors Lab 2 cr
Prereq: THEA 1013, THEA/FLM 1023, or THEA/FLM 1070. Coreq: FLM 2800. This lab course provides practice time to focus on the principles discussed in FLM 2800.

FLM 2900 – Special Topics 3-4 cr
Prereq: THEA 1013, THEA/FLM 1023, or THEA/FLM 1070. A course designed for students to explore specific areas of interest in a classroom setting.

FMTA 1110 – Maintenance Electricity I 5 cr
Prereq: FMTA 1470 or MATH 1010 or appropriate Accuplacer score. Basic AC/DC Electricity course discussing terminology, circuits, testing equipment, troubleshooting, outlets, three way switching, single pole switching, repair/replacement, splicing wires, working knowledge of code, lighting, and electrical safety rules and procedures in lock-out tag-out. First Aid/CPR course.

FMTA 1120 – Maintenance Electricity II 5 cr
Prereq: FMTA 1110. Continued training in industrial motor control principles and electrical magnetic controls, ladder diagramming and relay logic, reduced voltage starting, braking and speed control, symbols, design strategies, NEC codes, instrumentation, distribution and various control systems.

FMTA 1210 – Maintenance HVAC 5 cr
Prereq: FMTA 1120. Includes safety, basic HVAC principles/practices, EPA refrigerant evacuation/reclamation Certification, basic refrigeration, basic heating, troubleshooting, tools, and equipment. Course work for RMGA Certification will be presented with testing optional.
FMTA 1220 – Maintenance Plumbing 5 cr  
Prereq: FMTA 1470 or MATH 1010 or appropriate Accuplacer score and FMTA 1210 or approval of Program Sponsor.

FMTA 1470 – Math for the Trades (QS) 5 cr  
Customized course in applied mathematics starting with whole numbers, formulas, fractions, decimals, algebra, geometry, and trigonometric functions.

FMTA 2310 – Maintenance Constr/Mechanic 5 cr  
Prereq: FMTA 1470 or MATH 1010 or appropriate Accuplacer score and Program Sponsor approval.

FMTA 2320 – Maintenance Pipefitting 5 cr  
Prereq: Approval of Program Sponsor.

FMTA 2410 – Mntnc. Welding/Trowel Trades 5 cr  
Prereq: FMTA 1470 or MATH 1010 or appropriate Accuplacer score and Program Sponsor approval.

FRN 1010 – Beginning French I 5 cr  
First in a series of four courses which focus on listening, speaking, reading, writing and culture. Major objective of the first year is to develop functional language ability in the French culture. Lab attendance is required.

FRN 1020 – Beginning French II (LN) 5 cr  
Prereq: FRN 1010 or instructor approval. Second in a series of four courses which focus on listening, speaking, reading, writing and culture. Major objective of the first year is to develop functional language ability in the French culture. Lab attendance is required.

FRN 1300 – Beginning Conversation 1 cr  
Prereq: FRN 1010 or instructor approval. Course practices currently held conversation skills to increase speaking ability and vocabulary. Includes role-plays, small group work and presentations. Lab attendance may be required. May be repeated for credit.

FRN 1900 – Special Studies in French 1-2 cr  
Prereq: Instructor approval. In this course in language and culture, students plan areas of study, Service Learning or travel and work with an instructor on an individual basis. Some work may be done in groups. Lab may be required. May be repeated for credit.

FRN 2010 – Intermediate French I 4 cr  
Prereq: FRN 1020 or instructor approval. Third in a series of four courses which focus on listening, speaking, reading, writing and culture. Major objective of second year is to increase functional language ability. Emphasis is on proficiency. Lab attendance required.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>FRN 2020</td>
<td>Intermediate French II</td>
<td>4 cr</td>
</tr>
<tr>
<td></td>
<td>Prereq: FRN 1020 or instructor approval. Second-year French courses increase functional language ability focusing on listening, speaking, reading, writing as well as increased focus on culture (philosophies, history, geography, literature, etc.) Lab attendance is required.</td>
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<tr>
<td>FRN 2300</td>
<td>Conversation</td>
<td>1 cr</td>
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<tr>
<td></td>
<td>Prereq: FRN 1020 or instructor approval. Course practices currently held conversation skills to increase speaking ability and vocabulary. Includes role-plays, small group activities and presentations. Lab attendance required. May be repeated for credit.</td>
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<tr>
<td>FRN 2700</td>
<td>Introduction to Literature</td>
<td>3 cr</td>
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<td></td>
<td>Prereq: FRN 2020 or FRN 2010. Second year courses focus on improvement of listening, speaking, reading, writing and culture skills. Major objective is to increase functional language ability through holistic approach to literature. Lab attendance required.</td>
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<tr>
<td>FRN 2710</td>
<td>Introduction to French Film</td>
<td>3 cr</td>
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<td></td>
<td>Prereq: FRN 1020 or instructor approval. Course will aid students in their study of language and culture. Films will be viewed with subtitles and written work and discussions will be in French. Lab attendance required.</td>
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<tr>
<td>FRN 2900</td>
<td>Special Topics in French</td>
<td>1-3 cr</td>
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<td></td>
<td>This is a course designed by faculty which allows students to explore specific interests in French language and culture. Lab attendance is required. May be repeated for credit.</td>
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<tr>
<td>GEN 1000</td>
<td>Gen Computer &amp; Internet Tools</td>
<td>3 cr</td>
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<tr>
<td></td>
<td>Introduction to genealogy computer programs and basic genealogy skills used to conduct research and document records with appropriate citations. Students will learn how to use internet tools for genealogy research. May take Department Challenge Exam in place of course.</td>
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</tr>
<tr>
<td>GEN 1010</td>
<td>Intro to Genealogical Research</td>
<td>3 cr</td>
</tr>
<tr>
<td></td>
<td>Prereq: GEN 1000 w/C grade or better or GEN 1000 Department Challenge Exam. Students explore record groups and repositories which contain 10 U. S. sources known to provide evidence linking families from students’ lifetime to 1850 and solve research problems by evaluating evidence.</td>
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<tr>
<td>GEN 1011</td>
<td>U.S. Record Groups</td>
<td>3 cr</td>
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<tr>
<td></td>
<td>Prereq: Completion of GEN 1010 w/C grade or better or GEN 1010 Department Challenge Exam. Course will provide an in-depth study of sources, records, and methodologies not covered in GEN 0010 essential to documenting and verifying family history and genealogies within the U.S. and focusing on a time period prior to 1850.</td>
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</tbody>
</table>
SLCC COURSE DESCRIPTIONS

GEN 1012 – International Record Groups 3 cr
Prereq: Completion of GEN 1010 w/C grade or better or GEN 1010 Department Challenge Exam. Students examine and use major international record groups in genealogical research. Paleography, record recognition and usage, research strategies, and usage of the international collections at various repositories will be covered.

GEN 1016 – Tracing Immigrant Origins 3 cr
Prereq: Completion of GEN 1011 or 1012 w/C grade or better. Introduction to methodologies and practices to extend family genealogies beyond the U.S. to other countries by finding evidence in unique U.S. records to link localities to International locations.

GEN 1110 – Genealogy Writing & Publishing 3 cr
Prereq: Completion of GEN 1016 w/C grade or better. Introduction to standards in genealogical writing, reporting, documentation and presentation of genealogical data. Students will also learn how to publish a family history in various medias.

GEN 1111 – Genealogy & Family History Writing 3 cr
This course introduces students to various forms of genealogical and family history writing, such as a compiled genealogy, four-generation report, research report, record resource guide, and family history narrative. It also introduces students to analytical reading, the writing process, analysis and evaluation of genealogical research and sources, and documentation styles.

GEN 1150 – Preparing for U.S. Credentials 3 cr
Prereq: Completion of GEN 1110 w/C grade or better. Students finalize an ICAPGen credentialing application, a 4-generation report (with record citations linked to original images and research planners, and an analysis of evidence), plus assemble a research portfolio, and take a practice exam.

GEN 1151 – Preparing for Intl Credentials 3 cr
Prereq: Completion of GEN 1110 w/C grade or better. Students finalize international credentialing application, a 4-generation report (with record citations linked to original images and research planners, and an analysis of evidence), plus assemble a research portfolio, and take a practice exam.

GEO 1010 – Intro to Geology (PS) 3 cr
An introduction to the processes and materials that shape the earth. It includes mineral identification, map reading, deposition, volcanism, earthquakes, and continental drift.

GEO 1060 – Environmental Geology 3 cr
Coreq: GEO 1065. This is the study of natural and man-made threats to human life and property. Their causes, preventions, and mitigation are covered.
GEO 1065 – Environmental Geology Lab 1 cr
Coreq: GEO 1060. This course provides hands-on experience in the lab, the community, and the field with subjects covered in GEO 1060.

GEO 1110 – Physical Geology 3 cr
Coreq: GEO 1115. This is a survey of the earth’s crust and crustal physical processes, basic earth materials constituting the lithosphere and hydrosphere. Class is designed for Geology majors.

GEO 1115 – Physical Geology Lab 1 cr
Coreq: GEO 1110. This is a laboratory experience in physical geology.

GEO 1220 – Historical Geology 3 cr
Prereq: GEO 1110 and GEO 1115. Coreq: GEO 1225. Class covers physical and biological history of earth development of major structural and stratigraphic features; also an introduction to fossil record.

GEO 1225 – Historical Geology Lab 1 cr
Coreq: GEO 1220. This twice per week class is to provide hands-on experience in the lab, the community, and the field with subjects covered in GEO 1220.

GEO 2350 – Field Studies in Geology 3 cr
Prereq: Instructor approval. Course provides an introduction to geology field studies. Covers local geology, rock and mineral identification, map reading, structure recognition and relevant geologic processes.

GEOG 1000 – Physical Geography (PS) 3 cr
A scientific and spatial understanding of natural processes that shape the surface of our planet and the systems that exist between the atmosphere, climate, hydrosphere, lithosphere, and biosphere within the context of the human environment.

GEOG 1300 – Regional Geography (ID) 3 cr
The study of the cohesive elements that constitute the major cultural regions of the world. Course includes, but is not limited to the introduction and analysis of contemporary cultural, political, economic, and environmental issues.

GEOG 1400 – Human Geography (ID) 3 cr
The thematic study of human activity (population, religion, language, migration, industry) and the global distribution of these activities.
GEOG 1600 – Intro to Geographic Science 3 cr
This course will provide students with a strong understanding of the complex interaction between the physical and cultural environments of geography along with an understanding of the geospatial technologies, spatial pattern recognition, and methodology used in geographic science.

GEOG 1700 – Natural Disasters (PS) 3 cr
Course introduces natural disasters and the related energy and processes which cause them. An awareness of the impact on human activity is an integral component, investigating methods of prevention, preparation, and mitigation of damage.

GEOG 1780 – Remote Sensing of Earth (PS) 3 cr
Using the geospatial technology of satellite imagery, this hands-on course will investigate land-cover patterns of the physical and social environmental spatially and historically. Topics include: electromagnetic principles, sensors and their characteristics, image data sources, and image classification, interpretation, and analysis. Online students need access to Microsoft Windows.

GEOG 1800 – Mapping Our World (ID) 3 cr
Introduction to the fundamentals of Geospatial Technology, including Geographic Information Science (GIS), Global Positioning Systems (GPS), cartography, remote sensing, and spatial analysis through a series of hands-on computer-based exercises. Participants will learn how to utilize geospatial technology to address social and environmental issues. Online students need access to Microsoft Windows.

GEOG 1820 – Intermediate GIS 4 cr
Prereq: GEOG 1800. Course builds on the skills and concepts covered in GEOG 1800 with a hands-on focus on coordinate systems, vector models, raster models, data acquisition, spatial data accuracy, attribute data management, cartographic concepts, primary and secondary source data, geocoding and geoprocessing skill sets.

GEOG 1850 – Environmental Field Studies 3 cr
Prereq: GIS 1800 or concurrently, or instructor approval. GIS is applied to basic interpretation of the interrelationships inherent among the physical, cultural, and technological footprints of a region. Field study area may be at a local, national, or international scale.

GEOG 1900 – Special Projects 1-3 cr
Prereq: Instructor approval. With instructor as facilitator, students develop and pursue an individualized curriculum, using ArcView/GIS procedures.

GEOG 2000 – Geography Co-Op 2-4 cr
Prereq: Instructor approval. Cooperative education represents flexibility and alternative opportunities for students to complete portions of their educational goals through new learning associated with study related internships/employment.
GEOG 2100 – Cartography & Visualization 4 cr
Prereq: GEOG 1800 or instructor approval. This course introduces fundamental cartographic concepts. Successful students will be able to employ design principles to create and edit effective visual representations of data (e.g., maps, graphs, and diagrams) in different formats (e.g., hardcopy, digital, web). Specific topics include the ethical and appropriate application of map scale, map projections, generalization and symbolization.

GEOG 2200 – Urban/Environ. Issues (ID) 3 cr
Class investigates the effect of encroachment of the urban environment upon the natural environment, and the complexity of interrelationships at local, national, and global levels, to define the individual's role.

GEOG 2300 – Statistics for GIS 3 cr
Prereq: GEOG 1820; and MATH 1010 or appropriate Accuplacer score. An introductory course in nonspatial and spatial descriptive statistics and inferential problem solving with probability, sampling, and estimation from a geographic and spatial perspective. All examples and real-world problems will focus on both the physical and cultural environments and will provide a solid foundation for those seeking statistical skill sets in the geospatial industry.

GEOG 2400 – Data Acquisition & Management 3 cr
Prereq: GEOG 1820. The course addresses the interpretation and understanding of a variety of data formats available in GIS. It introduces the fundamental concepts of primary GIS data creation and discusses quantitative techniques for collection, classification, and management of geographical data.

GEOG 2600 – Python for GIS 4 cr
Prereq: GEOG 1820. The geospatial industry needs professionals trained in automation of geoprocessing functions using the programming language of Python for GIS and other geospatial technologies. Course will cover the fundamentals of Python scripting to meet industry needs. Topics include: basic concepts using Python, creating and writing Python script for geoprocessing, and customizing and automating Python in GIS.

GEOG 2700 – Open Source GIS 3 cr
Prereq: GEOG 1820. An introductory course that describes Open Source software for both desktop and internet GIS applications. Students will learn the concepts of Open Source software, and the leading desktop and web mapping Open Source software packages such as Quantum GIS (QGIS), GRASS GIS, Google Maps, OpenStreetMap, and MapServer. Students will apply technology in lab exercises using real-world data.
GEOG 2800 – Web GIS 4 cr
Prereq: GEOG 1820. The course addresses the interpretation and understanding of a variety of data formats available in GIS. It introduces the fundamental concepts of primary GIS data creation and discusses quantitative techniques for collection, classification, and management of geographical data.

GEOG 2900 – Independent Projects 1-3 cr
Prereq: Instructor approval. Course provides an avenue for recertification/endorsements for teachers, or an opportunities for students with varying credit needs. Individual topics will be mutually defined by instructor and student. Course may be taught with a Service Learning component.

GEOG 2920 – Spatial Analysis 4 cr
Prereq: GEOG 1820. This course introduces students to problem-solving and decision-making using geospatial analysis techniques, skillsets, and knowledge which are applicable to a wide range of disciplines.

GER 1010 – Beginning German I 5 cr
First in a series of four courses which focus on listening, speaking, reading, writing and culture. Major objective of the first year is to develop functional language ability in the German culture. Lab attendance is required.

GER 1020 – Beginning German II (LN) 5 cr
Prereq: GER 1010 or instructor approval. Second in a series of four courses which focus on listening, speaking, reading, writing and culture. Major objective of the first year is to develop functional language ability in the German culture. Lab attendance is required.

GER 1300 – Beginning Conversation 1 cr
Prereq: GER 1010 or instructor approval. Course practices currently held conversation skills to increase speaking ability and vocabulary. Includes role-plays, small group work and presentations. Lab attendance may be required. May be repeated for credit.

GER 1900 – Special Studies in German 1-2 cr
Prereq: Instructor approval. In this course in language and culture, students plan areas of study, Service Learning or travel and work with an instructor on an individual basis. Some work may be done in groups. Lab may be required. May be repeated for credit.

GER 2010 – Intermediate German I 4 cr
Prereq: GER 1020 or instructor approval. Second-year German courses increase functional language ability focusing on listening, speaking, reading, writing as well as increased focus on culture (philosophies, history, geography, literature, etc.) Lab attendance is required.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>GER 2020</td>
<td>Intermediate German II</td>
<td>4 cr</td>
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<tr>
<td></td>
<td>Prereq: GER 1020 or instructor approval. Second-year German courses increase functional language ability focusing on listening, speaking, reading, writing as well as increased focus on culture (philosophies, history, geography, literature, etc.) Lab attendance is required.</td>
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</tr>
<tr>
<td>GER 2300</td>
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<td>GER 2700</td>
<td>Introduction to Literature</td>
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<td>Prereq: GER 2010 or GER 2020. Second year courses focus on improvement of listening, speaking, reading, writing and culture skills. Major objective is to increase functional language ability through holistic approach to literature. Lab attendance required.</td>
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<td>GER 2710</td>
<td>Introduction to German Film</td>
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<td>Prereq: GER 1020 or instructor approval. Course will aid students in their study of language and culture. Films will be viewed with subtitles and written work and discussions will be in German. Lab attendance required.</td>
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<tr>
<td>GER 2900</td>
<td>Special Topics in German</td>
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<td>This is a course designed by faculty which allows students to explore specific interests in German language and culture. Lab attendance is required. May be repeated for credit.</td>
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<tr>
<td>HCCA 1110</td>
<td>Heavy Civil Carpenter 1A</td>
<td>5 cr</td>
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<td></td>
<td>Prereq: APPR 1470 or appropriate Accuplacer score. This course is an introductory course in heavy civil carpentry. Students will gain a basic knowledge of construction safety, hand and power tools, blueprint reading, and an introduction to concrete and related materials.</td>
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<tr>
<td>HCCA 1120</td>
<td>Heavy Civil Carpenter 1B</td>
<td>5 cr</td>
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<td></td>
<td>Prereq: HCCA 1110. This course will provide students with knowledge and skills concerning the properties of concrete and an introduction to foundations and slab on grade methods, and techniques for reinforcing, handling and placing concrete.</td>
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<tr>
<td>HCCA 1210</td>
<td>Heavy Civil Carpenter 2A</td>
<td>5 cr</td>
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<td></td>
<td>Prereq: HCCA 1120. This course provides students with an in-depth understanding of vertical and horizontal forms. An introduction to distance measurement and leveling as well as site layout is also presented.</td>
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</tbody>
</table>
HCCA 1220 – Heavy Civil Carpenter 2B 5 cr
Prereq: HCCA 1210. This course introduces students to angular measurement techniques, welding techniques and practices, below-grade construction processes, and structural bridge building. Project management skills are also presented.

HIST 1100 – Western Civ. to 1300 (SS) 3 cr
Prereq: RDG 0900. A survey of the development of Western Civilization to 1300. Special emphasis is placed on the cultural, economic, social and political contributions of ancient and medieval cultures in the Western civilization.

HIST 1110 – Western Civ Since 1300 (SS) 3 cr
Prereq: RDG 0900. This is a survey of the development of Western Civilization since 1300. Special emphasis is placed on the cultural, economic, social, and political contributions of European culture.

HIST 1300 – Colonial Latin America (SS) 3 cr
This is a survey of Latin America from pre-Columbian times to an era of independence. Emphasis is placed on the continuum of Latin as well as native cultures. Covers Latin American History from colonization to independence in the 1820s focusing on the interaction of Europeans, Africans, Native Americans and the imposition of European institutions and culture on subject populations.

HIST 1310 – Modern Latin America(SS) 3 cr
This course surveys Latin America from the era of independence to the present. Examines the political, social and economic issues and their diverse influence in shaping contemporary Latin America.

HIST 1450 – Middle Eastern Civ (SS) 3 cr
An introduction to the beginnings of civilization in river valleys of Mesopotamia and Egypt to the end of the 18th century. Emphasizes cultural and religious developments that contributed to modern Western European and Islamic civilizations.

HIST 1460 – Modern Middle Eastern Civ (SS) 3 cr
Survey of Middle East from late 18th Century to present. Emphasis on interactions between the various religious and ethnic groups in region as they find ways to fit into modern world and respond to the rise of Western powers.

HIST 1500 – World History to 1500(SS) 3 cr
This is a survey of the development of civilizations in the world to 1500. Special emphasis is placed on the cultural, economic, social and political contributions of each civilization.

HIST 1510 – World History Since 1500 (SS) 3 cr
This is a survey of the development of civilizations in the world since 1500. Special emphasis is placed on the cultural, economic, social and political contributions of World history.
HIST 1700 – American Civilization (AI) 3 cr
Prereq: RDG 0990. This course covers American History from the Pre-Columbian period to the present. It provides a thorough examination of the major social, political, and economic events, issues, and themes of the period. Course may be taught with a Service Learning component.

HIST 1900 – Special Studies in History 1-3 cr
Prereq: Instructor approval. Under the instructor's supervision, students develop and follow an individualized curriculum. Designed to allow students with special interests in a particular area of history to work with the instructor in creating a course and study plan. Course is research oriented.

HIST 2200 – Americanization (SS,DV) 3 cr
This course focuses on the challenges of diverse ethnic groups in their struggle for inclusion in American society. Politics and economics are examined in the context of power structures that created privilege and how marginalized groups became privileged over time.

HIST 2600 – Native American Voices (SS,DV) 3 cr
This course examines the history and diverse cultures of indigenous peoples in the U.S. from the pre-Columbian period to the present. The focus is on the perspective of the Native Americans as they experienced the imposition of European and American institutions and fought to survive and preserve cultural integrity and tribal sovereignty. It challenges common stereotypes and ethnocentric views.

HIST 2700 – US History to 1877 (SS) 3 cr
Provides a thorough examination of American History from the Pre-Columbian period through Reconstruction, with a focus on the challenges that diverse groups faced as they struggled for an inclusive place in American society.

HIST 2710 – US History Since 1877 (SS) 3 cr
American History is covered from Reconstruction to the present. In addition to thorough treatment of the major events of the period, this course will focus on the challenges that diverse groups faced as they struggled for an inclusive place in American society.

HIST 2800 – Utah’s Diverse Heritage(SS,DV) 3 cr
Utah has always been a multicultural, multiethnic and multiracial society. This course connects the historical conflict of the dominant and subdominant, the powerful and less powerful, and the privileged and less-privileged from Pre-Columbian times to the present.

HIST 2900 – Special Topics 3 cr
An in-depth study of a particular topic in American History. It involves readings, discussion, research, and intensive writing.
HIST 2950 – Archival Internship 3 cr
Involves 45 hours at the Utah Archives, as well as regular one-on-one meetings with the instructor to discuss and organize a research project that grows out of the archival work. It provides students the opportunity to learn how the archives function, to engage in primary research and writing, and to make professional contacts.

HIT 1010 – Introduction to Computers for Health Information Workers 1 cr
Students will learn basic concepts related to computer hardware, software, digital security, data entry and management of data. Students will acquire basic computer skills in word processor, spreadsheet, presentation, web browser, email, calendar, imaging and scanning with focus on navigation, accuracy and analysis.

HIT 1020 – Basic Diagnosis Coding 3 cr
Prerequisite: Program Coordinator's Permission. Recommended co-requisites: HIT 1030, HIT 1040, and HIT 1100. Introduction and practice with International Classification of Diseases (ICD) using current (ICD-9) coding procedures as well as instruction toward ICD-10 implementation & Health Care Common Procedural Coding System (HCPCS) for optimal reimbursements as practiced in the medical setting.

HIT 1030 – Basic Procedure Coding 3 cr

HIT 1040 – Pathophysiology for Health Information Technology 3 cr
Prereq: Program Coordinator's permission. Recommended co-requisites: HIT 1010, HIT 1020, HIT 1030, HIT 1100. Discussion of structure and function of full body systems. Emphasis will be placed on anatomical orientation. Specific disease causes and processes. Structure and functions of the full body systems will prepare the students for the Health Information Technology profession.

HIT 1100 – Medical Terminology for Health Information Technology 3 cr
Prereq: Program Coordinator’s permission. Recommended coreq: HIT 1010, HIT 1020, HIT 1030, HIT 1040. A body system approach covering medical word roots, suffixes and prefixes. Emphasis is placed on pronunciation through use of the textbook CD, spelling and proper usage of medical terms. Medical abbreviations are also introduced as they relate to Health Information Management.

HIT 2110 – Health Informatics 3 cr
Prereq: HIT 1010 or Program Manager's permission. Introduction to health informatics, which combines healthcare, information technology, and business. Students will focus on the implementation and optimization of the information systems that support clinical practice and the communication infrastructure that enables critical information to be utilized for healthcare administration.
HIT 2120 – Pharmacotherapy 2 cr
Prereq: HIT 1100 and HIT 1040 or Program Manager's permission. Students will be introduced to current drug information through a body system approach. Emphasis is placed on the understanding of the action of drugs such as: absorption, distribution, metabolism and excretion of drugs by the body. Drug classification of most commonly prescribed drugs is introduced.

HIT 2220 – Intermediate Diagnostic Coding 3 cr
Prereq: HIT 1020, HIT 1030, HIT 1040, HIT 1100 or Program Manager's permission. Coreq: HIT 2230. This course focuses on application of intermediate principles learned in HIT 1020 using the International Classification of Disease (ICD). Students will code a wide range of original source documents they may encounter on the job. The student will translate source documents & apply previously learned coding techniques in ICD-10-CM and ICD-9-CM concepts.

HIT 2230 – Intermediate Procedure Coding 3 cr
Prereq: HIT 1100, HIT 1020, HIT 1030 & HIT 1040 or Program Manager's permission. Coreq: HIT 2220. This course focuses on learning and mastering the process of building codes in the new procedure coding system, ICD-10-PCS. Students will code a wide range of original source documents they may encounter on the job. Each of the body systems are methodically examined, with a thorough review of the function and anatomy of the systems, along with the root operations, body parts, approaches, devices and qualifiers in each body system.

HIT 2240 – Healthcare Data, Content and Structure 3 cr
Prereq: HIT 1100, HIT 1020, HIT 1030 & HIT 1040 or Program Manager's permission. Coreq: HIT 2220. This course focuses on learning and mastering the process of building codes in the new procedure coding system, ICD-10-PCS. Students will code a wide range of original source documents they may encounter on the job. Each of the body systems are methodically examined, with a thorough review of the function and anatomy of the systems, along with the root operations, body parts, approaches, devices and qualifiers in each body system.

HIT 2250 – Healthcare Delivery Systems 3 cr
Prereq: HIT 1010 or Program Manager's permission. Course provides a comprehensive overview of the structures and operations of the healthcare system. Learn the organization of healthcare delivery in the United States and healthcare organizations structure and operation. Introduction to healthcare standards and regulations, such as federal and state law and medical ethics.

HIT 2260 – Healthcare Reimbursement 3 cr
Prereq: HIT 1010, 1020, & 1030 or Program Manager's permission. This course will introduce healthcare billing and reimbursement, including standard practices of insurance claim billing for major health insurance entities, federal healthcare legislation and compliance. Ethical standards of practice will be applied and promoted through the accuracy of coding, billing and the revenue cycle process.
HIT 2270 – Professional Practice Experience Capstone/Practicum 1 cr
Prereq: Program Approval. In this course the student will have the opportunity to experience on-the-job training while serving a 50-hour unpaid practicum.

HLAC 1000 – Cardio Fitness (LW) 1 cr
A workout class that emphasizes the correct concepts of a cardiorespiratory workout, including target heart rate zones and perceived exertion. Appraisal of student fitness level included. Emphasis is on lifelong wellness.

HLAC 1013 – Body Strength and Tone (LW) 1 cr
A group conditioning class that uses a variety of equipment to increase muscular strength and endurance. Students will learn to monitor their workout intensity, and safely use a variety of training methods. Lifelong wellness is emphasized.

HLAC 1014 – CrossFit (LW) 1 cr
A varied, high-intensity, functional movement strength and conditioning class to build cardio-respiratory endurance, strength, flexibility, power, speed, coordination, agility, and balance. Lifetime wellness concepts will be emphasized.

HLAC 1015 – Spinning (LW) 1 cr
A rigorous aerobic workout class on stationary bikes. Students learn to monitor their target heart rate and personal training zones for increased cardiovascular endurance and muscular strength. Lifelong fitness is emphasized.

HLAC 1020 – Step (LW) 1 cr
Aerobic conditioning designed to develop cardiovascular endurance, strength, and coordination. Routines include step benches and vigorous exercise, set to music. Course is designed for fun and to encourage lifelong fitness.

HLAC 1025 – Interval Training (LW) 1 cr
A group aerobic class which may include jogging, bands, interval training, and vigorous exercise, set to music. This course covers proper guidelines to monitor target heart rate, technique and safety. Designed to encourage lifelong fitness.

HLAC 1030 – Kickboxing (LW) 1 cr
A workout class combining techniques of boxing and the martial arts. Heart rate and personal training zones are taught to help students develop cardiovascular endurance and muscular strength. Emphasis is on lifelong wellness.
HLAC 1035 – Zumba (LW) 1 cr
An interval class that combines Latin/international rhythms with dance and aerobic moves for a fun cardiovascular workout. This class encourages fitness and wellness.

HLAC 1036 – Hula Fitness (LW) 1 cr
This course includes a group fitness total body workout inspired by dances of the Pacific Islands. Students will learn how to increase aerobic fitness, muscular endurance & flexibility. The class emphasizes lifelong wellness concepts.

HLAC 1040 – Belly Dancing Basics (LW) 1 cr
This class uses Middle Eastern Dance in a low impact cardio workout to stretch and strengthen muscles, especially core. It can help improve posture and increase concentration while having fun. This class encourages lifetime health/wellness.

HLAC 1046 – Jog/Walk (LW) 1 cr
Student will engage in a personalized jogging and/or walking program. Emphasis is on helping students lose fat, firm up, improve cardiovascular endurance and ease stress. Emphasis is on lifelong wellness.

HLAC 1051 – TRX (LW) 1 cr
TRX is suspension training using straps, body weight, and angles for core and functional strength work. TRX includes flexibility, stability, balance, strength, power and cardio conditioning. Lifetime wellness concepts will be emphasized.

HLAC 1052 – Boot Camp (LW) 1 cr
High-intensity interval class that uses cardio-respiratory, speed, and endurance drills combined with muscular strength and endurance exercises for a fun and challenging workout to increase fitness. Lifetime wellness is emphasized.

HLAC 1054 – CorePilatesBarre (LW) 1 cr
This workout class is a high intensity, fun mix of Pilates, ballet inspired exercises, yoga, and athletic conditioning in a group exercise setting. This class encourages lifelong wellness concepts.

HLAC 1055 – Pilates I (LW) 1 cr
This is a Pilates mat class that uses breathing, core conditioning and body awareness in a series of dynamic exercises to stretch, strengthen and streamline the body. This course emphasizes lifelong fitness and wellness.

HLAC 1056 – Pilates II (LW) 1 cr
Recommended prereq: HLAC 1055 or previous Pilates experience. Advanced Pilates Mat Class that will utilize equipment and delve deeper into Pilates principles of conditioning. This class will teach principles of form and alignment and emphasize lifelong health and wellness.
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HLAC 1057 – Yoga I (LW) 1 cr
An introduction to Hatha Yoga stretching, breathing, and relaxation techniques. It is designed for stress management, meditation, peace of mind and self-awareness. This class emphasizes overall balance and lifelong wellness concepts.

HLAC 1058 – Yoga II (LW) 1 cr
Recommended prereq: HLAC 1057. A more advanced practice of Hatha Yoga stretching, breathing and relaxation techniques. It is designed for stress management, meditation and increased self-awareness. This course emphasizes life balance and lifelong wellness concepts.

HLAC 1062 – Flexibility for Fitness (LW) 1 cr
A comprehensive stretching program to increase the range of joint mobility, through a regular flexibility exercise program. This course covers safe practice and enjoyable ways to increase muscular flexibility. Emphasis is on lifelong wellness.

HLAC 1073 – Aerobic Circuit (LW) 1 cr
A cardiovascular workout combined with strength training. It covers the use of resistance equipment while alternating with aerobic intervals. This course is excellent for cross training and muscle toning. Emphasis is on lifelong wellness.

HLAC 1080 – Strength Training I (LW) 1 cr
A basic resistance training course which teaches proper lifting techniques and methods to increase muscular strength and endurance. Free weights and resistance machines will be used. Emphasis is on lifelong fitness.

HLAC 1081 – Strength Training II (LW) 1 cr
Recommended prereq: HLAC 1080. A more advanced resistance training class that teaches proper lifting techniques to increase muscular strength and endurance. Free weights and resistance machines will be used. Emphasis is on lifelong fitness.

HLAC 1082 – Strength Training III (LW) 1 cr
Prereq: Instructor approval. This is the fall semester, intercollegiate athletic team class that teaches and practices advanced resistance training methods to increase muscular strength and endurance. Emphasis is on lifelong fitness.

HLAC 1083 – Strength Training IV (LW) 1 cr
Prereq: Instructor approval. This is the spring semester, intercollegiate athletic team class that teaches and practices advanced resistance training methods to increase muscular strength and endurance. Emphasis is on lifelong fitness.
HLAC 1096 – Fitness for Life (LW) 1 cr
Wellness and healthy lifestyle concepts are taught with an emphasis on aerobic exercise and physical fitness. Lecture/ Lab format. Students will design and engage in a fitness program. Includes fitness appraisals and behavior change with emphasis on lifelong wellness.

HLAC 1100 – Tennis I (LW) 1 cr
Covers the basic strokes, shots, safety, rules, etiquette, and strategy of tennis. Course is designed for fun, competition, and to encourage lifelong participation.

HLAC 1101 – Tennis II (LW) 1 cr
Recommended prereq: HLAC 1100. Course is for the intermediate player. Students will learn to adjust their tennis strokes according to power, control, height of bounces, speeds and angles. Course is designed for fun, competition, and encourages lifelong participation.

HLAC 1105 – Badminton (LW) 1 cr
Course covers basic concepts of singles and doubles badminton. Includes basic strokes, serves, shots, safety, rules, and strategy. Course is designed for fun and encourages lifelong participation.

HLAC 1110 – Racquetball I (LW) 1 cr
Covers basic fundamentals of racquetball. Includes basic strokes, shots, safety, rules, etiquette, and strategy. Course is designed for fun, competition, and to encourage lifelong participation.

HLAC 1111 – Racquetball II (LW) 1 cr
Recommended: HLAC 1110. This course teaches the intermediate skills of racquetball, with emphasis on strategy and a more competitive style of play. It is designed for fun, competition, and encourages lifelong participation.

HLAC 1125 – Pickleball (LW) 1 cr
This course is designed for students to learn the fundamentals and skills of pickleball, which is a combination of tennis, badminton, and ping pong. This course includes lifelong wellness concepts.

HLAC 1130 – Golf I (LW) 1 cr
Covers the basic fundamentals of golf. Emphasis is on the knowledge and practice of individual skills. Rules and etiquette will be taught. Course is designed for fun to encourage lifelong participation.

HLAC 1131 – Golf II (LW) 1 cr
Recommended prereq: HLAC 1130. Course teaches intermediate golf skills, techniques, rules, etiquette and strategies. It is designed for fun, competition, and encourages lifelong participation.
HLAC 1145 – Bowling I (LW) 1 cr
Covering the basic skills of bowling including: ball selection, fit, approach and delivery. History, rules, safety, terminology, and etiquette will also be covered. Designed for fun and to encourage lifelong participation.

HLAC 1146 – Bowling II (LW) 1 cr
Recommended prerequisites: HLAC 1145. Course continues the study and practice of bowling. Intermediate skills, techniques and strategies will be taught. Course is designed for fun, competition, and encourages lifelong participation.

HLAC 1200 – Basketball I (LW) 1 cr
This course covers the fundamentals of basketball. Students will increase individual skills and gain an understanding of the regulations that govern this sport. It is designed for fun, competition, and to encourage lifelong participation.

HLAC 1201 – Basketball II (LW) 1 cr
Recommended prerequisites: HLAC 1200. This course teaches the intermediate skills of basketball, with emphasis on strategy and a more competitive style of play. It is designed for fun, competition, and encourages lifelong participation.

HLAC 1210 – Volleyball I (LW) 1 cr
Covers the basic fundamentals of volleyball. Students will increase individual skills and gain an understanding of the regulations that govern this sport. It is designed for fun, competition, and to encourage lifelong participation.

HLAC 1211 – Volleyball II (LW) 1 cr
Recommended prerequisites: HLAC 1210. This course covers intermediate skills and team concepts, including 6-person, 3-person and 2-person intense transition drills. It is designed for fun, competition, and encourages lifelong participation.

HLAC 1212 – Volleyball III (LW) 1 cr
Recommended prerequisites: HLAC 1211. This course covers skills and team concepts for advanced player, including advanced techniques in offensive and defensive systems and blocking principles. It is designed for fun, competition, and lifelong participation.

HLAC 1213 – Sand Volleyball (LW) 1 cr
This class teaches the principles of sand volleyball including doubles, three, four or six player combinations. Basic volleyball skills will be taught. This class encourages fitness and wellness.
HLAC 1230 – Soccer I (LW) 1 cr
This course covers basic soccer skills including ball control, heading, passing and shooting. This course teaches rules and strategies with emphasis on team play. It is designed for fun, competition, and to encourage lifelong participation.

HLAC 1232 – Competitive Soccer (LW) 1 cr
Prereq: Instructor approval. This course is designed for the club soccer team at SLCC. Instructor approval is required. The class combines skill development, practice, and competition, and encourages lifelong fitness and wellness.

HLAC 1245 – Ultimate Frisbee (LW) 1 cr
This course teaches the basic rules, regulations and skills required for participation in ultimate frisbee. This class emphasizes lifelong wellness concepts.

HLAC 1310 – Water Fitness (LW) 1 cr
This water exercise course gives students the opportunity to increase cardiorespiratory fitness, muscular endurance and flexibility in a low impact environment. This class emphasizes lifelong wellness concepts.

HLAC 1350 – Scuba I (LW) 1 cr
Prereq: Must be able to swim. This course covers basic techniques, safety and equipment used in scuba diving in an indoor pool setting. Students will learn about pressure, dive tables, respiration and dive planning. It emphasizes lifelong fitness and wellness concepts.

HLAC 1351 – Scuba II (LW) 1 cr
Recommended prereq: HLAC 1350, instructor approval or Open Water Course. This course covers underwater search patterns, principles of underwater physics, volume and pressure changes, and limited visibility diving. Specialty equipment, deep diving and photography will be covered. Lifelong wellness is emphasized.

HLAC 1410 – Tai Chi Chuan (LW) 1 cr
This course covers basic knowledge and practice of Yang style Tai Chi Chuan Peking Form, and Chi Gung exercises, theories, and strategies. This course emphasizes martial arts for fitness rather than as a combative practice.

HLAC 1413 – Qi Gong (LW) 1 cr
A 5000 year old Chinese practice of slow movements combined with deep breathing to bring a peaceful mind, calm spirit, more capability dealing with daily stresses and disease along with an invigorated body. Health/wellness component taught.
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HLAC 1440 – Aikido I (LW) 1 cr
A Japanese martial arts incorporating joint-lock and throwing techniques applied in self-defense. Class helps develop strength, flexibility, posture/balance, concentration, awareness, self-observation, and lifelong fitness/wellness.

HLAC 1442 – Brazilian Capoeira (LW) 1 cr
Capoeira is a diverse Brazilian martial art which incorporates self-defense, kicks, ground moves, acrobatics and music. Participants gain strength, flexibility, coordination, and endurance. This course emphasizes lifelong wellness concepts.

HLAC 1445 – Taekwon-Do I (LW) 1 cr
This course covers the basic techniques, conditioning and self-defense movements of this Korean martial art. It provides opportunity to learn kicking, blocking, punching and self-defense techniques, and emphasizes lifelong wellness.

HLAC 1446 – Taekwon-Do II (LW) 1 cr
Prereq: HLAC 1445 or instructor approval. Continuation of HLAC 1445 with emphasis on intermediate technique, body conditioning and self-defense. Students will perform intermediate kicks, blocks, patterns and board breaking. Lifelong wellness concepts will be emphasized.

HLAC 1449 – Kung Fu I/Wing Chun (LW) 1 cr
Introduction to Wing Chun Kung Fu including calisthenics and basic techniques. Will include history, theory, fight strategy, self defense, sticky hand, grab, and grappling techniques. Emphasis is on lifelong wellness.

HLAC 1450 – Kung Fu I/Hung Gar (LW) 1 cr
This course covers Hung Gar Kung fu techniques including calisthenics/conditioning (cardiovascular, forearms, and shins). It includes history, theory, fight strategy, self defense, and grappling techniques. Emphasis is on lifelong wellness.

HLAC 1451 – Kung Fu II (LW) 1 cr
Recommended prereq: HLAC 1450 or HLAC 1449 or instructor approval. It continues the study of Hung Gar Kung fu, emphasizing theory, fight strategy, self defense, grab techniques and 1st traditional Hung Gar Kung fu form. Conditioning focus is on cardio, ribs, and outer thighs. Lifelong wellness emphasis.

HLAC 1520 – Hiking (LW) 1 cr
Students will learn the basic skills of hiking, including trip planning, map reading and basic first aid. Hikes include various locations along the Wasatch Front. This course is designed for fun and encourages lifelong participation.
HLAC 1527 – Rock Climbing I (LW) 1 cr
This is a beginning climbing class focusing on indoor Top Rope belaying/climbing skills and techniques. No prior rope climbing experience required. This course is designed for fun, challenge and encourages lifelong participation.

HLAC 1528 – Rock Climbing II (LW) 1 cr
Recommended prereq: HLAC 1527 or instructor approval. Students learn intermediate static and dynamic movement styles, including belaying, clipping and rope management techniques. Students are taught to safely lead-climb indoors. Designed for fun, challenge and lifelong participation.

HLAC 1535 – Backpacking (LW) 1 cr
This course is for students to learn the basic skills of backpacking; trip planning, navigation, outdoor cooking, and safety and survival skills, and includes two weekend class trips. This course encourages lifelong participation.

HLAC 1540 – Related Outdoor Activity (LW) 1 cr
Provides credit for physical activity tied to other courses offered by the college such as community services courses (building homes for the homeless) or anthropology courses involving field schools. Lifelong wellness is encouraged.

HLAC 1550 – Mountain Biking I (LW) 1 cr
This course provides instruction in mountain biking techniques, bike maintenance, trip planning and safety. Class meets at various locations along the Wasatch Front. This course is designed for fun and encourages lifelong participation.

HLAC 1551 – Mountain Biking II (LW) 1 cr
Recommended prereq: HLAC 1550. This course covers more advanced mountain biking skills with longer and more technical rides than Mountain Biking I. It is designed for fun and encourages lifelong participation.

HLAC 1610 – Skiing/Snowboarding (LW) 1 cr
This is a basic skiing and/or snowboarding course, taught by professionally trained instructors and accommodates all skill levels. The course is designed for fun and encourages lifelong participation.

HLAC 1655 – Snowshoeing (LW) 1 cr
Students are taught basic skills in snowshoeing techniques, maintenance, trip planning and safety. Class meets at various trails in the Wasatch Mountains. This course is designed for fun and encourages lifelong participation.
HLAC 1670 – Ice Skating I (LW) 1 cr
This course will introduce the students to the fundamental skills of ice skating. This course emphasizes lifelong wellness concepts.

HLAC 1715 – Country Western Dance (LW) 1 cr
This course teaches popular partner country western dances including Texas Two-Step, Nightclub Two-Step, East Coast Swing, West Coast Swing and Cha-cha. This course is designed for fun and encourages lifelong participation.

HLAC 1720 – Social Dance I (LW) 1 cr
This course introduces social, ballroom and partner dancing. It includes basic steps of Merengue, Waltz, Rumba, Foxtrot, Triple Swing, Cha-cha and Tango. This course is designed for fun and encourages lifelong participation.

HLAC 1721 – Social Dance II (LW) 1 cr
Recommended prereq: HLAC 1720. This course covers the more advanced steps of the Waltz, Cha-Cha, West Coast Swing, Two Step, Tango and Viennese Waltz. It is designed for fun and encourages lifelong participation.

HLAC 1800 – Intercollegiate Athl I (LW) 1 cr
Prereq: Instructor approval. This is the intercollegiate athletic team class offered in the Fall Semester. The class is designed for practice, competition, and encourages lifelong wellness.

HLAC 1801 – Intercollegiate Athl II (LW) 1 cr
Prereq: Instructor approval. This is the intercollegiate athletic team class offered during Spring Semester. The class is designed for practice, competition, and encourages lifelong fitness.

HLAC 1802 – Intercollegiate Athl III (LW) 1 cr
Prereq: Instructor approval. This is the intercollegiate athletic team class offered during Fall Semester. Instructor approval is required. The class is designed for practice, competition, and encourages lifelong wellness.

HLAC 1803 – Intercollegiate Athl IV (LW) 1 cr
Prereq: Instructor approval. This is the intercollegiate athletic team class offered during Spring Semester. Instructor approval is required. The class is designed for practice, competition, and encourages lifelong wellness.

HLAC 1805 – Cheer Squad I (LW) 1 cr
Prereq: Instructor approval. This is the fall semester intercollegiate cheer squad class. Instructor approval is required. The class is designed for practice, competition, and encourages lifelong fitness.
HLAC 1806 – Cheer Squad II (LW) 1 cr
Prereq: Instructor approval. This is the spring semester intercollegiate cheer squad class. Instructor approval is required. The class is designed for practice, competition, and encourages lifelong fitness.

HLAC 2105 – Principles of Cardiorespiratory Training (LW) 1 cr
A more advanced course designed to provide students with the knowledge and practice of cardiorespiratory training. Emphasis is in understanding cardiorespiratory modalities, manipulation of volume and intensity, and how it affects training adaptation. This course emphasizes lifelong fitness and wellness concepts.

HLAC 2110 – Prin. of Weight Training (LW) 1 cr
Advanced course designed to provide students with the knowledge and skill in the use of free weights, weight machines and exercise apparatus, with an emphasis in designing resistant training programs to meet a wide range of goals. Course emphasizes lifelong fitness and wellness concepts.

HLTH 1020 – Foundations of Nutrition 3 cr
Introduces and applies basic nutrition concepts. Fundamentals of human nutrition and its applications to a healthier lifestyle. Evaluation and assessment of nutrition issues which includes preventing nutrition-related diseases.

HLTH 1050 – Life, Society and Drugs (ID) 3 cr
A comprehensive study of the personal, social, health, political and economic effects of substance use and abuse in this country. The impact of alcohol and other drugs on the individual, family, and society as a whole, will be covered.

HLTH 1105 – Healthy Body Image/Weight Mgmt 2 cr
Promotes positive body image and self esteem. Includes self assessment, evaluation, biological, social and spiritual strategies to assist students in accepting themselves regardless of body size or images.

HLTH 1110 – Social Health & Div. (ID,DV) 3 cr
This course offers an analysis and evaluation of social health issues facing the United States today. Disparity in health care caused by social problems such as bias, privilege, discrimination and prejudice will be discussed.

HLTH 1150 – Know Greater Heroes I 3 cr
Students will be coached to master key communication skills, beliefs and physiology of truly successful people and outstanding leaders.

HLTH 1200 – First Aid and Safety 3 cr
Course follows American Red Cross Responding to Emergency guidelines and leads to first aid and CPR certification.
HLTH 1240 – Theory/Pract of Meditation (LW) 2 cr
This course is an overview of the use and practice of meditation to reduce stress and increase health and wellness. Different forms and purposes of meditation will be explored and daily meditation practice encouraged.

HLTH 1242 – Laughter Yoga (LW) 2 cr
A mind/body class combining lecture, practice and laughter to lower stress hormones, foster a positive and hopeful attitude and to help people increase health and vitality through unconditional laughter and yogic breathing.

HLTH 1243 – Introduction To Laughter Yoga Instructor Training 3 cr
Recommended prereq: HLTH 1242. Train to become a certified Laughter Yoga Instructor. Learn how to lead Laughter Yoga and Meditations sessions for social clubs, corporate clients, senior citizen groups and school children. After successful completion of this course you will be qualified as a Certified Laughter Yoga Leader (CLYL).

HLTH 1245 – Environmental Yoga (LW) 2 cr
Yoga philosophy and principles are used to explore ways to be more environmentally conscious, to appreciate human interconnectedness with the environment and how to live a sustainable, ethical life.

HLTH 1250 – Stress Management 2 cr
Covers ways to help minimize effects of stress. Includes techniques of prevention, perception and intervention. Also provides relaxation techniques, personality profiles, goal setting, communication, time management and imagery skills.

HLTH 1255 – Mind/Body Connection 3 cr
Intro to mind/body potential for alleviating illness and improving health. Covers relaxation tech, guided imagery, and other alternative methods. Includes psychoneuroimmunology and support systems with practical application.

HLTH 1260 – 21st Century Medicine 3 cr
Explores trends in medical treatment. Learn about nutrition therapies, environmental detoxification, pharmaceutical treatment, herbology, homeopathy, energy medicine, physical therapy and other practical preventative measures.

HLTH 1300 – Doula & Childbirth Preparation 3 cr
This course covers the pre and post partum period of pregnancy as well as labor and delivery. Students will learn what to expect in pregnancy, childbirth and the postpartum period.
HLTH 1325 – Intro Group Fitness Instructor 3 cr
This course assists successful students to prepare for certification as fitness professional by covering the educational components of teaching a safe and effective group fitness class.

HLTH 1350 – Intro to Yoga Teacher Training 3 cr
Recommended prereq: HLAC 1057 or HLAC 1058 or personal practice. Class will cover the following principles of yoga: asanas, pranayamas, kriyas, chanting, mantra, meditation and other traditional yoga practices with equal time given to analytical training and teaching and practice techniques.

HLTH 1355 – Yoga Teacher Training II 2 cr
Class will cover human physical anatomy, physiology, and energy anatomy and physiology (chakras, nadis, etc.) as applied to the subject and application to yoga practice.

HLTH 1360 – Yoga Teacher Training III 3 cr
Recommended prereq: HLTH 1350. Class covers the following principles of yoga: asanas, pranayamas, kriyas, chanting, mantra, meditation and other traditional yoga practices with equal time given to analytical training and teaching, and practice techniques.

HLTH 1365 – Yoga Teacher Training IV 3 cr
Recommended prereq: HLTH 1350. Class studies advanced asanas, pranayamas, kriyas chanting, mantra, meditation and other traditional yoga techniques. Teaching methodology and ethics will be covered.

HLTH 1370 – Yoga Teacher Practicum 2 cr
Prereq: Instructor approval. This class allows students to complete the required practical teaching requirements for the Yoga Alliance. Practicum teaching will be done with fellow students during class and in the community as a volunteer.

HLTH 1375 – Yoga Sutras 5 cr
Prereq: must have successfully completed a 200 hour Yoga Alliance Program. This course offers an in-depth study of ancient and modern texts like Patanjali’s Yoga Sutra or Hatha Yoga Pradipika. Students will explore various interpretations along with ways to apply the Sutras into everyday living & Yoga Practice.

HLTH 1380 – Yoga for Pathology 5 cr
Prereq: Must have successfully completed a 200 hour Yoga Alliance Program. Course covers the use of asana, pranayama, shatkarma, & meditation that are traditionally used to help when teaching a yoga class or working one on one with yoga students, to help design practices that serve each individual specifically.
HLTH 1385 – Yoga for the Life Cycle 3 cr
Prereq: successful completion of a Yoga Alliance approved 200 hr program. This course offers an in-depth study of the application of Yoga and Yoga Principles through the life cycle beginning with pregnancy, childhood, adolescence, adulthood and older adults.

HLTH 1390 – Yoga Lab and Practicum 3 cr
Prereq: successful completion of a Yoga Alliance approved 200 hr program. This course offers students opportunities to work on their own personal practice, to teach general populations and to work one on one with yoga clients to help them find a practice suited to their own needs and goals.

HLTH 1500 – Lifetime Wellness/Fitness (ID) 3 cr
This interdisciplinary course teaches students to become active participants in achieving wellness in the physical, intellectual, emotional, social, spiritual and environmental areas of health in their lives.

HLTH 2020 – Nutrition for the Life Cycle 3 cr
Covers nutrition function needs, sources and alterations during pregnancy, lactation, growth, development, maturation and aging. Includes disease prevention, essential nutrients, metabolism, wt. management and specific problems.

HLTH 2021 – Nutrition for Fitness & Sports 3 cr
Prereq: HLTH 1020 or HLTH 2020. Examines advanced fitness/sport nutrition issues, including ergogenic aids and nutrient metabolism for optimal athletic performance.

HLTH 2100 – Fitness Motiv./Behav Response 3 cr
Covers behavior management techniques that will assist fitness trainers in providing programs for people of all ages. Provides students with an understanding of a variety of teaching, learning and communication strategies.

HLTH 2150 – Know Greater Heroes II 3 cr
Prereq: HLTH 1150. A continuation of HLTH 1150. Students will continue their mastery of communication skills, mentoring and teaching leaders to train others to be outstanding leaders.

HLTH 2200 – Kinesiology 3 cr
Required prereq: BIOL 1090. This course will focus on the anatomical, physiological and mechanical principles as they are applied to human movement.

HLTH 2250 – Exercise Physiology 3 cr
Required prereq: BIOL 1090. Covers the function and adaptation of the human body to the stress of physical activity. This course will study these adaptations and the metabolic process of energy yielding pathways.
HLTH 2300 – Emergency Medical Technician  
14-week course. Must be 18 years old. BLS CPR certification available. Treatment of medical emergencies, trauma injuries, patient assessment, shock treatment, bleeding control, illness, bandaging, splinting, taking vital signs. Upon successful course completion, students will be recommended to take the Utah Department of Health EMT Certification test.

HLTH 2400 – Exercise & Special Populations  
Prereq: HLTH 2250. This course is designed to give students an understanding of the correct application of exercise principles for special population clients. Students will learn theory and application of cardiovascular, muscular, and neuromuscular criteria for exercise prescription, with focus on; scope of practice, training design, and its application to special populations.

HLTH 2415 – Functional Performance  
Prereq: HLTH 2200. The purpose of this course is to provide students with the tools necessary in assessing and implementing corrective movements for participants showing relative risk to decrease neuromuscular coordination, improper motor unit recruitment, and the risk of musculoskeletal injury to optimize performance and decrease injury rate patterns.

HLTH 2425 – Evaluation and Assessment of Fitness  
Prereq: HLTH 2200. The purpose of this course is to provide students with the tools necessary to evaluate and assess participants relative to risk factors and/or symptoms for various chronic cardiovascular, pulmonary, muscular, and metabolic diseases/disorders, to optimize safety during exercise testing and participation.

HLTH 2430 – Designing Training Programs  
Prereq: HLTH 2425. Students will learn to design and implement comprehensive fitness programs, preparing them for a career in the fitness industry.

HLTH 2435 – Personal Fit Trainer Industry  
This course introduces students to the business aspect of the fitness training industry. Students will have the opportunity to create their own business plan as a fitness entrepreneur.

HLTH 2450 – Personal Trainer Internship  
Prereq: Instructor approval. Should be taken in final semester of Fit Tech Program. Students will observe and assist in the fitness training of individuals. 120 hours must be completed. Possible intern sites include SLCC fitness center, fitness clubs, county recreation and corporate fitness centers.
HS 2050 – Cultural, Legal, And Ethical Issues For The Health Sciences (ID, DV)  3 cr
The course explores Western medical ethics as articulated by clinicians, health care professionals within
the framework of a wide range of secular, cultural, and socioeconomic groups and religious traditions
and how these various factors lead to tension and compromise effective, humane health care. The
course will promote awareness of health care outcomes and medical care for diverse populations.

HSEM 1360 – Intro to Homeland Security  3 cr
Prereq: CJ 1010 & HSEM 1450. Overview of national strategy for homeland security in the various
agencies and bureaucracies that make up the infrastructure of homeland security and the role of local
law enforcement and first-responders in homeland security.

HSEM 1370 – Law, Policy & Privacy in Homeland Security Emergency Management  3 cr
Constitution applies to critical homeland security issues and a review of laws and regulations that impact
homeland security and emergency management programs and policies.

HSEM 1380 – Intro to Intelligence Analysis  3 cr
Prereq: CJ 1010 & HSEM 1450. Study of the history of intelligence gathering and analysis; relationships
between intelligence officers and policy makers; dangers of intelligence politicization; and, successes
and failures of intelligence activities.

HSEM 1390 – Transportation & Border Security  3 cr
Prereq: CJ 1010 & HSEM 1450. Dangers from domestic and international terrorism to air, rail, maritime
and ground transportation in the United States. Border security of the United States from international
drug trafficking and terrorist operations.

HSEM 1400 – First Responder in Homeland Security Emergency Management  3 cr
Prereq: CJ 1010 & HSEM 1450. Course examines the roles and responsibilities of first responders during
crisis events and how policies and procedures impact the on-scene decision-making process. Students
will learn the actions each type of responder (fire, law enforcement and medical) will take in an
emergency situation to secure scenes, reduce loss of property and save lives.

HSEM 1450 – Critical Thinking in Homeland Security & Emergency Management  3 cr
Introduces students to critical thinking and logic skills through analyzing and evaluating arguments and
basic logical framework. Students develop judgment about the application of critical thinking and logic
skills as applied to issues arising in the context of terrorist attacks or natural disasters through critical
reading, thinking, writing, research and analysis.
Prereq: CJ 1010, CJ 2450, HSEM 1360 & HSEM 1450. This course covers independent study in homeland security emergency management. Students can earn 1-24 elective credit hours for this class. HSEM elective credit may also be awarded for POST, EMT, and other related courses offered at the SLCC Institute of Public Safety.

Prereq: CJ 1010, CJ 2450, HSEM 1360 & HSEM 1450. This course provides supervised work experience in a business, industrial, or government environment related to the program major. Credit is awarded for successful completion. Prior approval required for participation in this program.

HSS 1500 – Therapeutic Recreation Tech  
Course introduces students to basic principles of recreation therapy and gives a general overview of the field. Areas related to rules and regulations, assessment, documentation, planning and program implementation will be covered.

HUMA 1010 – Essentials of Humanities (HU)  
Introduces the elements of the Humanities through a one-semester thematic survey of the major ideas, art forms, literature, social structures, and events of history that have shaped global human cultures from the prehistoric to the present. Activities and discussions encourage students to make cultural connections, see world events in historical context, and to think critically.

HUMA 1100 – Intro to Humanities (HU)  
Course thematically investigates the fundamental and perennial questions of humankind and how human beings relate through culture to their political, religious, social, intellectual, economic, and geographic environments.

HUMA 1900 – Special Studies in Humanities  
This is an individualized studies course in the humanities. Students plan their areas of study and work with the instructor on individual basis. Some work may be done in groups. May be repeated for credit.

HUMA 2000 – Humanities CO-OP Education  
Prereq: Sophomore standing, minimum GPA of 2.0. Supervised work experience in a business, industrial, nonprofit corp. or gov. environment related to the program major. Credit awarded for completion of specific objectives that provide new learning related to the program major.

HUMA 2120 – Sacred Traditions (HU)  
Recommended prereq: HUMA 1100 or HUMA 2300. Using interdisciplinary theories of the origin of Religion, students learn to describe, interpret, explain & evaluate human experiences of the sacred through material culture & sacred traditions especially as it pertains to the roles of space, ritual, sacred time, & language in the construction of others' & one's own conceptions of sacredness.
HUMA 2220 – Pacific Amer. Studies (HU,DV) 3 cr
This course explores Pacific Islander American Experience including their histories, literature, cultural patterns and contemporary experiences within the context of a theoretical framework of race and ethnic studies.

HUMA 2300 – World Religions (HU) 3 cr
A survey of the world's religions, their cosmologies and methods for living. Takes a historical perspective including mythology, philosophy, rituals, and doctrines of the belief systems; emphasizes the relationship religion has with culture.

HUMA 2310 – Great Books I 3 cr
Examines the unique legacy left to us by ancient and medieval cultures from around the world through intensive reading and discussion of primary sources in literature, philosophy, political theory, religion, and history.

HUMA 2320 – Great Books II 3 cr
Examines the unique legacy left to us by early-modern and modern cultures through intensive reading and discussion of primary sources in literature, philosophy, political theory, religion, and history.

HUMA 2400 – Religious Diversity-US (HU,DV) 3 cr
Examines what it means to be religious in America: the conflict, interaction and influence of US culture and diverse religious minorities. Explores ideas of privilege, stereotypes, discrimination and the challenge of integration and accommodation.

HVAC 1100 – Refrigeration Basic Electrical 10 cr
Coreq: HVAC 1120. Provides an understanding of HVACR electrical controlled circuits. Reading ladder and schematic diagrams, computerized training, troubleshooting circuits, electric single-phase motors and starting devices are emphasized in both theory and lab.

HVAC 1110 – HVAC I A 5 cr
Prereq: HVAC 1470 or equivalent. Materials and devices with focus on CPR/First Aid, Safety, Hand Tools, Accessories, Basic Electricity, Character Education/Customer Service, and Basic Gas Properties/ Gas Appliance Installation.

HVAC 1120 – HVAC IB 5 cr
Prereq: HVAC 1110. Basic refrigeration cycle and physic principles. Cut, solder, and braze copper tubing, demonstrate safe use of manifold gauges, vacuum pumps, recovery machines. EPA/CFC certificate preparation.
HVAC 1210 – HVAC IIA 5 cr
Installation principles, determine heat and cooling loads, calculate and design ducts, identify filtration methods, and install residential systems. Rocky Mountain Gas Association (RMGA) installation test.

HVAC 1220 – HVAC IIB 5 cr
Prereq: HVAC 1210. Reading and interpreting of HVAC system blueprints to design and install HVAC layout, fabricate and install common sheet metal duct fittings.

HVAC 1400 – Air Conditioning 10 cr
Prereq: HVAC 1300. Provides an understanding of commercial and residential air conditioning installation, service on refrigerant control devices and compressors, super-heat and sub-cooling adjustments, and heat pump operations.

HVAC 1470 – Math Basics for HVAC (QS) 5 cr
This is a customized course in applied mathematics for the trades including algebraic and trigonometric functions.

HVAC 2000 – Heat, Vent, Air Specialties 5 cr
This course is designed to meet the needs of a student requesting co-op credit for on-the-job training hours. Credit hours may vary for this course.

HVAC 2310 – HVAC IIIA 5 cr
Prereq: HVAC 1120. Electron theory, AC and DC current, Ohm's law, series and parallel circuits, operation of gas furnaces, basic heat and cool controls and balance equipment. ICE Residential and Light Commercial Air-Conditioning and Heating Certification tests.

HVAC 2320 – HVAC IIIB 5 cr
Prereq: HVAC 2310. Operation of the compression refrigeration and heat pump cycles, and troubleshoot systems. RMGA Service Certification test, the NATE Core Service and one Specialty test.

HVAC 2410 – HVAC IVA 5 cr
Prereq: HVAC 2320. Fan types, measure air flow, volume and velocity using various instruments. Principles of hydronics, steam heat and heat distribution units as well as basic principles of oil furnace heat systems.

HVAC 2420 – HVAC IVB 5 cr
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**IND 1120 – Math for Industry (QS) 3 cr**
Prereq: MATH 0900 w/C grade or better, or appropriate Accuplacer score. Designed to provide students with training in elementary math skills and work place applications of various vocational areas. Intent is to increase and enhance the math skills that are necessary.

**IND 1130 – Math for Welders 3 cr**
Prereq: IND 1120. Math for Welders is designed to help students apply fundamental math skills to practical workplace problems.

**INTD 1010 – Intro. to Interior Design 3 cr**
A broad overview of the principles of interior design, furniture selection, accessories, lighting, fabrics and architectural finishes.

**INTD 1100 – Drafting for Interior Design 3 cr**
An introduction to the basic principles and techniques of Hand drafting and rendering for planning interior environments in residential and commercial design.

**INTD 1200 – Color for Interiors 3 cr**
A review of the theories of color and applications as they relate to the psychological impact of color in residential and commercial settings.

**INTD 1300 – Perspective Drawing 3 cr**
Prereq: INTD 1100. Overview of techniques and media used by Interior Designers for perspective drawings and renderings.

**INTD 1350 – Rendering Techniques 1 cr**
Coreq: INTD 1300. Highlighting the use of markers in combination with other mediums, this class focuses on hard-to-draw subjects such as wood, stone, glass, foliage, skies, carpet, and fabrics.

**INTD 1370 – Commercial Space Planning 3 cr**
Prereq: INTD 1010. Overview of the principles of commercial interior design. This course will require students to focus on individual projects and field work.

**INTD 1400 – Copyrights for Creative Professionals 1 cr**
This introductory short course focuses on U.S. copyrights given to creative individuals who produce visual, musical, literary works of art or performing arts. The course also covers licensing and trademarking.

**INTD 1420 – Salesmanship And Promotion For Creative Professionals 2 cr**
This introductory short course will introduce basic sales and self-promotional principles and techniques specifically tailored for creative artists.
INTD 1440 – Building A Creative Business 2 cr
This introductory short course will introduce basic business structures and examine the process of setting up a business for creative professionals working in the areas of music, the many forms of visual design, fine art, animation, film and video, and the literary arts.

INTD 1450 – Interior Design AutoCAD I 4 cr
Prereq: INTD 1100. Survey of basic AutoCAD applications for Interior Design. Students will learn how to create floor plans using AutoCAD.

INTD 1460 – Interior Designers AutoCAD II 4 cr
Prereq: INTD 1450. Students will learn to use advanced computer-aided design tools and drafting techniques.

INTD 1550 – Presentation Technique I 3 cr
Prereq: INTD 1010. Capstone course to develop a presentation portfolio utilizing printed and multimedia applications.

INTD 1600 – History/Int. Des. & Furniture 3 cr
This course is a survey of historical furnishings, architecture design motifs from ancient civilization through the Victorian era, with emphasis on French, English and American periods.

INTD 1700 – Contemporary Furnishings 3 cr
This course is a survey of contemporary furnishings from the end of the Victorian period to present day, emphasizing the masters of contemporary furniture design and current trends.

INTD 1750 – Design Psychology 3 cr
Prereq: INTD 1010. An introduction into the field of Design Psychology. Students will explore basic Psychology principals that explore the relationship between people and place, and examine how individuals unconsciously connect with their environments.

INTD 1950 – Materials/Components of Design 3 cr
Prereq: INTD 1010. A survey of the properties and production of materials employed in interiors, such as textiles, wood, metals, masonry, and other elements.

INTD 2000 – Internship 3 cr
Prereq: INTD 1950 and instructor approval. To experience and gain a first-hand working knowledge of various aspects of the interior design field.
INTD 2150 – Green/Sustainable Interiors 3 cr
Prereq: INTD 1950, INTD 2200 and INTD 2500. An overview of the environmentally responsible design, building practices, systems, materials, current codes, and current applicable certifications. Emphasis is on residential construction and interiors.

INTD 2200 – Building Const. and Codes I 3 cr
Prereq: INTD 1450 and INTD 1950. Students will be introduced to the basics of construction management and the common practices of residential and commercial construction. The role of interior designers in the construction process will also be taught.

INTD 2300 – Lighting Design & Application 3 cr
Prereq: INTD 1450. Overview of light fundamentals and lighting systems. Students will learn to calculate lighting levels, solve interior design lighting problems and communicate specification to clients and other professionals.

INTD 2400 – Kitchen & Bath Design 3 cr
Prereq: INTD 1450. An overview of the basic principles of kitchen design and space layout, including drawing floor plans and elevations to scale. Cabinetry, appliances, finish materials, barrier free design are covered.

INTD 2450 – Advanced Kitchen & Bath Design 3 cr
Prereq: INTD 2400. Course covers kitchen and bath design in greater depth, including theme, universal design, and auxiliary spaces.

INTD 2500 – Building Const. & Codes II 3 cr
Prereq: INTD 1460. Overview of the principles of commercial interior design. This course will require students to focus on individual projects and field work.

INTD 2600 – Professional Practice 4 cr
Prereq: INTD 2500. Overview of basic business principles related to interior design. Topics include: ethics, fees, documentation, terminology and job coaching.

INTD 2700 – Presentation Techniques II 3 cr
Prereq: INTD 2600. Gain the skills needed to produce presentation quality drawings by using Photoshop, Illustration, InDesign and Google SketchUp to augment artistic skills.

INTD 2800 – Historic Preservation 3 cr
Prereq: Instructor approval. This is an introduction course to historic preservation from a national and international perspective including the evolution of theory and practice and its application.
INTD 2900 – Independent Study 1-3 cr
Prereq: INTD 2600 or instructor approval. For Interior Design majors ONLY. This Independent Study is based on a student-selected design topic.

INTL 2040 – The Immigrant Experience through Literature and Film (HU,DV) 3 cr
A study of human issues linked to immigration through literature and film: cultural identity, prejudice, racism, multiculturalism. The US experience will be framed in the perspective of human migration and globalization.

INTL 2060 – Intl Lit and Culture (HU,DV) 3 cr
Comparison of literature of ethnic groups of the U.S. with that of the native country in order to explore issues of U.S. discrimination, acculturation, identity, and bigotry as well as appreciating the benefits brought by that provenance.

INTL 2230 – Global French Cultures (HU) 3 cr
Focuses on non-European French-speaking areas, such as Africa, the Caribbean, the Pacific Islands, Southeast Asia and Quebec. Students study literature, films, etc., and through them, the history of French colonialism, the areas' geography, and current economic and political status.

INTL 2240 – Latin American Studies (HU) 3 cr
Explores the Latin American Experience based on literature, film, geography, histories, politics, religion, cultural patterns and contemporary experiences to increase intercultural competence and understanding modern Latin culture.

INTL 2980 – Travel Study (ID) 3 cr
Prereq: Varies by semester and trip taken. This course includes travel experience with faculty of SLCC as well as pre- and post-trip activities and assignments. Credit awarded for successful completion of specified learning objectives.

INTL 2990 – Study Abroad (ID) 3 cr
Prereq: Varies by semester and trip taken. The student attends lectures/workshops at an institution in a different country and studies in conjunction with faculty of SLCC in residence. Credit awarded for successful completion of specified learning objectives.

INTR 1000 – Introduction to Interpreting 1 cr
This course provides an intro to the profession of interpreting with lecture, interviews, readings, and projects. Topics include history, terminology, responsibilities, skills/aptitudes, and employment options for interpreters.
INTR 1100 – Connections to Community I 1 cr
Prereq: Acceptance into the INTR program. CoReq: INTR 1200 & 1300. This course is designed to immerse students in the Deaf community and interpreting profession through Service Learning and mentoring opportunities to improving ASL skills and broaden their understanding of the community and profession.

INTR 1110 – Connections to Community II 1 cr
Prereq: INTR 1100. CoReq: INTR 1400 & 1500. This course is designed to immerse students in the Deaf community and interpreting profession through Service Learning and mentoring opportunities to improving ASL skills and broaden their understanding of the community and profession.

INTR 1200 – Interpreting I 5 cr
Prereq: Acceptance to the INTR program. CoReq: INTR 1100 & 1300. This course provides an intro to, and enhancement activities for, cognitive processing skills associated with interpretation. Discourse styles of ENG and ASL are analyzed and consecutive interpreting is introduced.

INTR 1300 – Ethics/Professional Standards 3 cr
Prereq: Acceptance to the INTR program. CoReq: INTR 1100 & 1200. This course provides an overview of ethical decision-making and prepares students to apply strategies professionally. Interpreting ethics are explored and readings, discussions, and case studies are used to apply knowledge used in course.

INTR 1400 – Interpreting II 5 cr
Prereq: INTR 1200. CoReq: INTR 1110 & 1500. This course provides students with the opportunity to practice interpretation skills in consecutive formats while further enhancing cognitive and linguistic skills as well as cultural awareness and knowledge.

INTR 1500 – Comparative Linguistics 3 cr
Prereq: Acceptance to the INTR program and INTR 1200. Coreq: INTR 1110 & 1400. This course examines basic similarities and differences between the linguistic structure of ASL and ENG, focusing on the way each conveys primary and secondary information. Students engage in a research project related to course content.

INTR 1600 – Internship I 2 cr
Prereq: INTR 1400. CoReq: INTR 2100 & 2200. This course provides students opportunities to make connections with professionals in the field, learn about different tasks, populations and settings of interpreting as well as explore later internship options.

INTR 1900 – Individual Studies 1-2 cr
Prereq: INTR 1400. In this special studies course, students plan areas of study Service Learning or travel and work with an instructor on an individual basis. Some work may be done in groups.
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>INTR 2000</td>
<td>Individual Research Project</td>
<td>1-2 cr</td>
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<td></td>
<td>Prereq: INTR 1400. In this special studies course, students plan areas of study Service Learning or travel and work with an instructor on an individual basis. Some work may be done in groups.</td>
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<tr>
<td>INTR 2100</td>
<td>Connections to Community III</td>
<td>1 cr</td>
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<td></td>
<td>Prereq: INTR 1110. CoReq: INTR 1600 &amp; 2200. This course is designed to immerse students in the Deaf community and interpreting profession through Service Learning and mentoring opportunities to improving ASL skills and broaden their understanding of the community and profession.</td>
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<tr>
<td>INTR 2200</td>
<td>Interpreting III</td>
<td>5 cr</td>
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<td></td>
<td>Prereq: INTR 1400. CoReq: INTR 1600 &amp; 2100. This course provides the opportunity to continue practicing ASL/ENG interpretation skills using a simultaneous format. Linguistic and cultural considerations are emphasized for accurate interpretations and to preserve meaning.</td>
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<td>INTR 2400</td>
<td>Interpreting IV</td>
<td>2 cr</td>
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<td></td>
<td>Prereq: INTR 2200. CoReq: INTR 2600. This course focuses on ASL/ENG interactive interpreting skills. Transliteration skills are also introduced as a means for matching consumer language use.</td>
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<tr>
<td>INTR 2600</td>
<td>Internship II</td>
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<td>Prereq: INTR 2200. Coreq: INTR 2400. This course is the internship component that complements your academic work through practical experiences in a community setting. Students will observe interpreters and interpret with direct supervision.</td>
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<tr>
<td>INTR 2900</td>
<td>Special Topics</td>
<td>1-2 cr</td>
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<td></td>
<td>Prereq: INTR 2200. This course provides various topics in interpreting including community, video relay service, and theatrical interpreting, working with specific populations, and other topics of importance to interpreters.</td>
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<tr>
<td>INTR 2910</td>
<td>Educational Interpreting</td>
<td>2 cr</td>
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<td>Prereq: INTR 1400. This course is an introduction to interpreting in K-12 settings. Topics include an overview of public/deaf education in the US, classroom learning activities, language skills/communication modes, learning styles, and accessibility.</td>
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<tr>
<td>INTR 2920</td>
<td>VRS Interpreting</td>
<td>2 cr</td>
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<td>Prereq: INTR 2200. This course is an introduction to interpreting in Video Relay settings. Topics include an overview of legislation and federal administration, corporate environments, and the use and challenges of technology used to interpret in this setting.</td>
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INTR 2930 – Community Interpreting 2 cr
Prereq: INTR 1400. This course is an introduction to interpreting in community settings. Topics business practices, billing, insurance, and taxes. Students will also be introduced to types of employment expected in community settings.

ISA 1110 – Ironworkers 1A 5 cr
This course includes OSHA Outreach Training, MSILA New Miner Training, and specialized training for Steel Erection.

ISA 1120 – Ironworkers 1B 5 cr
Prereq: ISA 1110. This course covers the fundamentals of placing reinforcing steel and Post Tensioning cables in concrete. Upon completion, students will be able to take PTI certification exam.

ISA 1210 – Ironworkers IIA 5 cr
Prereq: ISA 1120. This course covers blueprint reading and the fundamentals of construction and steel erection drawings.

ISA 1220 – Ironworkers IIB 5 cr
Prereq: ISA 1210. This course covers the fundamentals of planning, job layout, and steel erection.

ISA 2310 – Ironworkers IIIA 5 cr
Prereq: ISA 1220. This course examines the basic fundamentals of welding.

ISA 2320 – Ironworkers IIIB 5 cr
Prereq: ISA 2310. This course is a continuation of the basic fundamentals of welding.

ISCI 1000 – Intro Competitive Intelligence 3 cr
The introductory course examines the principles, roles, responsibilities, and activities associated with CI-BI work, as well as the history of CI-BI. The learner will survey a range of functions, models, practices, processes, techniques, technologies, and tools that will be applied to basic, experiential projects.

ISCI 1010 – Intermediate Competitive Intelligence 3 cr
Prereq: ISCI 1000 w/C grade or better. Must have access to a camcorder. Strategic Competitive Intelligence capitalizes on the intelligence life-cycle continuum learned in ISCI 1000. Companies must compete in order to increase customers, market share, revenue, and profit. The intermediate course examines competition and intelligence, and how they became intertwined. Learners construct frameworks for viewing the competitive environment.

ISIS 1010 – Intro to Library Services 3 cr
Course provides an overview of types of libraries, media and information centers, tools and terminology used in libraries, the role of library assistants, library Bill of Rights, privacy issues and library associations.
ISIS 1200 – Public Information Services  
Course includes information about library circulation, covers policies, procedures, reserve collections, patron holds/requests, reference and information services, search strategies, information sources, customer communication and search techniques.

ISIS 1500 – Library Technical Services  
Review processes by which materials are acquired for collections and prepared for public access. Bibliographic search tools, acquisition terminology, serials ordering, cataloging reference tools and resources covered.

ISKM 1000 – Intro Knowledge Management  
This introductory course provides students with an introduction to a range of cases, concepts, models, practices, theories, and technologies related to the emerging field of Knowledge Management (KM). The course will survey business value of KM; careers in KM; intellectual capital; perspectives of knowledge creation, knowledge transfer, knowledge sharing, and knowledge leadership roles and skills.

ISKM 1010 – Intermediate Knowledge Management  
Prereq: ISKM 1000 w/C grade or better. Must have access to camcorder. Strategic Knowledge Management capitalizes on the knowledge management (KM) life-cycle continuum learned in KM 1000. More in depth concepts, terms, techniques, tools, processes, and systems are introduced to the learner. The intermediate course examines the principles of KM, technologies and systems, and the management of KM in an enterprise.

ITL 1010 – Beginning Italian I  
First in a series of four courses which focus on listening, speaking, reading, writing and culture. Major objective of the first year is to develop functional language ability in the Italian culture. Lab attendance is required.

ITL 1020 – Beginning Italian II (LN)  
Prereq: ITL 1010 or instructor approval. Second in a series of four courses which focus on listening, speaking, reading, writing and culture. Major objective of the first year is to develop functional language ability in the Italian culture. Lab attendance is required.

ITL 1300 – Beginning Conversation  
Prereq: ITL 1010 or instructor approval. Course practices currently held conversation skills to increase speaking ability and vocabulary. Includes role-plays, small group work and presentations. Lab attendance may be required. May be repeated for credit.
ITL 1900 – Special Studies in Italian 1-2 cr
Prereq: Instructor approval. In this course in language and culture, students plan areas of study, Service Learning or travel and work with an instructor on an individual basis. Some work may be done in groups. Lab may be required. May be repeated for credit.

ITL 2010 – Intermediate Italian I 4 cr
Prereq: ITL 1020 or instructor approval. Second-year Italian courses increase functional language ability focusing on listening, speaking, reading, writing as well as increased focus on culture (philosophies, history, geography, literature, etc.) Lab attendance is required.

ITL 2020 – Intermediate Italian II 4 cr
Prereq: ITL 1020 or instructor approval. Second-year Italian courses increase functional language ability focusing on listening, speaking, reading, writing as well as increased focus on culture (philosophies, history, geography, literature, etc.) Lab attendance is required.

ITL 2300 – Conversation 1 cr
Prereq: ITL 1020 or instructor approval. Course practices currently held conversation skills to increase speaking ability and vocabulary. Includes role-plays, small group activities and presentations. Lab attendance required. May be repeated for credit.

ITL 2700 – Introduction to Literature 3 cr
Prereq: ITL 2010 or ITL 2020. Second year courses focus on improvement of listening, speaking, reading, writing and culture skills. Major objective is to increase functional language ability through holistic approach to literature. Lab attendance required.

ITL 2710 – Introduction to Italian Film 3 cr
Prereq: ITL 1020 or instructor approval. Course will aid students in their study of language and culture. Films will be viewed with subtitles and written work and discussions will be in Italian. Lab attendance required.

ITL 2900 – Special Topics in Italian 1-3 cr
This is a course designed by faculty which allows students to explore specific interests in Italian language and culture. Lab attendance required. May be repeated for credit.

JPN 1010 – Beginning Japanese I 5 cr
First in a series of four courses which focus on listening, speaking, reading, writing and culture. Major objective of the first year is to develop functional language ability in the Japanese culture. Lab attendance is required.
JPN 1020 – Beginning Japanese II (LN) 5 cr
Prereq: JPN 1010 or instructor approval. Second in a series of four courses which focus on listening, speaking, reading, writing and culture. Major objective of the first year is to develop functional language ability in the Japanese culture. Lab attendance is required.

JPN 1300 – Beginning Conversation 1 cr
Prereq: JPN 1010 or instructor approval. Course practices currently held conversation skills to increase speaking ability and vocabulary. Includes role-plays, small group work and presentations. Lab attendance may be required. May be repeated for credit.

JPN 1900 – Special Studies in Japanese 1-2 cr
Prereq: Instructor approval. In this course in language and culture, students plan areas of study, Service Learning or travel and work with an instructor on an individual basis. Some work may be done in groups. Lab may be required. May be repeated for credit.

JPN 2010 – Intermediate Japanese I 4 cr
Prereq: JPN 1020 or instructor approval. Second-year Japanese courses increase functional language ability focusing on listening, speaking, reading, writing as well as increased focus on culture (philosophies, history, geography, literature, etc.) Lab attendance is required.

JPN 2020 – Intermediate Japanese II 4 cr
Prereq: JPN 1020 or instructor approval. Second-year Japanese courses increase functional language ability focusing on listening, speaking, reading, writing as well as increased focus on culture (philosophies, history, geography, literature, etc.) Lab attendance is required.

JPN 2300 – Conversation 1 cr
Prereq: JPN 1020 or instructor approval. Course practices currently held conversation skills to increase speaking ability and vocabulary. Includes role-plays, small group activities and presentations. Lab attendance required. May be repeated for credit.

JPN 2700 – Introduction to Literature 3 cr
Prereq: JPN 1020 or instructor approval. Second year courses focus on improvement of listening, speaking, reading, writing and culture skills. Major objective is to increase functional language ability through holistic approach to literature. Lab attendance required.

JPN 2710 – Introduction to Japanese Film 3 cr
Prereq: JPN 1020 or instructor approval. Course will aid students in their study of language and culture. Films will be viewed with subtitles and written work and discussions will be in Japanese. Lab attendance required.
JPN 2900 – Special Topics in Japanese 1-3 cr
This is a course designed by faculty which allows students to explore specific interests in Japanese language and culture. Lab attendance is required. May be repeated for credit.

KABM 0115 – Basic Math Skills 64 hrs
Prereq: TABE test, placement test in class. Recommended Coreq: KALL 0110. Student improves skills in basic operations, problem solving, analysis and computations using whole numbers, fractions, decimals, percents, measurement and formulas, equations, ratio and proportion, and GED prep.

KABR 0115 – Basic Reading Skills 64 hrs
Prereq: TABE test. Recommended Coreq: KALL 0110. Student tests in classroom for proper placement in curriculum; gains comprehension and vocabulary skills; uses computer aids; studies grammar, spelling, and writing as it relates to nine levels of reading.

KACC 0100 – Safety Fundamentals 20 hrs
Prereq: School of App Tech assessment. Students prepare for the OSHA 10 hr. safety certificate and practice safety rules that apply to HVAC Industry.

KACC 0105 – Green Energy Systems 40 hrs
Prereq: School of App Tech assessment. Also requires completion of the following previous courses from this HVAC program: KACC 0100 Safety Fundamentals. Provides an awareness of the need for conservation and energy management and self-sufficiency in energy needs related to HVAC service. Students learn principles of solar, wind, and alternative energy resources.

KACC 0200 – Fundamentals of Electricity 180 hrs
Prereq: School of App Tech assessment. Recommended Prereq: KACC 0100 and KACC 0105. Electrical theory and applications in HVAC service. Students learn principles of electricity as applied to HVAC. Students may earn related Employment Ready certificates.

KACC 0220 – Electrical Applications 140 hrs
Prereq: School of App Tech assessment, KACC 0100, KACC 0105 and KACC 0200. Students apply the fundamentals of electricity in specific HVAC applications. Heat pumps, electrical heating equip, variable frequency drives, electrical and DDC controls are emphasized. Students may earn Employment Ready certificates.

KACC 0230 – HVAC Fundamentals 20 hrs
Prereq: School of App Tech assessment. Recommended Prereq: KACC 0100, KACC 0105, KACC 0200 and KACC 0220. HVAC theory and applications are introduced. Students learn fundamentals of heat transfer and the basic principles of refrigeration.
KACC 0240 – Applied Combustion Heating 80 hrs
Prereq: School of App Tech assessment. Recommended Prereq: KACC 0100, KACC 0105, KACC 0200, KACC 0220, KACC 0230. Theory and applications of combustion heating systems are introduced. Students learn principles of natural gas and oil heating systems and associated mechanical codes and safety; includes COSA carbon monoxide protection and RMGA exams.

KACC 0250 – Applied Refrigeration Theory 70 hrs
Prereq: School of App Tech assessment. Recommended Prereq: KACC 0100, KACC 0105, KACC 0115, KACC 0220 and KACC 0230. Application of refrigeration theory and basic refrigeration systems are introduced. Students learn properties of refrigerants, and characteristics of different types of refrigeration systems; includes preparation for certifications.

KACC 0260 – Automotive A/C Service 10 hrs
Prereq: School of App Tech assessment. Recommended Prereq: KACC 0100, KACC 0105, KACC 0200, KACC 0220, KACC 0230 and KACC 0250. Application of refrigeration practices particular to the service of automotive air conditioners. Students can qualify for the Federal Clean Air Act automotive CFC (EPA 609) certification exam.

KACC 0290 – Employment Workshop 10 hrs
Students learn job-seeking skills, resume writing, and interviewing skills necessary for job placement.

KACC 0300 – Residential HVAC Systems 160 hrs
Prereq: School of App Tech assessment. Recommended Prereq: KACC 0100, KACC 0105, KACC 0200, KACC 0220, KACC 0230, KACC 0240 and KACC 0250. Application of heating and refrigeration practices as they apply to residential heating and air conditioning systems. Emphasis is on energy efficiency in home HVAC systems. Students prepare for all applicable certifications.

KACC 0400 – Light Commercial HVAC Systems 80 hrs
Prereq: School of App Tech assessment. Recommended Prereq: KACC 0100, KACC 0105, KACC 0200, KACC 0220, KACC 0230, KACC 0240, KACC 0250 and KACC 0300. Application of heating and refrigeration practices for light commercial heating and air conditioning systems. Emphasis is on energy efficiency in the installation, operation, and service of basic commercial systems.

KACC 0420 – Commercial HVAC Systems 80 hrs
Prereq: School of App Tech assessment. Recommended Prereq: KACC 0100, KACC 0105, KACC 0200, KACC 0220, KACC 0230, KACC 0240, KACC 0250 and KACC 0300. Introduction to the basic heating and refrigeration fundamentals of larger commercial HVAC systems. Emphasis is on compliance to federal Indoor Air Quality (IAQ) requirements and IEEE energy efficiency standards for commercial facilities.
KACC 0440 – Commercial Heat/Refrigeration 80 hrs
Prereq: School of App Tech assessment. Recommended Prereq: KACC 0100, KACC 0105, KACC 0200, KACC 0220, KACC 0230, KACC 0240, KACC 0250 and KACC 0300. Introduction to commercial heating and refrigeration applications other than commercial HVAC systems. Focus is on safe and efficient commercial food handling and storage and other miscellaneous applications.

KACC 0500 – Capstone Project 80 hrs
Prereq: School of App Tech assessment. Recommended Prereq: KACC 0100, KACC 0105, KACC 0200, KACC 0220, KACC 0230, KACC 0240, KACC 0250 and KACC 0300 and completion of two of the following courses: KACC 0400, KACC 0420, KACC 0440. The student develops a personal choice project that applies the skills learned throughout the program. Students design the project focusing on energy efficiency with instructor input.

KACC 0990 – HVAC Externship 80 hrs
Prereq: Completed full HVAC program or completed all courses in the program with the exception of KACC 0500. This course allows HVAC students a supervised paid work experience with Questar Gas assisting to perform semi-skilled and skilled routine HVAC job tasks.

KACT 0115 – Basic Spreadsheets 40 hrs
Students learn basic spreadsheet skills including creating, editing, saving and printing worksheets and workbooks; manipulating and formatting worksheets; creating and using formulas and functions; creating, editing, and formatting charts; creating and manipulating tables and using What-If analysis tools.

KACT 0125 – Comprehensive Spreadsheets 80 hrs
Students learn basic to advanced spreadsheet skills including creating and using worksheets and workbooks; formatting; formulas and functions; charts; table analysis tools; audit and validate workbooks; inserting graphics and hyperlinks; consolidating data and linking workbooks; sorting and filtering; work with external data sources; data tables; PivotTables; macros; templates; sharing workbooks. Comprehension levels: Math 8th grade, Reading 10th grade, Vocabulary 10th grade

KACT 0135 – Accounting 140 hrs
This course takes students from an introduction to the accounting cycle, the double entry framework and the basic concepts in accounting all the way to the generation of financial statements and the year end accounting procedures for service and merchandising businesses. It emphasizes in the use of manual systems.

KACT 0170 – Records Management 30 hrs
Students learn business alphabetic filing skills.
KACT 0185 – Basic QuickBooks 40 hrs
This course teaches students on how to utilize QuickBooks to create companies, record transactions and adjust and correct entries.

KACT 0195 – Comprehensive QuickBooks 80 hrs
This course teaches students on how to utilize QuickBooks to create companies, record transactions and adjust and correct entries.

KAIT 0100 – National Electrical Code 12 hrs
This course will provide a step by step guide to the most current 2011 National Electrical Code, providing an over-view of each chapter. The course will help you understand the structure and logic of the NEC rather than memorize all the details. Material that appears outside the NEC main body, including the index, annexes, and Article 90, is also discussed in this essential handbook.

KAIT 0105 – Automated Systems 96 hrs
Prereq: KET2 0106. This course will provide a solid foundation in Industrial Automated Systems, Instrumentation and Motion Control. The student will understand the full spectrum of industrial maintenance and control, from servomechanisms to instrumentation. Coverage of components, circuits, instruments, control techniques, calibration, and programming associated with industrial automated systems.

KAIT 0110 – Instr & Control Documentation 12 hrs
This course will cover Control Systems Documentation, Development of piping and instrument diagrams (P&IDs) and related ANSI/ISA drawings are emphasized, covering both the development and the reading/interpreting of these documents.

KAIT 0115 – Measurement and Control 72 hrs
Recommended Prereq: KET2 0106. This course will provide the fundamentals of industrial process, measurement, and control. Applying the principles necessary to understand the variables that affect industrial automation and process control systems. Coverage of process control, loops, analytical measurement, process visualization and process control computer-based systems.

KAIT 0120 – Elec Motors & Control Systems 60 hrs
Recommended Prereq: KAIT 0115. Coverage of a broad range of motor types, control systems, electric motor operation, selection, installation, control and maintenance. Industrial applications of variable speed drives for constant torque, constant horsepower, and variable torque/variable horsepower. Coverage of motor starter circuits, reduced voltage starting techniques, and stepper/servo motors.
KAIT 0125 – Fluid Power Systems 60 hrs
Recommended Prereq: KAIT 0120. Broad coverage of fluid power technology, balancing theory and applications; how electrical currents control the operation of fluid power systems, the design, analysis, operation, and maintenance of fluid power systems. Complete coverage of both HYDRAULIC and PNEUMATICS systems, and the use of fluids under pressure to generate, control, and transmit power.

KAIT 0130 – Main of Instruments & Systems 60 hrs
Recommended Prereq: KAIT 0125. Comprehensive coverage of maintenance requirements for pneumatic and electrical/electronic devices, DCS systems, analytical instrumentation, fiber optics, and smart instruments. Installing, Calibrating, and Maintaining Electronic Instruments and systems combines theory and hands-on experience, such as configuring and calibrating transmitters, transducers, and controllers.

KAIT 0135 – Troubleshooting Automated Sys 48 hrs
Recommended Prereq: KAIT 0130. This course presents a systematic approach to troubleshooting and start-up of single- and multi-loop control loops. Coverage of how pressure, level, flow, and temperature loops operate to maintain good process control systems. A logical Troubleshooting approach is covered, test equipment, programmable systems, communication circuits, transient problems, and software.

KAIT 0140 – Industrial Data Communications 36 hrs
Recommended Prereq: KAIT 0135. This course will cover industrial data communication concepts that are needed to understand, troubleshoot, and maintain both legacy and leading-edge systems. Emphasizing practical functional aspects of common systems rather than design criteria, it includes a complete description of relevant terminology, standards, and protocols including EIA/TIA 232, 485, and IEEE 802.

KAIT 0145 – ISA CST Associate Exam Prep 16 hrs
This course helps to prepare the Student for the ISA Control Systems Technician Associate recognition examination. The ISA CST Associate examination measures a fundamental understanding of knowledge in automation and control, has specialized work experience and/or an educational background in automation and control or a related field.

KALL 0110 – Integrated Learning Lab 64 hrs
Recommended Coreq: KABR, KABM, KGED. Students receive supplementary computer-assisted instruction in math, reading comprehension, vocabulary, spelling, grammar, and GED subjects.

KAOS 0110 – Beginning Keyboarding 20 hrs
This course teaches the efficient operation of the keyboard, including the touch method of operation, correct techniques, and correct fingering.
KAOS 0115 – Keyboarding/Skillbuilding 80 hrs
This course teaches and reinforces the touch method of keyboarding, with emphasis on attaining the speed, accuracy, and knowledge necessary for an entry-level job.

KAOS 0145 – Basic Ten-Key 25 hrs
This course teaches basic ten-key calculator concepts and applications using the touch method, with emphasis on attaining speed, accuracy, and skills necessary to qualify for an entry-level job.

KAOS 0155 – Intermediate Ten-Key 50 hrs
This course teaches basic ten-key calculator concepts and applications using the touch method, with emphasis on attaining speed, accuracy, and skills necessary to qualify for an entry-level job.

KAOS 0165 – Comprehensive Ten-Key 75 hrs
This course teaches basic ten-key calculator concepts and applications using the touch method, with emphasis on attaining speed, accuracy, and skills necessary to qualify for an entry-level job.

KAOS 0170 – Computer Concepts 30 hrs
Students learn the basic features of computer hardware and software, Windows, Microsoft WordPad, Microsoft Paint, File Management, basic knowledge of the Internet and skills necessary to qualify for an entry-level job.

KAOS 0185 – Basic Word Processing 40 hrs
Students learn basic word processing skills including creating, opening, closing, editing, saving, printing, and managing files; character, paragraph, and page formatting; using the spell check and thesaurus; formatting letters and memos; creating and utilizing tables and columns.

KAOS 0195 – Comprehensive Word Processing 80 hrs
Students learn basic to advanced word processing skills including creating, editing formatting, and printing documents; using reference tools; tables and columns; inserting graphics; mail merge; fields and forms; macros; footnotes, endnotes, bibliographies, outlines, and table of contents; create comments; compare and merge documents; track changes; and create hyperlinks.

KAOS 0215 – Basic Business Communications 40 hrs
Students learn basic principles of English grammar including punctuation, number usage, capitalization, sentence structure, nouns, pronouns, and verbs. In addition, the course includes spelling, dictionary and reference manual usage, paragraph and essay writing, and proofreading.
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>KAOS 0225</td>
<td>Intermediate Business Commun</td>
<td>58</td>
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<tr>
<td></td>
<td>Students learn basic principles of English grammar including punctuation, capitalization, number usage, sentence structure, nouns, pronouns, verbs, adjectives, adverbs, prepositions, and conjunctions. In addition, the course includes spelling, dictionary and reference manual usage, paragraph, e-mail, essay, memo, and letter writing, and proofreading.</td>
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<tr>
<td>KAOS 0235</td>
<td>Advanced Business Communications</td>
<td>69</td>
</tr>
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<td>Students learn basic principles of English grammar including punctuation, capitalization, number usage, sentence structure, nouns, pronouns, verbs, adjectives, adverbs, prepositions, conjunctions, misused verbs, and appropriate word choice. In addition, the course includes spelling, dictionary and reference manual usage, paragraph, e-mail, essay, memo, and letter writing, and proofreading.</td>
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<tr>
<td>KAOS 0245</td>
<td>Comprehensive Business Commun</td>
<td>90</td>
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<td></td>
<td>Students learn basic principles of English grammar including punct, cap, number usage, sent structure, nouns, pro, verbs, adj, adv, prep, conj, misused verbs, appropriate word choice, verb tense, phrases, and clauses. In addition, the course includes spelling, dictionary and reference manual usage, paragraph, e-mail, essay, memo, letter, and report writing, and proofreading.</td>
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<tr>
<td>KAOS 0250</td>
<td>Customer Service/Life Skills</td>
<td>60</td>
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<td></td>
<td>This class covers professionalism as it pertains to attitude, ethics, communications, appearance, verbal presentation, conflict management/resolution, problem solving, team skills, telephone etiquette, note taking, manners at work, corporate etiquette, up-selling, and life skills.</td>
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<tr>
<td>KAOS 0260</td>
<td>Presentations</td>
<td>30</td>
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<tr>
<td></td>
<td>Students learn and demonstrate MS PowerPoint presentation software including creating, modifying, enhancing, and formatting slides and using embedding techniques.</td>
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<tr>
<td>KAOS 0270</td>
<td>Database</td>
<td>40</td>
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<td></td>
<td>This course introduces spreadsheet functions and applications. Students will learn how to design, create, manipulate, calculate, and present data. Students will utilize critical thinking skills and apply spreadsheet techniques in developing information for business applications.</td>
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<tr>
<td>KCDL 0100</td>
<td>CDL Learner's Permit</td>
<td>16</td>
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<tr>
<td></td>
<td>Prepare for the CDL learners permit written test with the following endorsements: general knowledge, air brakes, and combinations (tractor and single trailer).</td>
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<tr>
<td>KCDL 0120</td>
<td>CDL License Upgrade</td>
<td>80</td>
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<td></td>
<td>This course is designed to give students who are sponsored by companies backing skills, over-the-road driving practice, shifting and other skills required by their employer. Includes the CDL road test.</td>
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</tr>
</tbody>
</table>
KCMA 0065 – Medical Office Communications and Records  55 hrs
Recommended Prereq: KCMA 0105. Provides training in proficient medical office communication and administrative skills, the fundamentals of beginning and tracking a patient record using both paper and electronic medical record (EMR) software. Introduction to medical terminology suffixes and prefixes.

KCMA 0105 – Working In The Healthcare Environment  70 hrs
Recommended Prereq: KAOS 0110 and KAOS 0170. An overview of the medical assistant profession and its role in the health care environment, introduction to the legal and ethical issues that impact the healthcare setting, basic principles of psychology in a health care environment and the impact of ethnic cultures in healthcare as well as introduction to medical terminology in these areas.

KCMA 0115 – Medical Assisting Procedures 1  95 hrs
Recommended Prereq: KCMA 0065. Provides the guidelines for personal safety and well-being of staff and patients learning and practicing the CDC guidelines for hand hygiene and government regulations for standard and biohazard wastes. Provides a fundamental understanding of vital signs, basic first aid and healthcare provider level CPR. Provides a fundamental understanding and skill in phlebotomy.

KCMA 0125 – Medical Assisting Procedures 2  60 hrs
Recommended Prereq: KCMA 0115. Provides understanding of basic concepts, safety and procedures of clinical lab. Learn proper handling and performance of CLIA waived hematology/serology labs and proper specimen handling and performance of microbiology and urinalysis testing.

KCMA 0135 – Medical Assisting Procedures 3  110 hrs
Recommended Prereq: KCMA 0125. Provides understanding of the basic skills and procedures for assisting with patient exams. Learn to prepare patients for diagnostic, therapeutic, rehabilitation, and radiology procedures. Provides understanding of heart anatomy and electrical physiology as students properly perform ECGs. Learn to calculate medication dosages and administer nonparenteral and parenteral medications.

KCMA 0165 – Introduction To Medical Insurance & Billing Procedures  40 hrs
Recommended Prereq: KCMA 0065. Provides an introduction to medical insurance procedures. Exposes the clinical medical assistant to medical office financial procedures.

KCMA 0200 – Assisting w/Office Procedures  220 hrs
Recommended Prereq: KCMA 0135. Fourteen modules cover medical assisting in a variety of medical office procedures related to specialties and/or exams including the associated anatomy, physiology and medical terminology.

KCMA 0420 – Final Review & Cert Prep  10 hrs
Recommended Prereq: KCMA 0200. Focuses on completion of a final exam covering all competencies of the medical assistant and preparation for clinical externship.
KCMA 0431 – Clinical Medical Assisting 165 hrs
Recommended Prereq: KCMA 0420. This course provides an unpaid clinical opportunity for students to demonstrate and practice their medical assisting skills with clinical site supervision in a healthcare setting.

KCMS 0136 – Computer Components 75 hrs
Prereq: Minimum basic skills required as defined by program. Please see an admissions advisor. This course covers techniques for basic computer hardware and operating systems, including installing, building, upgrading, repairing, configuring, and troubleshooting.

KCMS 0140 – Storage and Multimedia 75 hrs
Recommended Prereq: KCMS 0136. This course covers techniques for basic computer hardware and operating systems, including installing, building, upgrading, repairing, configuring, and troubleshooting.

KCMS 0151 – Wired and Wireless 75 hrs
Recommended Prereq: KCMS 0140. This course stresses troubleshooting and interacting with customers who work or intend to interact with clients resolving technical issues.

KCMS 0180 – Software and Security 75 hrs
Recommended Prereq: KCMS 0151. This course stresses troubleshooting and interacting with customers remotely via the telephone or e-mail. It is targeted to individuals who intend to interact with clients resolving technical issues.

KCMS 0201 – Basic Externship 75 hrs
Recommended Prereq: KCMS 0180 and instructor approval. Students will participate in an externship with a local company and will learn and experience first-hand, strong teamwork skills which should prepare them as viable, experienced job applicants when seeking employment after graduation.

KCMS 0202 – Advanced Externship 75 hrs
Recommended Prereq: KCMS 0201. In this elective, students will continue the cooperative externship with a local company. The student will receive additional hands-on experience and teamwork skills providing them with additional hours in the workplace setting.

KCMS 0240 – Intro to Networking Technology 75 hrs
Prereq: Minimum basic skills required as defined by program. Please see faculty. This course covers techniques of basic networking technologies and operating systems, including installing, building, upgrading, repairing, configuring, troubleshooting, diagnosing, and security.
KCMS 0250 – Advanced Network Technology  75 hrs
Recommended Prereq: KCMS 0240. This course is a continuation of KCMS 0240 which covers techniques of basic networking technologies and operating systems, including installing, building, upgrading, repairing, configuring, troubleshooting, diagnosing, and security.

KCMS 0350 – Customer Service Help Desk  75 hrs
This course takes a detailed look at the characteristics of excellent technical customer support including soft skills, business skills and self-management skills.

KCMS 0415 – Linux Administration  75 hrs
Prereq: Minimum basic skills required as defined by program. Please see faculty. This Linux Administration course includes installation, command syntax, systems management, file systems, devices, upgrades, as well as other common administrative tasks. Can be used as preparation for the CompTIA Linux+ industry exam.

KCMS 0440 – Intro to Security Principles  75 hrs
Recommended Prereq: KCMS 0250 or related knowledge and experience in IT, including but not limited to: encryption protocols, ports, viruses, and threats. This course explores real world threats to network security including known network vulnerabilities and security breaches. Defense software, devices, tools, and procedures are investigated. Course 1 of 2 in preparation for CompTIA Security+ exam.

KCMS 0450 – Advanced Security Principles  75 hrs
Recommended Prereq: KCMS 0440. This course continues the exploration of real world threats to network security. Advanced security attack methods are analyzed and advanced procedures and protocols are investigated, including cryptography and recovery plans and procedures. Course 2 of 2 in preparation for CompTIA Security+ industry test.

KCMS 0500 – Mac OS X Essentials  75 hrs
This course covers basic installation, configuration, and support of Apple’s OS X operating system.

KCMS 0520 – Advanced Mac OS  75 hrs
Recommended Prereq: KCMS 0500. This course prepares students for advanced Mac OS tasks including working with images and video, printing, automation and troubleshooting.

KCMS 0810 – Microsoft Technology Associate Networking Fundamentals  50 hrs
Recommended Prereq: KCMS 0180 or instructor permission. This course allows students to gain a solid foundation for understanding networking concepts upon which more advanced topics and technologies can be built. Students will learn networking components, understand the OSI model, core TCP/IP protocols, and how to network components. For students to successfully pass this course, they must earn Microsoft MTA certification #98-366.
KCMS 0820 – Microsoft Technology Associate Security Fundamentals 50 hrs
Recommended Prereq: KCMS 0180 or instructor permission. This course offers students a chance to discover and demonstrate knowledge of network security fundamentals and earn a Microsoft Technology Associate (MTA) certification. This course will also help prepare the students for further courses and prove commitment and understanding of a variety of entry-level technology concepts. This course is in line with the HigherEd Utah 2020 Master Plan by help providing another source for post-secondary degree/training.

KCMS 0830 – Microsoft Technology Assoc Windows Server Administration Fundamentals 50 hrs
Recommended Prereq: KCMS 0180 or instructor permission. Microsoft Technology Associate Windows Server Administration Fundamentals course is designed to provide students with an explanation and understanding of fundamental server administration concepts. This training course prepares students for Microsoft exam 98-365. This course will lead to certification which is in line with the HigherEd Utah 2020 Master Plan by help providing another source for post-secondary degree/training.

KCMS 0840 – Microsoft Technology Associate Windows Operating System Fundamentals 50 hrs
Recommended Prereq: KCMS 0180 or instructor permission. Networking Fundamentals is designed to provide students with an explanation and understanding of fundamental networking concepts. This training course prepares students for Microsoft exam 98-349. This course will lead to certification which is in line with the HigherEd Utah 2020 Master Plan by help providing another source for post-secondary degree/training.

KCNA 0010 – CPR Health Care Professionals 4 hrs
Prepares and certifies students in CPR for Health Care Professionals.

KCNA 0100 – Patient Care Theory 74 hrs
Students learn the skills required to meet the needs of acute, chronic, long-term, and chronically ill patients in hospitals, long-term care facilities, and in the home, while preparing for the state Certified Nurse Assistant exam.

KCNA 0110 – Skills Lab 20 hrs
This lab must be taken concurrently with the Patient Care Theory course. Students will practice and demonstrate patient care skills that align with the theory portion of the program.

KCNA 0120 – Patient Care Long Term Clinic 16 hrs
Students practice and demonstrate patient care skills in a long term care facility.

KCNA 0140 – Patient Care Acute Care Clinic 12 hrs
Students practice and demonstrate patient care skills in a hospital.
KECT 0110 – Signal Processing 60 hrs
Recommended Prereq: KET2 0106. This course will cover the fundamentals of signal processing, to include modern Digital Signal Processing, complete coverage of systems, principles of electronic signals, both analog and digital. AM/FM circuits, modulation and multiplexing techniques, acquisition, reconstruction, sampling and quantization, Phase Locked Loop circuits, and hands-on projects of processing circuits.

KECT 0111 – Electronic COM Systems 120 hrs
Recommended Prereq: KECT 0110. This course will cover the principles of Electronic Communication Systems, a systems approach covering communications technologies, wave propagation, HF fundamentals, AM/FM circuits, AM/CB/SSB transceivers, Multiplexing (DEMUX), Data Transmission Techniques, Transmission Lines, Smith Chart usage, Communication Tests and Measurements, and Electromagnetic Interference Testing.

KECT 0112 – Antennas, Transmission Lines & Towers 60 hrs
Recommended Prereq: KECT 0111. This course will provide basic Antennas concepts, antenna theory and practical designs, antenna projects, antenna impedance, transmission Lines, antenna measurements and Antenna Modeling. In the Tower portion of the course you will learn the proper procedures working with towers, inspections, performing maintenance, Cables, Connections, and safety measures for antennas and towers.

KECT 0113 – Telecommunications & Data Communications 72 hrs
Recommended Prereq: KECT 0140. This course will cover Telecommunications and Data Communications Technologies that support modern communication systems, Analog & Digital Telephony, protocols, optical wiring, wireless telephony, safety, transmission services, cabling, test equipment, distribution methods, Interfacing, Internet, networks and troubleshooting. This course will prepare for the TCM certification.

KECT 0114 – FCC License Preparation - General Radiotelephone Operator License 36 hrs
KECT 0141 – Microwaves and Radar Systems  
72 hrs
Recommended Prereq: KECT 0112. This course covers microwave systems, devices, and provides an understanding of how everything fits together to make communications, navigation, and equipment. Topics include microwave fundamentals, power, equipment for measuring microwave, signal control components, IC amplifiers, microwave oscillators, receivers, microwave tubes, antennas, relay, satellite and radar systems.

KECT 0151 – Fiber Optics Installer Certification  
96 hrs
The Fiber Optics course will cover, installation, preparation, troubleshooting, and design of fiber optics cables and systems. Lab projects will include cable preparation and connectors, splicing, OTDR usage and industry standards. Theory and Hands-on training covers all competencies required of a FOI Technician and knowledge to pass the examination.

KEET 0100 – LabVIEW Basics: Introd & Dev.  
96 hrs
Prereq: Experience with Microsoft Windows and writing algorithms in the form of flowcharts or block diagrams. The course introduces the LabVIEW environment, its features, dataflow programming, and common architectures. It also teaches you to design complete, stand-alone applications. Prepares for Associate Developer Cert.

KEET 0400 – Schematic Capture & Simulation  
72 hrs
Prereq: Completed Electronics Core or Equivalent. This course introduces the Multisim integrated capture and simulation design environment. Learn how to build a schematic and evaluate circuit performance through interactive simulation and analyses.

KEET 0500 – Printed Circuit Board Design  
72 hrs
Prereq: Completed Electronics Core or equivalent. Recommended Preq: KEET-0400. This PCB layout course provides the basics of the Utiliboard environment. It prepares you to transfer Multisim schematic netlists to Ultiboard and design a printed circuit board for export to production.

KELA 0151 – Universal Assembly and Repair  
72 hrs
A project oriented course that provides basic soldering and assembly skills required of electronics technicians. The focus is on thru-hole soldering to industry specifications.

KELA 0161 – Surface Mount Technology  
72 hrs
Recommended Prereq: KELA 151 or equivalent education or experience, must provide proof of this to dept. Learn theory, installation, and quality workmanship methods involved in surface mount technologies (SMT), including component identification, placement, and rework soldering techniques.

KELA 0172 – IPC-A-610E Cert IPC Specialist  
36 hrs
Designed and certified by IPC. Enables students to make correct accept/reject decisions for appropriate class(es) of electronic assemblies. Certification earned through examination.
KELA 0175 – IPC-A-610E IPC Certified IPC Specialist Recertification/Challenge Option 12 hrs
Recommended Prereq: Previous IPC Certifications. Designed and certified by IPC, this course supports challenge testing. A "Challenge Test" will involve the applicant completing the same skills measurement examinations as is required of those taking the full course. Individuals are limited to take a challenge test more than once in any twelve-month period.

KELA 0190 – Basic Assembly and Soldering 24 hrs
A basic assembly and soldering skills course required of communications electronics technicians. The focus is hand-on thru-hole soldering to industry specifications.

KEMA 0167 – IPC-J-STD-001E Cert 36 hrs
Prereq: Students must have quality through-hole and surfact-mount soldering background: Universal Assembly and Repair (KELA 0151 or equivalent) Surface Mount Assembly (KELA 0161 or equivalent) IPC 610 E Certification Specialist (KETA 0172 or equivalent) or instructor permission based on industry experience or other factors that suggest the student will be successful in this course. J-STD-001 E is a consensus standard for soldering materials/ processes using lead-tin and lead-free solder. Course has practical and academic elements. Certification requires practical and written exams.

KEMA 0168 – IPC/WHMA-A-620 Cert 64 hrs
IPC/WHMA-A-620 is a consensus standard for requirements and acceptance for cable and wire harness assemblies. Prepares students for the IPC written Certification Exam.

KEMA 0169 – IPC/WHMA-A-620B CIS Cert 60 hrs
This course will cover the Requirements and Acceptance for Cable and Wire Harness Assemblies, as defined by the IPC/WHMA-A-620B industry-consensus standard. The student will learn the criteria for wire prep, soldering to terminals, crimping, ultrasonic welding, splicing, connectors, molding, marking, coax cables, wrapping, and be prepared to obtain IPC-620B CIS certification.

KEMA 0170 – IPC-J-STD-001E Certified IPC Specialist Recertification/Challenge Option 16 hrs
Prereq: Proof of previous J-STD IPC Certification or completion of 151 and 161 courses or equivalent. Designed and certified by IPC, this course supports challenge testing. A "Challenge Test" will involve the applicant completing the same skills measurement examinations as is required of those taking the full course. A challenge test can only be taken once in any twelve-month period.

KEMA 0171 – IPC/WHMA-A-620 Certified IPC Specialist Recertification/Challenge Option 12 hrs
Recommended Prereq: Previous IPC Certifications. Designed and certified by IPC, this course supports challenge testing. A "Challenge Test" will involve the applicant completing the same skills measurement examinations as is required of those taking the full course. A challenge test can only be taken once in any twelve-month period.
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>KEMA 0172</td>
<td>Introduction to Mfg Processes</td>
<td>60</td>
</tr>
<tr>
<td>KEMA 0180</td>
<td>Electromechanical Project</td>
<td>70</td>
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<tr>
<td>KESL 0010</td>
<td>ESL Pre to-Beginning Literacy</td>
<td>1-20</td>
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<tr>
<td>KESL 0020</td>
<td>Low Beginning ESL</td>
<td>1-20</td>
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<tr>
<td>KESL 0110</td>
<td>Beginning Grammar/Writing</td>
<td>110</td>
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<td>KESL 0112</td>
<td>Beginning Grammar/Writing</td>
<td>90</td>
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<tr>
<td>KESL 0120</td>
<td>Beginning Reading</td>
<td>60</td>
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<td>KESL 0122</td>
<td>Beginning Reading</td>
<td>45</td>
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<tr>
<td>KESL 0150</td>
<td>Beginning Listening and Speaking</td>
<td>60</td>
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<tr>
<td>KESL 0152</td>
<td>Beginning Listening/Speaking</td>
<td>45</td>
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<tr>
<td>KESL 0210</td>
<td>Intermediate Grammar/Writing</td>
<td>120</td>
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KEMA 0172 – Introduction to Mfg Processes
This course is a study of Manufacturing Processes, covering types of processes and their elements such as chemicals, thermal, material properties, systems, manufacturing science, dimensions, tolerances, composites, metallurgy, processing of ceramics/cermets, sheet metal, surface processing operations, mechanical assembly, process technologies, and quality control and inspection.

KEMA 0180 – Electromechanical Project
This project-based course combines material from previous courses with industry requirements to complete an entire project. Mechanical/electronics assembly/safety/handling/cleaning, and cabling/harnessing are emphasized.

KESL 0010 – ESL Pre to-Beginning Literacy
Prereq: CASAS 0-150. Introduction to basic reading, writing, and communication skills.

KESL 0020 – Low Beginning ESL
Prereq: CASAS 151-179. Introduction to basic reading, writing, and communication skills.

KESL 0110 – Beginning Grammar/Writing
Prereq: CASAS 180-200, CELSA 10-20. Introduction to basic parts of speech, verb forms, and writing.

KESL 0112 – Beginning Grammar/Writing
Prereq: CASAS 180-200, CELSA 10-20. Introduction to basic parts of speech, verb forms, and writing.

KESL 0120 – Beginning Reading
Prereq: CASAS 180-200, CELSA 10-20. Introduction to general reading skills.

KESL 0122 – Beginning Reading
Prereq: CASAS 180-200, CELSA 10-20. Introduction to general reading skills.

KESL 0150 – Beginning Listening and Speaking Skills
Prereq: CASAS 180-200, CELSA 10-20. Introduction to basic listening and speaking skills.

KESL 0152 – Beginning Listening/Speaking
Prereq: CASAS 180-200, CELSA 10-20. Introduction to basic listening and speaking skills.

KESL 0210 – Intermediate Grammar/Writing
Prereq: CASAS 201-220, CELSA 21-39. Practice with basic verb forms and parts of speech. Introduction to perfect tenses. Short pararaph writing with correct grammar, sentence word order, capitalization and punctuation.
KESL 0212 – Intermediate Grammar/Writing 90 hrs
Prereq: CASAS 201-220, CELSA 21-39. Practice with basic verb forms and parts of speech. Introduction to perfect tenses. Short paragraph writing with correct grammar, sentence word order, capitalization and punctuation.

KESL 0220 – Intermediate Reading 60 hrs
Prereq: CASAS 201-220, CELSA 21-39. The focus is on developing reading and vocabulary skills.

KESL 0222 – Intermediate Reading 45 hrs
Prereq: CASAS 201-221, CELSA 21-39. The focus is on developing reading and vocabulary skills.

KESL 0250 – Intermed Listen/Note-take 60 hrs
Prereq: CASAS 201-221, CELSA 21-39. Introduce and develop listening strategies, note-taking and organizational skills, vocabulary building, and speaking abilities in various contexts.

KESL 0251 – Intermed Listening/Speaking 60 hrs
Prereq: CASAS 201-220, CELSA 21-39. Introduce and develop listening and speaking fluency in various contexts, as well as build vocabulary.

KESL 0252 – Intermed Listening/Speaking 45 hrs
Prereq: CASAS 201-220, CELSA 21-39. Develop intermediate listening and speaking skills.

KESL 0253 – Intermed Listen/Note Taking 45 hrs

KESL 0310 – Advanced Grammar/Writing 120 hrs

KESL 0312 – Advanced Grammar/Writing 90 hrs

KESL 0320 – Advanced Reading 60 hrs
Prereq: CASAS 221-235, CELSA 40-57. Advanced reading and vocabulary development.

KESL 0322 – Advanced Reading 45 hrs
Prereq: CASAS 221-235, CELSA 40-57. The focus is on developing advanced reading and vocabulary skills.
KESL 0350 – Advanced Listen/Note-take 60 hrs
Prereq; CASAS 221-235, CELSA 40-57. Refine listening strategies, note-taking and organizational skills, academic vocabulary building, cooperative speaking activities, and test-taking skills.

KESL 0351 – Advanced Listening and Speaking 60 hrs
Prereq: CASAS 221-235, CELSA 40-57. Develop and refine listening skills and speaking fluency in various contexts, as well as build vocabulary.

KESL 0352 – Advanced Listening/Speaking 45 hrs
Prereq: CASAS 221-235, CELSA 40-57. Develop and refine listening and speaking fluency in various contexts.

KESL 0353 – Advanced Listen/Note Taking 45 hrs
Prereq: CASAS 221-235, CELSA 40-57. Develop advanced listening strategies and note-taking skills.

KESL 0452 – Language Lab 45 hrs
Prereq: CASAS 201-235, CELSA 21-57. Improve pronunciation, conversational skills, language skills, and typing ability.

KESL 0455 – Language Lab 60 hrs
Prereq: CASAS 180-235; CELSA 10-57. Computer-aided instruction in spelling, pronunciation, grammar, vocabulary, reading, writing, and keyboarding, and/or communicative activities to develop fluency.

KESL 0470 – Developing Vocabulary And Dictionary Skills 60 hrs
Prereq: CASAS 201-250; CELSA 40-66. Develop and build essential vocabulary for work, school, and specific content areas. Learn and develop useful dictionary skills.

KESL 0472 – Developing Vocabulary and Dictionary Skills 45 hrs
Prereq: CASAS 221-250; CELSA 40-66. Develop and build essential vocabulary for work, school, and specific content areas. Learn and develop useful dictionary skills. ESL level must be at least Level 3.

KESL 0480 – Effective Communication Skills for Work & Study 60 hrs
Prereq: CASAS 201-250; CELSA 40-66. Develop effective skills as needed for work and study for both oral and written communication. Develop an understanding of emotional intelligence and its impact.

KESL 0482 – Effective Communication Skills for Work & Study 45 hrs
Prereq: CASAS 201-250; CELSA 40-66. Develop effective skills as needed for work and study for both oral and written communication. Develop an understanding of emotional intelligence and its impact. ESL level must be at least Level 3.
KESL 0490 – Reading For Career Development 60 hrs
Prereq: CASAS 221-250; CELSA 40-66. Strengthen reading skills as needed for career and technical training using a variety of materials and in a variety of contexts.

KESL 0492 – Reading for Career Development 45 hrs
Prereq: CASAS 221-250; CELSA 40-66. Strengthen reading skills as needed for career and technical training using a variety of materials and in a variety of contexts.

KESL 0711 – Pre-College Writing 60 hrs
Prereq: CASAS 236-250, CELSA 58-75. Students are taught correct organizational styles for writing summaries of readings and college level essays.

KESL 0712 – Pre-College Writing 45 hrs
Prereq: CASAS 236-250, CELSA 58-75. Students are taught correct organizational styles for writing summaries of readings and college level essays.

KESL 0721 – Pre-College Reading 60 hrs
Prereq: CASAS 236-250, CELSA 58-75. Advanced reading and vocabulary skills are practiced.

KESL 0722 – Pre-College Reading 45 hrs
Prereq: CASAS 236-250, CELSA 58-75. Advanced reading and vocabulary skills are practiced.

KESL 0731 – Pre-College Listening/Speaking 30 hrs
Prereq: CASAS 236-250; CELSA 58-75. Develop listening skills for determining key information in a talk or lecture. Develop conversational skills. Develop presentation skills.

KESL 0732 – Pre-College Listening/Speaking 21 hrs

KESL 0740 – Pre-College Computer Skills 60 hrs
Prereq: CASAS 236-250, CELSA 58-75. Introduction and practice as needed for college success: word processing, e-mail, internet and writing lab.

KESL 0742 – Pre-College Computer Skills 45 hrs
Prereq: CASAS 236-250, CELSA 58-75. Introduction and practice as needed for college success: word processing, email, internet and writing lab.

KESL 0751 – Pre-College Grammar 60 hrs
Prereq: CASAS 236-250, CELSA 58-75. Students will refine their grammar abilities for linguistic competence and accuracy.
KESL 0752 – Pre-College Grammar
Prereq: CASAS 236-250, CELSA 58-75. A refining of grammar abilities for linguistic competence and accuracy.

KET2 0101 – Electronics Math
The Electronics Math course will cover basic math, a review of arithmetic fundamentals, metric notation, and square roots. Algebra fundamentals, linear equations, graphing, and logarithms in electronics is also covered. The fundamentals of trigonometry, and statistics is also covered, as well as the proper usage of the scientific calculator.

KET2 0102 – Technical Writing
This course will cover the principles of technical writing, organization, formats, and knowing the audience. It will cover formats of page design, elements of reports, formats of correspondence, and writing proposals. The course will cover the skills needed to write and support required engineering related documentation, such as proposals and engineering lab reports.

KET2 0103 – DC Fundamentals & Circuits
Recommended Prereq: KET2 0101 or equivalent. The course will cover DC fundamentals, resistive components, Ohms Law, Power calculations, Series and Parallel circuit formulas and characteristics. The usage of meters to measure voltage, current, resistance, and DC power sources. The course is a balance of theory, and hands-on, including measurements, troubleshooting, and circuit construction.

KET2 0104 – AC Fundamentals & Circuits
Recommended Prereq: KET2 0103 or equivalent. The course will cover the fundamentals of AC circuits, transformers, inductors, capacitors, RL/RC, and RCL circuits, passive filters, and resonance circuits. The course will cover AC calculations, measurements, and troubleshooting. In addition, usage of Oscilloscopes, function generators, and frequency counters will be addressed.

KET2 0105 – Analog Devices & Circuits
Recommended Prereq: KET2 0104 or equivalent. Coverage of a variety of semi-conductor devices, operating characteristics, calculations, circuit applications, measurement and troubleshooting; including diodes, transistors, V-regulators, Amps, and FETs. Also include oscillators, SCR, multivibrators, and operational amplifiers circuits. Analog is covered through applications exploration.

KET2 0106 – Digital Circuits & Apps
Recommended Prereq: KET2 0105 or equivalent. Covers digital fundamentals, electrical characteristics of digital ICs; testing and troubleshooting of logic circuits and applications; conversions/simplification. Applications; includes flip-flops, register memory circuits, arithmetic counting, displays, conversion. The focus will be on digital apps and will include hands-on projects.
KET2 0107 – CET Associate Tech Cert 32 hrs
This course is designed to assist in the preparation for the CET Associate certification, for technicians who have less than two years experience or trade school training for electronics technicians. This industry certification represents your body of knowledge for Electronics Technicians. The course itself is a review of Electronics Technology, approximately 2 years of knowledge.

KET2 0108 – Test and Measurement Instrumentation 60 hrs
Recommended Prereq: KET2 0106 or equivalent. Through a hands-on approach, the full-usage of common instruments such as Power Supplies, DMM, Oscilloscopes, and Spectrum/Logic Analyzers. The exploration of the Test and Measurement Industry, ATE, covering tools used to analyze, validate, and verify measurements of electronic and mechanical systems, operating principles, strengths and weaknesses.

KET2 0111 – Basic Computer Literacy 36 hrs
Provides computer literacy skills including Windows, email/internet, word-processing, and spreadsheets.

KET2 0171 – Microprocessors 96 hrs
Recommended Prereq: KET2 0106. Covers basic concepts of microcomputer and microprocessor architecture, assembly language and machine language programming, debugging and troubleshooting. Interfacing hardware/software, control and feedback is covered. The Freescale 68K, and HCS12 are covered devices.

KET2 0172 – Embedded Controllers 96 hrs
Recommended Prereq: KET2 0106. This class covers the fundamentals of the microcontroller family architecture and instruction set. Topics include the architecture, instruction set, writing and editing assembly programs, and programming devices. The PIC controller is covered.

KET2 0173 – Troubleshooting 96 hrs
Recommended Prereq: KET2 0106. Covers the principles, techniques, and procedures for troubleshooting electronics equipment. Covers power supplies, audio and RF systems, analog, and digital systems. Emphasis is on the use of test equipment and the troubleshooting process.

KET2 0220 – Coop. Internship - Elective 96 hrs
Students participate in cooperative internship with a local company. Student and instructor will work with company to ensure students complete specific tasks and assignments in a workplace environment to enhance their competency.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>KET2 0250</td>
<td>Programmable Logic Controllers</td>
<td>96 hrs</td>
</tr>
<tr>
<td></td>
<td>Programmable Logic Controllers course will provide coverage of all aspects of programming, installation, maintaining procedures and hardware components. Development of wiring diagrams, Ladder Logic Programs, Programming of Timers, Counters, Data Manipulation, Sequencer and Shift Register Instructions. Troubleshooting of process control, Network Systems, SCADA and usage of the CLX Controllers.</td>
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</tr>
<tr>
<td>KFLT 0250</td>
<td>Fork Lift Training</td>
<td>0 hrs</td>
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<tr>
<td></td>
<td>Students learn the basic skills needed to safely operate fork lifts and pallet jacks.</td>
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<tr>
<td>KGED 0500</td>
<td>GED Language Arts/Writing</td>
<td>64 hrs</td>
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<tr>
<td></td>
<td>Recommended Coreq: KGED 600, KABM. Designed for individual study to prepare for the GED. Curriculum includes Reading/Writing. Test-taking tips are presented in the course to lessen test anxiety and to encourage confidence.</td>
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<tr>
<td>KGED 0600</td>
<td>GED Test Preparation</td>
<td>64 hrs</td>
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<tr>
<td></td>
<td>Prereq: TABE score of 8.0 in comprehension and vocabulary; complete levels 1-7 of KABM 0115 to enter level 8, GED Math. Recommended Coreq: KGED 0500, KABM; optional KALL 0110. Students prepare for the GED Social Studies, Science Exams. Test-taking tips are presented in the course to lessen test anxiety and encourage confidence.</td>
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<tr>
<td>KHUC 0190</td>
<td>Health Unit Coordinating</td>
<td>60 hrs</td>
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<td></td>
<td>Students learn the skills required to work as a member of the health care team providing non-clinical support for patient care: maintain patient charts, transcribe doctors orders, order diagnostic tests/procedures, etc.</td>
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<tr>
<td>KHUC 0210</td>
<td>Cooperative Externship</td>
<td>78 hrs</td>
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<tr>
<td></td>
<td>Students participate in a cooperative externship with a local hospital. A cooperative preceptor assists with specific assignments to enhance the students competency and proficiency for work in a hospital nursing unit.</td>
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<tr>
<td>KHVT 0005</td>
<td>Heavy Duty Brakes</td>
<td>0 hrs</td>
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<tr>
<td></td>
<td>Provides theory and hands-on experience for students on maintenance and repair of air ABS, hydraulic brakes and wheel bearing systems.</td>
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<tr>
<td>KHVT 0010</td>
<td>Preventive Maint. &amp; Inspection</td>
<td>0 hrs</td>
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<tr>
<td></td>
<td>Students prepare for complete inspection on the vehicle to ensure a safe operation. Covers inspections and repairs on items such as wheel bearings, engine inspections, checking lights, oil levels and tire and frame inspections.</td>
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<tr>
<td>Course ID</td>
<td>Course Title</td>
<td>Hours</td>
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<tr>
<td>KHVT 0015</td>
<td>Suspension and Steering</td>
<td>0 hrs</td>
</tr>
<tr>
<td>KHVT 0020</td>
<td>Heavy Duty HVAC</td>
<td>0 hrs</td>
</tr>
<tr>
<td>KHVT 0025</td>
<td>Diesel Engines</td>
<td>0 hrs</td>
</tr>
<tr>
<td>KHVT 0030</td>
<td>Electrical/Electronic Systems</td>
<td>0 hrs</td>
</tr>
<tr>
<td>KHVT 0035</td>
<td>Safety and Shop Skills</td>
<td>0 hrs</td>
</tr>
<tr>
<td>KHVT 0040</td>
<td>Hydraulics I</td>
<td>0 hrs</td>
</tr>
<tr>
<td>KHVT 0060</td>
<td>Drive Trains</td>
<td>0 hrs</td>
</tr>
<tr>
<td>KMAT 0010</td>
<td>Machine Shop Intro Work Ethics</td>
<td>25 hrs</td>
</tr>
<tr>
<td>KMAT 0050</td>
<td>Blueprint Reading</td>
<td>50 hrs</td>
</tr>
</tbody>
</table>

KHVT 0015 – Suspension and Steering
Provides theory and hands-on experience in maintenance and repair of the heavy duty steering and suspension systems. Covers shocks, kingpins, drag links, tie rods, steering bear box, straight axles, wheels, tire and frame service.

KHVT 0020 – Heavy Duty HVAC
Provides theory and hands-on experience for students on troubleshooting and repair of heavy duty truck air conditioning systems, including condensers, check valves, driers, compressors, evaporators, controls and recovering, handling and installing different refrigerants.

KHVT 0025 – Diesel Engines
Provides theory and hands-on training on basic operation, parts and overhaul procedures of a diesel engine. Students receive detailed instruction on engine lubricants, air cooling and exhaust systems.

KHVT 0030 – Electrical/Electronic Systems
Provides theory and hands-on training on basic electrical components and systems. Includes alternators, lights, wiring, schematics, symbols and circuits. Students wire various circuits and use test equipment to troubleshoot components and systems.

KHVT 0035 – Safety and Shop Skills
Provides theory and hands-on training on basic skills and safety needed for the diesel shop, including how to lift heavy materials properly, working with electrical machinery fire extinguishers, welding safety and hand tools.

KHVT 0040 – Hydraulics I
Provides instruction and hands-on training for fluid power (hydraulics) as used in modern mobile equipment; includes practical theory and troubleshooting on hydraulic/pneumatic components.

KHVT 0060 – Drive Trains
Provides theory and hands-on experience on maintenance and repair of the heavy duty drive train systems. Covers clutches, transmissions, drive lines and differentials.

KMAT 0010 – Machine Shop Intro Work Ethics
Students learn job performances and attitudes that employers expect from their employees and are exposed to the machine shop as a possible career.

KMAT 0050 – Blueprint Reading
Recommended Prereq: KMAT 0010. Students learn to read and interpret mechanical drawings and apply them to machining projects.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>KMAT 0105</td>
<td>Basic Mill</td>
<td>60 hrs</td>
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<tr>
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<td>Recommended Prereq: KMAT 0100. Students learn the basic operation of Knee Mills.</td>
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<tr>
<td>KMAT 0155</td>
<td>Advanced Mill</td>
<td>60 hrs</td>
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<tr>
<td></td>
<td>Recommended Prereq: KMAT 0105. Students learn the advanced operation of Knee Mills.</td>
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<tr>
<td>KMAT 0205</td>
<td>Basic Lathe</td>
<td>60 hrs</td>
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<tr>
<td></td>
<td>Recommended Prereq: KMAT 0010. Students learn the basic operation of metal cutting lathes.</td>
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<tr>
<td>KMAT 0250</td>
<td>Advanced Lathe</td>
<td>60 hrs</td>
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<tr>
<td></td>
<td>Recommended Prereq: KMAT 0205. Students learn the advanced operation of metal cutting lathes.</td>
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<tr>
<td>KMAT 0305</td>
<td>Basic Grinding</td>
<td>60 hrs</td>
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<tr>
<td></td>
<td>Recommended Prereq: KMAT 0010. Students learn the basic operation of Pedestal and Surface Grinders.</td>
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<tr>
<td>KMAT 0355</td>
<td>Advanced Grinding</td>
<td>60 hrs</td>
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<tr>
<td></td>
<td>Recommended Prereq: KMAT 0305. Students learn the advanced operation of Pedestal and Surface Grinders.</td>
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<tr>
<td>KMCB 0110</td>
<td>Medical Filing</td>
<td>15 hrs</td>
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<td>This class covers basic concepts and rules governing medical filing, including the correct use of terminology. Both theory and practical applications are covered.</td>
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<tr>
<td>KMCB 0120</td>
<td>Medical Terminology</td>
<td>30 hrs</td>
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<td>Through lecture and video presentations, students learn 300 medical elements (roots, suffixes, and prefixes), with emphasis on pronunciation, definitions, and usage.</td>
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<tr>
<td>KMCB 0130</td>
<td>Anatomy/Med. Coding &amp; Billing</td>
<td>40 hrs</td>
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<td>Recommended Prereq: KMCB 0120 Medical Terminology. This class covers the basis human anatomy and physiology concepts required to help the student prepare for the AACP and/or AHIMA national certification tests. Terminology will be covered with emphasis on body structures and systems.</td>
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<tr>
<td>KMCB 0140</td>
<td>Medical Office Software</td>
<td>70 hrs</td>
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<td>The student will use medical office software to enter patient information, payment transactions, print statements and reports, create and submit insurance claims, prepare collection letters and reports, and schedule appointments.</td>
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<tr>
<td>KMCB 0165</td>
<td>Intro to Electronic Health Records</td>
<td>50 hrs</td>
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<td>Students learn EHR documentation through industry-standard software. The students learn electronic charting with emphasis from the basic patient’s chart to labs, tests, codes and templates. The students apply their knowledge by working through many case histories using the Spring Charts EHR software.</td>
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</tbody>
</table>
KMCB 0170 – ICD-10-CM Medical Coding
Recommended Prereq: KMCB 0120 and KMCB 0130. This course covers basic concepts and rules governing medical insurance coding, including the correct use of terminology specific to the diagnostic coding process. It covers all the newly expanded disease classifications and provides the greater specificity required by ICD-10-CM. Lectures and practical application will be utilized. This course prepares students for the ICD 10 CM Certification.

KMCB 0200 – Outpatient Medical Coding
Recommended Prereq: KMCB 0120 and KMCB 0130. This course covers concepts and rules governing diagnostic and procedural coding in the outpatient setting using the ICD-9, CPT, and HCPCS coding manuals. Course will include web-enhanced lectures, exercises, and practical application in a structured classroom environment. Successful completion will help prepare students to take the AAPC and/or AHIMA national coding certification exams.

KMCB 0210 – Cooperative Externship 1
Recommended Prereq: KMCB 0200. The externship consists of 80 hours of work experience in an approved medical facility under professional supervision to give hands-on experience in the medical coding and billing profession.

KMCB 0221 – Intro to Med Insurance/Pharm
Recommended Prereq: KMCB 0120 and KMCB 0200. Students will learn basic concepts of health insurance, benefit determination and how to fill out an insurance form. Students will also learn basics of pharmacology including clinical uses of drugs.

KMCB 0241 – Cooperative Externship 2
Recommended Prereq: KMCB 0170 and KMCB 0165. The externship consists of 80 hours of work experience in an approved medical facility under professional supervision to give hands-on experience with medical records.

KMDT 0010 – Introduction to Media Design
An introduction to various multimedia applications: graphics, multi-media text, animation, sound, video, virtual reality and interactive features of multimedia. Learn the computer systems used to develop and play back multimedia products.

KMDT 0020 – Graphic Design Applications
Focuses on familiarizing students with graphic design principles including color, typography and layout.

KMDT 0031 – Design Principles
Recommended Prereq: KMDT 0020. This course focuses on basic elements of design; line, shape format, texture, and spatial arrangement. Students will complete assignments designed to integrate these concepts into a variety of media types.
### KMDT 0040 – Computer Illustration 90 hrs
Introduces concepts, technical information and artistic requirements for completing a successful illustration using the computer as a medium; includes creative techniques for drawing, designing, filling, blending and texturing.

### KMDT 0101 – Design & Internet Technologies 90 hrs
An introduction to the technologies associated with design applications for the internet; includes the basic use of XHTML, JavaScript, DHTML, DOM and the technologies involved with design and the internet.

### KMDT 0111 – Web Design Fund. 120 hrs
Recommended Prereq: Successful completion of KAOS 0170. Computer Concepts or upon instructor approval. The Web Design Fundamentals course covers web design creation and publication to the Internet such as: basic HTML, forms, graphics, HTML editors, publishing to the Internet, and basic web design and graphic layout principles.

### KMDT 0120 – Web Design Authoring 120 hrs
An introduction to web authoring tools that allows for the smooth integration of a variety of multimedia creations into a finished movie title; includes creating a multimedia CD/DVD that can be printed or published to the internet.

### KMDT 0130 – Web Authoring Apps 90 hrs
Recommended Prereq: KMDT 0320 or related knowledge and experience. Students will learn to design and create user-friendly, interactive websites without requiring a knowledge of developer skills. Students will design with useful graphic tools and publish HTML pages that conform to the latest web standards.

### KMDT 0140 – Web Design Animation 90 hrs
An introduction to a variety of elements involving web site animation. Learn applications that allow a web designer to create a variety of graphic objects that add visual stimulation to the web site.

### KMDT 0171 – Electronic Portfolio 90 hrs
The Electronic Portfolio course guides the student to prepare an electronic, web and physical version of their portfolio. When finished, students will have created a complete marketing package of their work on the web and via a CD ROM.

### KMDT 0205 – Interactive Media Scripting 90 hrs
Provides essential training for interactive scripting that supports authoring software programs such as Flash and Director. Students complete a series of projects which use programs to create interactive media projects.
KMDT 0210 – Web Developer Final Project 90 hrs
Students complete a final project of their choice with instructor approval. Final projects are designed as they can be put forward in a proposal form or in a portfolio format.

KMDT 0220 – Web Programming Introduction 90 hrs
An overview of various key Web development topics focused on Web applications that are dynamic, data-driven and interactive. An introduction to SML, VB. NET, ADO. NET, C#, CGI-Perl, Java, JSP, PHP, ColdFusion MX, Access, SQL.

KMDT 0230 – Web Application Scripting I 120 hrs
Recommended Prereq: KMDT 0111. Teaches basic JavaScript programming concepts with syntax for program development and implementation. Create and modify simple JavaScript language applications and the tools to create more complex applications.

KMDT 0240 – Web Application Scripting II 120 hrs
Recommended Prereq: KMDT 0111. Learn the advanced video capturing and editing techniques used in non-linear and linear editing programs on desktop computers. An introduction to production assignments and staffing, camera operation and positions and graphics.

KMDT 0300 – Desktop Publishing Fund 90 hrs
An essential course for anyone looking for jobs in printing companies or prepress service bureaus. Learn the fundamentals of desktop publishing design and layout, and detailed use of at least one major publishing software program.

KMDT 0311 – Image Editing 90 hrs
Edit, combine and manipulate digital images using industry standard software. Projects include creating line art, retouching damaged photos, building panoramic scenes, making digital collages and adding special effects.

KMDT 0320 – Desktop Publishing Apps 90 hrs
Designed to teach skills for creating document layouts that are ready for printing and Web distribution using leading industry publishing software such as QuarkXPress. Maximize productivity for producing many different documents.

KMDT 0520 – Video Production I 90 hrs
Covers the fundamentals of video capturing and video editing and detailed instruction in the use of non-linear editing programs including types of effects, titles, audio effects, equalization, videotape masters and EDLs.
KMOA 0101 – First Aid / CPR 10 hrs
Students will understand the importance of knowing what to do in a timely manner during and shortly after a medical emergency including basic first aid and Healthcare provider CPR.

KMOA 0111 – Medical Terminology 70 hrs
Learn the terminology needed to be successful in the medical and health care fields.

KMOA 0120 – Medical Law and Ethics 60 hrs
Provides an overview of the legal and ethical issues that impact the health care setting.

KMOA 0130 – Psychology for Healthcare 30 hrs
Provides an overview of the basic principles of psychology required in a health care environment.

KMOA 0145 – Anatomy and Physiology 50 hrs
A study of the structure and function of the human body. Includes an overview of all organ systems including processes and diagnostic treatment modalities.

KMOA 0155 – Medical Office Procedures I 60 hrs
The first in a series of three that teaches the basic skills needed to perform clerical functions and proper insurance, coding and billing procedures efficiently in a medical office setting.

KMOA 0170 – Medical Office Procedures II 60 hrs
The second in a series of three that teaches the basic skills needed to perform clerical functions and proper insurance, coding and billing procedures efficiently in a medical office setting.

KMOA 0180 – Medical Office Procedures III 60 hrs
The third in a series of three that teaches the basic skills needed to perform clerical functions and proper insurance, coding and billing procedures efficiently in a medical office setting.

KMOA 0210 – Medical Office Externship 90 hrs
Provides an opportunity for the student to practice and demonstrate their administrative skills in a health care environment. This unpaid externship takes place in a working office or clinic under supervision.

KMOA 0211 – Medical Office Externship 160 hrs
Recommended Prereq: KMOA 0180. This course provides an opportunity for the student to practice and demonstrate their administrative skills in a health care setting. This unpaid externship takes place in a medical office or clinic under supervision.
KNIT 0751 – Routing and Switching I (CCNA) 90 hrs
This Cisco Academy course provides a hands-on introduction to networking and the Internet using tools and hardware commonly found in the home and small business environments.

KNIT 0756 – Routing & Switching II (CCNA) 90 hrs
Recommended Prereq: KNIT 0751. This Cisco Academy course will help develop skills needed to provide support to users of small-to-medium-sized networks across a range of applications. The course provides an introduction to routing, remote access, network services.

KNIT 0760 – Routing & Switching III (CCNA) 90 hrs
Recommended Prereq: KNIT 0756. This Cisco Academy course helps develop the skills necessary to maximize enterprise LAN and WAN performance. The course provides advanced configurations of switching and routing protocols, access control lists, and WAN links.

KNIT 0765 – Routing & Switching IV (CCNA) 90 hrs
Recommended Prereq: KNIT 0760. This Cisco Academy course will develop the skills to design small enterprise LANs and WANs. The course will introduce how to collect customer requirements, translate those requirements into equipment, and create a network topology.

KNIT 0780 – Intro to Wireless Systems 75 hrs
Recommended Prereq: KCMS 0180 Software or instructor permission. This course is designed to teach students the knowledge needed for enterprise WLAN sales and support professionals who must be familiar and confident with the terminology and basic functionality of enterprise 802.11 wireless networks.

KNIT 0785 – Advanced Wireless Systems 75 hrs
Recommended Prereq: KNIT 0780 Intro to Wireless Systems. This is the second course designed for students needing knowledge of enterprise WLANs for sales and support positions. Students will design, configure, and prepare equipment and perform site surveys for WLAN networks.

KNNA 0100 – Nutrition Assistant 20 hrs
Prereq: Current TB test results or x-ray within past 12 months. Designed to train students in the skills required to meet patient mealtime needs in long-term care or rehabilitation health care settings.

KNWE 0640 – Server Administration 1 90 hrs
Recommended prereq: Complete KNWE 0742 prior to enrolling. Learn to deploy operating systems, manage Windows updates with WSUS, monitor server and network performance, improve network share performance and reliability, secure data, configure Audit Policies, manage DNS records, zones and servers, and configure routing and VPN services. MCP and MCSA titles (Course 1 of 2 for exam 70-411).
KNWE 0642 – Server Installation & Configuration 1 75 hrs
Recommended prereq: CompTIA A+-level experience strongly recommended. Learn to install, configure, and troubleshoot Windows Server and server services such as disks and volumes, RAID, file and print services, remote server management, system and network virtualization, as well as IPv4 and IPv6 addressing. MCP and MCSA titles (Course 1 of 2 for exam 70-410).

KNWE 0646 – Advanced Server Services 1 75 hrs
Recommended prereq: Complete KNWE 0740 prior to enrollment. Learn advanced tasks necessary to deploy, manage, and maintain a Windows Server infrastructure. Topics in this course include Network Load Balancing, failover clustering, site-level fault tolerance, virtual machine migration, advanced file services, backup and disaster recovery. MCP and MCSA titles (Course 1 of 2 for exam 70-412).

KNWE 0680 – Configuring Windows Clients 75 hrs
Students learn installing, upgrading, migrating and deploying Windows 7. This includes configuring hardware, application, and network connectivity exercises. Prepares student for the MCTS industry certification. (Exam 70-680)

KNWE 0740 – Server Administration 2 90 hrs
Recommended Prereq: KNWE 0640. From small offices to enterprise environments, learn to support and implement Windows Server services such as DirectAccess, Network Policy Server, Network Access Protection, Service Authentication, FSMO role maintenance, Group Policy settings, and Active Directory backup and recovery. MCP and MCSA titles (Course 2 of 2 for exam 70-411).

KNWE 0742 – Server Install & Config 2 75 hrs
Recommended Prereq: KNWE 0642. Learn to install, configure, and troubleshoot Windows Server services such as DHCP, DNS, Active Directory Domain Services, Domain Controller configuration, Group Policy, and user and computer creation and management. MCP and MCSA titles (Course 2 of 2 for exam 70-410).

KNWE 0746 – Advanced Server Services 2 75 hrs
Recommended Prereq: KNWE 0646. Learn advanced tasks necessary to deploy, manage, and maintain a Windows Server infrastructure. Topics include DNS security, IP Address Management (IPAM), multi-domain and multi-forest management and support, site configuration, replication, certificate services and more. MCP and MCSA titles (Course 2 of 2 for exam 70-412).

KNWE 0780 – Maintaining Windows Clients 75 hrs
Students will monitor and maintain systems that run Windows 7 including configuring access to resources; mobile computing, backup and recovery. Prepares student for the MCTS industry certification (Exam 70-680).
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>KOLL 0100</td>
<td>Open Learning Lab SCC OIS</td>
<td>1-300</td>
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<tr>
<td></td>
<td>An open learning class developed specifically to</td>
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<td>track the Department of Workforce Services clients</td>
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<tr>
<td></td>
<td>study time outside the traditional program hours.</td>
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<tr>
<td>KOLL 0200</td>
<td>College Academic Readiness Center</td>
<td>32</td>
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<tr>
<td></td>
<td>The College Academic Readiness Program is designed</td>
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<td>to prepare students for college level reading,</td>
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<td>writing, and mathematics, in addition to G.E.D.</td>
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<td>Preparation. The program features an open entry/</td>
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<td></td>
<td>open exit format, allowing flexible course start</td>
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<td>dates. It also features a blended curriculum of</td>
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<td>textbooks and software allowing for competency-</td>
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<td></td>
<td>based individualized instruction, with pre and</td>
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<td>post-testing for each unit to ensure students</td>
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<td></td>
<td>master the material</td>
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<tr>
<td>KPDR 0510</td>
<td>Truck Driving/Class &quot;A&quot; CDL</td>
<td>160</td>
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<td>Prerequisites: Minimum age of 18 years. Valid</td>
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<td>D.O.T. Medical Card. Copy of motor vehicle record</td>
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<td>for the past 3 years. Pre-enrollment drug screen.</td>
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<td>This course consists of 21 milestones that cover</td>
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<td>basic and advanced operating practices, defensive</td>
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<td>driving, inspections, life skills and essential</td>
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<td>activities such as trip planning, map reading,</td>
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<td>hours of service and cargo handling.</td>
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<tr>
<td>KPDR 0521</td>
<td>Extended Driving Course</td>
<td>80</td>
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<td>Recommended Prereq: KPDR 0510. This course</td>
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<td>provides students additional instruction and</td>
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<td>time behind the wheel after completing KPDR</td>
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<td>0510 and consists of 11 milestones (units of</td>
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<td>instruction) that cover basic and advanced</td>
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<td>operating practices, defensive driving,</td>
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<td>inspections, and hours of service.</td>
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<td>KWLD 0115</td>
<td>Intro to Welding &amp; Lab Safety</td>
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<td>Prereq: School of App Tech entry; good eyesight,</td>
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<td>lift 50 lbs. Students are provided with a general</td>
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<td>introduction to the art, science, and technology</td>
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<td>of welding. General industrial safety practices</td>
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<td>are taught.</td>
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<td>KWLD 0126</td>
<td>Oxy-Acetylene (OAW)</td>
<td>120</td>
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<td>Prereq: good eyesight, lift 50 lbs. Recommended</td>
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<td>Prereq: KWLD 0115. Learn practical welding and</td>
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<td>cutting skills using the oxyacetylene welding</td>
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<td>process on carbon steel. Safe practices and</td>
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<td>theory of OAW are taught.</td>
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<td>KWLD 0136</td>
<td>Basic Shielded Metal Arc Welding</td>
<td>190</td>
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<td>Prereq: good eyesight, lift 50 lbs. Recommended</td>
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<td>Prereq: KWLD 0126. Learn practical basic welding</td>
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<td>skills using the SMAW process on carbon steel.</td>
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<td>Safe practices and theory of SMAW are taught.</td>
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<td>KWLD 0145</td>
<td>Gas Metal Arc (GMAW)</td>
<td>160</td>
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<td>Recommended Prereq: KWLD 0135. Learn practical</td>
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<td>welding skills using the GMAW process on carbon</td>
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<td>steel and aluminum. Short circuiting and spray</td>
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<td>transfers. Safe practices and theory of GMAW are</td>
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KWLD 0165 – Blueprint Reading for Welders 100 hrs
Basic study of blueprint reading and drawing, welding symbols (AWS and SI), and NDT symbols.

KWLD 0170 – Flux Cored Arc (FCAW) 170 hrs
Recommended Prereq: KWLD 0145. Learn practical welding skills using the FCAW process on carbon steel. Gas shielded and self-shielded. Safe practices and theory of FCAW are taught.

KWLD 0180 – Gas Tungsten Arc (GTAW) 140 hrs
Recommended Prereq: KWLD 0170. Learn practical welding skills using the GTAW process on Fe and non-Fe metals. Safe practices and theory of GTAW are taught. Plasma Arc Cutting is also covered.

KWLD 0190 – Math for Welders 100 hrs
Instruction in basic math skills needed by welders. Addition, subtraction, multiplication, and division of whole numbers, fractions, decimals, metrics, and currency. Basic geometry and trigonometry formulas are taught.

KWLD 0235 – Advanced Shielded Metal Arc Welding 150 hrs
Prereq: good eyesight, lift 50lbs. Recommended Prereq: KWLD 0136, Learn practical advanced welding skills using the SMAW process on carbon steel. Safe practices and theory of SMAW are taught.

KWRK 0515 – Job Seeking Skills 15 hrs
Prepares students to find employment related to their training; covers applications, networking in the job market, resumes (writing resumes, electronic resumes, and sending resumes), interviewing, and strategies for keeping a job.

LAND 1110 – Plumbing/Pipefitting Applica. 5 cr
Prereq: APPR 1470 or appropriate Accuplacer score. This introductory course will put emphasis on drawing and sketching in relation to architectural drawings, isometric single-line pipe sketching, dimensioning, and working drawings.

LAND 1120 – Landscp Water Conserv./Elect. 5 cr
Prereq: LAND 1110. This course introduces electrical theory for AC, DC, and low voltage applications. Electrical safety is strongly emphasized. Water conservancy through proper usage and variety of landscape practices.

LAND 1210 – Small Engine Repair/Mntenance 5 cr
Prereq: LAND 1120. Designed to introduce apprentices to internal combustion, 2 and 4 cycle small engine theory and practical application. Preventative maintenance, fuel mixtures, repair and service are all introduced.
LAND 1220 – Pest Mngmt/Sustnbl. Landscapes  5 cr
Prereq: LAND 1210. Controlling pests through proper management practices and application of pesticides. Various landscapes and typical control methods for preventing destruction by pests. Proper personal protection when making these control applications.

LAND 2310 – Fund. /Soil Sci. & Hort. Sci.  5 cr
Prereq: LAND 1220. Designing and sustaining soils for a variety of plant proliferation. Desirable plants for varying soil conditions and watering practices. Application of fertilizers, how much, when, and for what vegetation.

LAND 2320 – Woody Plant Mat/Turfgrass Mgt  5 cr
Prereq: LAND 2310. Theory, application of woody plant materials, management of various applications, and consistent practices for control and management of plants and materials. Maintenance and care of turfgrass through proper fertilization and care.

LAND 2410 – Arbor Culture  5 cr
Prereq: LAND 2320. Cultivation of tree and wooded plant growth through proper soil conditions, water management and training practices.

LAND 2420 – Annual/Perenn. Plant Materials  5 cr
Prereq: LAND 2410. Good landscaping practices through the utilization of annual and perennial plants with added available color variety and sustaining growth habitats.

LE 1200 – Major & Career Exploration  1 cr
Prereq: RDG 0900. Overview of the various components involved in career exploration, major and career decision making, and career preparation/reevaluation when personal and/or environmental situations change. Elements include self-reflection, self-clarity, visioning, goal setting and planning, implementing and adapting.

LE 1220 – Human Relat.-Career Dev(SS,HR)  3 cr
Creative, traditional job search methods and human relation skills to find and keep gainful employment. Topics include self-assessment, goal setting, career review, job sources, written goals, appearance, interviewing, and diversity. Course may be taught with a Service Learning component.

LE 1240 – Tutor Certification  1 cr
Basic principles of tutoring through supervised practice tutoring. Students learn to become effective and certified tutors.
LE 1310 – Mind, Mach., Consciousness (ID) 3 cr
Explore artificial intelligence (AI) from historical, philosophical, scientific views within an educational framework. Discusses what life is, current and future projections. Possible rights of AI entity and Implication of AI in all facets of life.

LE 1350 – Values and Self-Image (ID) 3 cr
Explore philosophical, psychological, educational theory on values and self-image. Students will assess values at beginning and end with changes noted. Latest techniques in use of affirmation, goal setting. Personal philosophy. Course may be taught with a Service Learning component.

LE 1360 – Opening Diverse Doors (ID,DV) 3 cr
Course investigates needed critical reading/thinking skills in relation to philosophical, sociological, psychological and education values in areas of diversity consciousness (skills, awareness and understanding of diversity) in America.

LE 1900 – Special Studies 1-3 cr
Seminars and workshops to find appropriate field of study, develop personal skills and attitudes, explore college services, self-exploration/career planning, job hunting, personal development.

LE 2920 – Developing The Civically Engaged Leader 2 cr
This interdisciplinary Service Learning course will focus on personal leadership development, civic engagement, social justice, and personal management skills including communication, motivation, problem solving, and conflict resolution with an emphasis on personal growth.

LE 2950 – Developing Strengths Based Leadership 2 cr
Students will explore the world of leadership through experiential interactive exercises and activities plus assignments designed to further your knowledge of leadership. Skills learned in this course will center on communication, organizational behavior, problem solving, delegating, and goal setting as they apply to various aspects of your daily life.

LINE 1110 – Lineman Apprentice 1A 5 cr
This course is for lineman apprentices. It introduces transmission and distribution systems. Students will learn about safety, climbing, overhead distribution systems, tools and service installation.

LINE 1120 – Lineman Apprentice 1B 5 cr
Prereq: LINE 1110 or departmental approval. This course is for lineman apprentices. It introduces metering, rigging, pole work, care and testing of equipment, distribution. Students will learn about safety, overhead maintenance, pole framing and guying.
LINE 1210 – Lineman Apprentice 2A 5 cr
Prereq: LINE 1120 or departmental approval. This course is for lineman apprentices. It introduces line equipment, tree trimming, hydraulic derricks and digging equipment. Students will learn about DC fundamentals and pole top equipment and replacement.

LINE 1220 – Lineman Apprentice 2B 5 cr
Prereq: LINE 1210 or departmental approval. This course is for lineman apprentices. It introduces line equipment, transformers, safety and distribution. Students will learn about underground, hydraulics systems, AC fundamentals and hand tools.

LINE 2310 – Lineman Apprentice 3A 5 cr
Prereq: LINE 1220 or departmental approval. This course is for lineman apprentices. It introduces compressors, transformer connections, underground conduit and street lighting systems. Students learn about distribution repair with gloves and hot sticks, and cable installation.

LINE 2320 – Lineman Apprentice 3B 5 cr
Prereq: LINE 2310 or departmental approval. This course is for lineman apprentices. It introduces troubleshooting overhead and transformers, safety and power quality. Students will learn high-voltage AC power, switchgear and URD transformers

LINE 2410 – Lineman Apprentice 4A 5 cr
Prereq: LINE 2320 or departmental approval. This course is for lineman apprentices. It introduces reading electrical diagrams, transformers, splicing and meters. Students will learn about cable termination, troubleshooting, safety and fault location.

LINE 2420 – Lineman Apprentice 4B 5 cr
Prereq: LINE 2410 or departmental approval. This course is for lineman apprentices. It introduces voltage regulators, customer relations, cable fault locations and transformers. Students will learn troubleshooting, circuit breakers, capacitors and reactors.

MA 1100 – Medical Terminology 3 cr
Course uses videos, supplemented lecture and covers over 350 medical word roots, suffixes, prefixes. Emphasis placed on pronunciation, spelling, proper usage of medical terminology. Medical abbreviations are also introduced.

MA 1200 – Medical Office Management 2 cr
Prereq: Proof of word processing proficiency. Medical procedures including: billing, schedules, mail, telephones, office machines, computer hardware and software. Law and ethics, charting and other procedures as pertaining to the medical office.
MA 1210 – Practical Medical Office Mgt. 2 cr
Prereq: Proof of word processing proficiency. Recommended coreq: MA 1200. Practical application of procedures taught in MA 1200. Students must type 30 wpm and demonstrate proficiency, passing all competencies outlined in the course with an 80% (B-) grade or better by the end of the semester before advancing in the program.

MA 1240 – Medical Office Communication (note: This will cross list to MA 2240, they are the same class) 2 cr
Prereq: MA 1100, MA 1200 and MA 1210. Verbal and nonverbal communication between physician, staff, patients, and support personnel. Office correspondence using WP software, including resume, cover letters for externship, interpersonal skills, and the ADA.

MA 1290 – Introduction to Electronic Medical Records 2 cr
Prereq: Admission to program. Introduction to Electronic Medical/ Health Records (EMR/EHR). Students will be introduced to EHR elements, guidelines, protocols and care plans. They will also be introduced to templates, reports, medical database analysis and clinical alerts.

MA 1300 – Clinical Pharmacology 3 cr
Pre-Req: Admission to MA Program and MA 1520 w/C grade or better. Material in this on-line course will familiarize students with basic principles of pharmacology including the five steps in the fate of a drug, the five Controlled Drug Schedules, the correct method of writing a prescription and charting drug orders, and appropriate abbreviations used charting medications in a patient’s chart.

MA 1310 – Medical Math & Admin Meds 2 cr
Pre-Req: Admission to MA program and MA 1520 w/C grade or better. Course teaches the students practical applications of the administration of medications, collection of blood specimens by capillary and phlebotomy methods, and introduces the students to the administration of IV fluids. Students will also become competent in calculation of medication dose.

MA 1400 – Introduction to Patient Care 2 cr
Prereq: Acceptance into MA program. Coreq: MA 1410. Course will focus on application of clinical patient care including: asepsis, assessing patient vital signs, assisting provider in exams, emergency preparedness, medical office emergencies and nutrition for lifelong wellness.

MA 1410 – Practical Introduction to Patient Care 2 cr
Prereq: Acceptance into MA program. Coreq: MA 1400. Course will focus on application of clinical patient care including: asepsis, assessing patient vital signs, assisting provider in exams, emergency preparedness, medical office emergencies and nutrition for lifelong wellness.
MA 1420 – Clinical Pathology I  
Prereq: Admission to program. Structure and Function of body systems includes cell structure and chemistry and structures of skin, musculoskeletal, and nervous systems. Pathology is introduced to prepare the student for medical office triage and appropriate treatment for related disorders.

MA 1520 – Clinical Pathology II  
Pre-Req: Admission to the program and MA 1420 w/C grade or better. Lecture course will discuss structure and function of the senses, endocrine system, cardiovascular system, renal system, pulmonary system, gastrointestinal system, urinary system, reproductive system, and human development and related system pathologies including diagnosis, treatment, and prognosis of the disorders or diseases.

MA 1600 – Intermediate Patient Care  
Preq: Admission to program. Coreq: MA 1610. Course will focus on the practical routine application areas of clinical patient care including the units: ophthalmology, otolaryngology, neurology, pulmonology, gastroenterology, endocrinology, urinology, gynecology, obstetrics, pediatrics and geriatric medicine.

MA 1610 – Intermediate Patient Care  
Prereq: Acceptance into the MA program. Coreq: MA 1600. Course applies practical skills taught in MA 1600. Competencies include assisting with routine/specialty exams in Ears, Nose and Throat (ENT), Ortho, Neuro, Urology, Respiratory, Pediatrics, OB/GYN, and Geriatrics.

MA 1700 – Introduction to Limited Radiology  
Prereq: Instructor's approval. Coreq: MA 1710. Theory and principles of basic x-ray exams in medical office. It includes physics as it pertains to x-rays, use and care of the machine, proper mAs, kVp and time, image production and darkroom procedures, patient protection, discussion of licensing requirements as it applies to the Medical Assistant.

MA 1710 – Practical Application of Limited Radiology  
Prereq: MA 1420 & MA 1520 w/C grade or better, or instructor approval. Coreq: MA 1700. Practical application of principles and theories taught in MA 1700, including patient positioning for chest x-ray and extremities x-rays using the phantom. Practical component of the knowledge, skills and abilities to pass the Limited Scope of Practice in Radiography exam and receive state licensure as a limited x-ray machine operator (LRPT).

MA 2240 – Medical Office Communication (note: This will cross list to MA 1240, they are the same class)  
Prereq: MA 1100, MA 1200 and MA 1210. Verbal and nonverbal communication between physician, staff, patients, and support personnel. Office correspondence using WP software, including resume, cover letters for externship, interpersonal skills, and the ADA.
MA 2300 – Medical Coding Procedures 3 cr
Prereq: MA 1100 and MA 1420. Introduction and practice with current procedural terminology (CPT) and international classification of disease (ICD) coding procedures, HCPS for optimal reimbursements, as practiced in the medical setting.

MA 2310 – Advanced Medical Coding 4 cr
Prereq: MA 1100, MA 1420, MA 2300, MA 2420 or instructor approval with industry requirements met. This elective course is intended for students who have completed MA 2300 or have met industry standards as a medical coder/biller to take the AHIMA or AAPC certification examinations. This is achieved by advanced classifications of disease (ICD-9) coding procedures, HCPCS for optimal reimbursements as utilized in such medical settings as hospitals, outpatient clinics and physician offices.

MA 2420 – Clinical Pathology II (note: This will cross list to MA 1520, they are the same class) 3 cr
Prereq: MA 1420. Structure and Function of the endocrine, cardiovascular, renal, pulmonary, GI, and reproductive body systems. Pathology is introduced to prepare the student for medical office triage and appropriate treatment of related disorders seen in a clinical setting.

MA 2540 – Practical Radiology 2 cr
Prereq: MA 1420, MA 1600 and instructor approval. Theory and principals of basics of x-ray exams in the office. It includes physics as it pertains to x-ray, use and care of machine, proper mass KvP and time, darkroom procedures and patient protection, discussion of licensing requirements.

MA 2550 – Practical Application-Radiolo. 3 cr
Prereq: MA 1420, MA 1600 and instructor approval. Recommended coreq: MA 2540. Practical application of principles and theories taught in MA 2540, including patient positioning for chest x-ray, extremities, pelvis and x-rays using the phantom.

MA 2600 – Advanced Patient Care 2 cr
Prereq: Admission to program. Coreq: MA 2610. Lectures in this theory course will focus on advanced medical assisting skills such as assisting in dermatology, instrument identification, medical office triage, and interpreting a twelve-lead. Discussion will include lab safety and creating a safe work environment, medical office microbiology, normal values for basic lab tests, and urinalysis.

MA 2610 – Practical Adv. Patient Care 4 cr
Prereq: MA 1310. Coreq: MA 2600. Application of practical skills taught in MA 2600. Competencies include recording ECG, assisting with office surgeries, ortho, maintain a sterile field, laboratory testing of blood, urine and body fluids, applying nutrition principles.
MA 2700 – Application of Limited Radiology 2 cr
Prereq: Acceptance into the MA program and MA 1700/1710 and/or instructor approval. Coreq: MA 2710. Application of principles and theories taught in MA 2710, including patient positioning for chest x-ray, spine, skull and extremities x-rays using the phantom.

MA 2710 – Application of Limited Radiology 2 cr
Prereq: Acceptance into the MA program and MA 1700/1710 and/or instructor approval. Coreq: MA 2700. Application of principles and theories taught in MA 2700, including patient positioning for chest x-ray, spine, skull and extremities x-rays using the phantom.

MA 2810 – Medical Assistant Practicum 4 cr
Prereq: Successful completion of all courses in the Health Sciences Medical Assistant Program meeting the minimum required grade before placement in practicum site. After completing the Medical Assistant Program, the student will be required to complete a 200-hour unpaid Practicum. Students will meet with the Practicum Coordinator for preparation and assignments for their clinical site. All clinical sites must have an Affiliation Agreement with the College.

MA 2990 – Special Studies in Radiology 2-6 cr
Prereq: MA 2540, MA 2550 or instructor approval. Study of anatomy, proper patient positioning, setting tech factors and evaluation of radiographs of the cervical, thoracic and lumbar spine, skulls and paranasal cavities. Credits: 1 for skull; 1 for spines; 1 for paranasal sinuses.

MATH 0001 – College Preparatory Mathematics 1 4 cr
Prereq: RDG 0900 or appropriate Accuplacer score and EDU 1020 (either may be taken concurrently). MATH 0001 is a course in which students must successfully complete at least 4 of 12 modules. The 12 modules cover the same material presently included in MATH 0900 - 0990. Upon successful completion of all 12 modules, students will be eligible to take MATH 1010. Because this course is delivered on an individual basis using computer software, students will be able to complete as many modules as they can in a given term. Students may also test out of any module with pretest mastery.

MATH 0002 – College Preparatory Mathematics 2 4 cr
Prereq: MATH 0001 & EDU 1020. MATH 0002 is a continuation of Math 0001. Students start where they ended in Math 0001 and must successfully complete up through at least module 8 of the 12 modules. The modules cover the same material presently included in MATH 0900 - 0990. Upon successful completion of all 12 modules and a final exam, students will be eligible to take MATH 1010. Because this course is delivered on an individual basis using computer software, students are able to complete as many modules as they can in a given term. Students may also test out of any module with pretest mastery.
SLCC COURSE DESCRIPTIONS

MATH 0003 – College Preparatory Mathematics  4 cr
Prereq: MATH 0002 & EDU 1020. MATH 0003 is a continuation of Math 0002. Students start where they ended in Math 0002 and must successfully complete all remaining 12 modules. The modules cover the same material presently included in MATH 0900 - 0990. Upon successful completion of all 12 modules and a final exam, students will be eligible to take MATH 1010. Students may test out of any module with pretest mastery.

MATH 0900 – College Arithmetic  3 cr
Prereq: RDG 0900 (may be taken concurrently) or appropriate Accuplacer score. This course will focus on operations with whole numbers, integers, and fractions and will include learning essentials such as time management, test taking skills, note taking, use of student resources and student responsibility.

MATH 0915 – Fractions Workshop  1 cr
This course is designed to be a refresher course in basic operations with fractions, including application problems and signed numbers. This course can be taken concurrently with Math 0920, Math 0950, and Math 0990.

MATH 0920 – Developmental Math  6 cr
Prereq: RDG 0900 (may be taken concurrently) or appropriate Accuplacer score. Includes whole numbers, fractions, decimals, proportions, percents and basic geometry. It also includes integers, linear equations, polynomials, and graphing. Computer assisted instruction is available.

MATH 0925 – Pre-Algebra Workshop  1 cr
Recommended Coreq: Math 0920. This course is a companion course to MATH 0920. This course focuses on basic operations with whole numbers, fractions and decimals, geometric formulas, ratio, proportions, and percents, as well as signed numbers, solving equations, polynomials and other algebraic concepts.

MATH 0950 – Pre-Algebra  3 cr
Prereq: RDG 0900 w/B grade or better or appropriate Accuplacer score AND within the last year MATH 0900 w/B grade or better or appropriate Accuplacer score. This course includes basic math concepts of whole numbers, fractions, decimals, proportions, percents and basic geometry. It also includes pre-algebra topics on integers, linear equations, polynomials, and graphing.

MATH 0955 – Pre-Algebra Workshop  1 cr
Recommended Coreq: Math 0950. This course is a companion course to MATH 0950. This course focuses on basic operations with whole numbers, fractions and decimals, geometric formulas, ratio, proportions, and percents, as well as signed numbers, solving equations, polynomials and other algebraic concepts.

MATH 0990 – Elementary Algebra  4 cr
Prereq: RDG 0900 w/B grade or better or appropriate Accuplacer Score AND within the last year MATH 0950 or MATH 0920 w/C grade or better, or appropriate Accuplacer score. Includes linear equations,
systems, polynomials, factoring, graphing, and inequalities. It also includes rational and radical expressions and equations. Computer-assisted instruction is available.

**MATH 0995 – Elementary Algebra Workshop** 1 cr
Recommended Coreq: MATH 0990. This course is a companion course to MATH 0990. It provides a review of topics in MATH 0990 and additional practice on problem solving through collaborative learning.

**MATH 1010 – Intermediate Algebra (QS) 4 cr**
Prereq: RDG 0900 w/C grade or better or appropriate Accuplacer score AND within the last year MATH 0990 w/C grade or better or appropriate Accuplacer score. Linear and quadratic equations; inequities; polynomials; rational expressions; radicals; negative and rational exponents; complex numbers; linear systems; introduction to functions; logarithms; and exponential functions.

**MATH 1015 – Intermediate Algebra Workshop 1 cr**
Recommended Coreq: MATH 1010. This is a companion course to MATH 1010. It provides a review of topics in MATH 1010 and additional practice on problem solving through collaborative learning.

**MATH 1030 – Quantitative Reasoning (QL) 3 cr**
Prereq: RDG 0990 w/C grade or better or appropriate Accuplacer score AND within the last year MATH 1010 w/C grade or better or appropriate Accuplacer score. The course focuses on the development of analytical thinking through the application of math to real-life problems. Topics include modeling, logic, financial math, probability, statistics, and geometry.

**MATH 1040 – Intro to Statistics (QL) 3 cr**
Prereq: RDG 0990; within the last year, MATH 1010 w/C grade or better, or appropriate Accuplacer score. This course satisfies the SLCC Quantitative Literacy (QL) requirement. This course focuses on descriptive and inferential statistical methods. Emphasis on sampling design; descriptive statistics; linear regression and correlation; probability; sampling distributions; hypothesis testing and confidence intervals.

**MATH 1048 – Technical Math I 3 cr**
Prereq: Within the last year, MATH 1010 w/C grade or better, or appropriate Accuplacer score. This course covers scientific notation; systems of units; equations; linear systems; quadratic, polynomial, rational, and exponential functions; logarithms; roots and radicals; overview of statistics; includes major-specific curriculum modules.

**MATH 1050 – College Algebra (QL) 4 cr**
Prereq: RDG 0990 w/C grade or better or appropriate Accuplacer score AND within the last year MATH 1010 w/C grade or better or appropriate Accuplacer score. Covers polynomial, rational, exponential, and logarithmic functions and graphs; complex roots of polynomial functions; matrices; partial fractions; conics; sequences and series; and the binomial theorem. Includes real-world application problems and
graphing technology. Satisfies quantitative literacy requirement and prepares students for trigonometry and calculus.

**MATH 1055 – College Algebra Workshop** 1 cr
Optional Coreq: MATH 1050. This is a companion course to MATH 1050. It provides a review of topics in MATH 1050 and additional practice on problem solving through collaborative learning. STEM focused activities maybe incorporated into the course.

**MATH 1058 – Technical Math II** 3 cr
Prereq: Within the last year, MATH 1048 w/C grade or better, or appropriate Accuplacer score. This course covers angles; right triangle trigonometry; amplitude, period, phase shift; identities; trig equations and inverse trig functions; oblique triangles; polar coordinates; vectors; complex numbers; conics; includes major-specific modules.

**MATH 1060 – Trigonometry (QL)** 3 cr
Prereq: RDG 0990 w/C grade or better or appropriate Accuplacer score AND within the last year MATH 1050 w/C grade or better or appropriate Accuplacer score. Trigonometric functions and their graphs developed using circular and triangular methods including inverses; polar coordinates; and an introduction to vectors.

**MATH 1080 – Precalculus (QL)** 5 cr
Prereq: RDG 0990 w/C grade or better or appropriate Accuplacer score AND within the last year an appropriate Mathematics Accuplacer score or departmental approval. Covers the main concepts of college algebra and trigonometry. Topics include polynomial, rational, exponential, logarithmic, inverse and trigonometric functions, graphs and equations; matrices and determinants; sequences and series; solutions of triangles; conics; and polar coordinates. Satisfies the prerequisite for calculus.

**MATH 1090 – College Algebra-Business (QL)** 3 cr
Prereq: RDG 0990 w/C grade or better or appropriate Accuplacer score AND within the last year MATH 1010 w/C grade or better or appropriate Accuplacer score. Topics include: graphs, linear, quadratic, logarithmic, and exponential functions; matrices; systems of equations and inequalities; leontieff models; compound interest; geometric and arithmetic series, loans and annuities.

**MATH 1100 – A Brief Course in Calculus** 3 cr
Prereq: Within the past year, MATH 1050 or MATH 1080 or MATH 1090 w/C grade or better or appropriate Accuplacer score. A first course in differential and integral calculus designed primarily for students in biological sciences, social sciences, education, and humanities. Maximization and minimization of functions, marginal analysis and the optimization of constrained functions. Not for students who have completed MATH 1210.
MATH 1210 – Calculus I (QL)  
Prereq: Within the last year, MATH 1050 and MATH 1060 w/C grade or better; OR MATH 1080 w/C grade or better, OR appropriate Accuplacer score. Calculus 1 introduces the following topics: limits, derivatives of algebraic and transcendental functions, applications of differentiation, integration, the Fundamental Theorem of Calculus, the technique of substitution, and finding the area between curves.

MATH 1220 – Calculus II  
Prereq: Within the last year, MATH 1210 w/C grade or better. This course is a continuation of the study of Calculus. Topics covered include applications and techniques of integration; parametric equations and polar coordinates; Taylor and power series, and 3-dimensional analytical geometry and vectors. This course is required for an AS in Mathematics.

MATH 2000 – Math CO-OP  
Standard CO-OP. Prereq: Sophomore standing with GPA of 2.0. This course is for study-related employment and approval of Director of Cooperative Education

MATH 2010 – Math for Elem. Teachers I  
Prereq: Within the last year, MATH 1050 w/C grade or better. This course covers topics include problem-solving techniques; sects and logic; number theory including properties and operations; mental arithmetic; estimation; and topics in algebra. Technology projects, and manipulatives are utilized in this course.

MATH 2020 – Math for Elem. Teachers II  
Prereq: Within the last year, MATH 2010 w/C grade or better. This course is a continuation of Math 2010. The topics include probability; statistics; measurement; two and three-dimensional geometry including tessellations, Euclidian constructions, and transformations.

MATH 2040 – Statistics for Applied Science  
Prereq: Within the last year, MATH 1050 w/C grade or better, or appropriate Accuplacer score. This course includes descriptive and inferential statistical methods. Topics include sampling design; descriptive statistics; probability; mathematical expectation; discrete and continuous probability distributions; sampling distributions; estimation and confidence intervals; hypothesis testing; two-sample inference, inference on categorical data; analysis of variance (ANOVA); linear regression and correlation; and regression analysis. This course or Math 2200 is required for an AS in Mathematics.
MATH 2200 – Introduction To Discrete Mathematics 3 cr
Prereq: Within the last year, MATH 1220 w/C grade or better or instructor permission. This course is an introduction to proofs course ideal for anyone majoring or minoring in mathematics or wants a stronger foundation in mathematics. This course covers the fundamentals of logic, set theory, order, relations, functions. It includes elementary number theory, modular arithmetic, combinatorics; counting permutations, generating functions, matrix operations, basic algebraic structures; groups, rings, discrete probability. It also includes an introduction to graph theory, trees, search optimization problems and Boolean algebra. This course or Math 2040 is required for an AS in Mathematics.

MATH 2210 – Multivariate Calculus 3 cr
Prereq: Within the last year, MATH 1220 w/C grade or better. This course is a continuation of the study of Calculus. Topics covered include partial derivatives, multiple integrals, curves and surfaces; vector calculus including Green's and Stoke's theorems. This course is required for an AS in Mathematics.

MATH 2250 – Differential Eq/Linear Algebra 4 cr
Prereq: Within the last year, MATH 1220 w/C grade or better. This course is an introduction to ordinary differential equations and linear algebra with applications to mechanics, electrical circuits, and populations. Topics included in this course are qualitative analysis, numerical methods, Laplace transforms, and systems of linear equations.

MATH 2270 – Linear Algebra 4 cr
Prereq: Within the last year, MATH 1220 w/C grade or better. The topics studied in this course are the theory and application of matrices, linear systems, determinants, inverses, vector spaces, linear independence, linear transformations, eigenvalues and eigenvectors, diagonalization, and least squares approximation. This course is required for an AS in Mathematics.

MATH 2280 – Differential Equations 4 cr
Prereq: Within the last year, MATH 2270 w/C grade or better. The topics studied in this course are linear and nonlinear differential equations, systems of equations, phase-plane analysis, initial and boundary value problems, bifurcation analysis, Laplace Transforms, series solutions and numerical methods. This course is required for an AS in Mathematics.

MATH 2900 – Spec Topics 1-3 cr
Special topics in Mathematics.

MCCT 1500 – Manual Machining 2 cr
Coreq: MCCT 1510. Basic machine shop theory including operation and performance of lathes and mills.

MCCT 1510 – Manual Machining Lab 1 cr
Coreq: MCCT 1500. Laboratory application of the manual machine shop principles taught in MCCT 1500 including lathes and mills.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCCT 1600</td>
<td>CNC Machine Theory</td>
<td>2 cr</td>
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<tr>
<td></td>
<td>Coreq: MCCT 1610. Basic CNC machine shop theory including G and M programming, operation, and performance of CNC lathes and mills.</td>
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<tr>
<td>MCCT 1610</td>
<td>CNC Machining Lab</td>
<td>1 cr</td>
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<tr>
<td></td>
<td>Coreq: MCCT 1600. Laboratory application of principles taught in MCCT 1600 including programming and operation of CNC lathes and mills.</td>
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<tr>
<td>MCCT 2650</td>
<td>CAD/CAM</td>
<td>2 cr</td>
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<tr>
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<td>Prereq: EDDT 2540. Recommended Coreq: EDDT 2600. Design using CAD/CAM software. Experience in the engineering/designer role in industry as members of a project design team in collaboration w/machining students. Includes assembly design, documentation, tolerance studies and inspection.</td>
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<tr>
<td>MCCT 2670</td>
<td>GMA, GCA, GTA Welding</td>
<td>3 cr</td>
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<td></td>
<td>Prereq: WLD 1005. Theory and lab course covering Gas Metal Arc Welding, Flux Core Arc Welding, and Gas Tungsten Arc Welding.</td>
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<tr>
<td>MCCT 2850</td>
<td>Plastics &amp; Composites CNC/CAM</td>
<td>3 cr</td>
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<td>Prereq: MCCT 1500 and MCCT 1510. Methods for machining organic and metal composites. Machining procedures and the damage introduced into composites. CNC and CAM for production of plastic products and tooling. Concepts also including taser, water-jet, and electro discharge machining.</td>
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<tr>
<td>MCCT 2860</td>
<td>Plastic/Composite Matis &amp; Prop</td>
<td>3 cr</td>
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<td></td>
<td>Prereq: CHEM 1110 or 1210 and PHYS 2010 or 2210. Covers the most common commercial plastics including their additives, fillers and fibers: includes common physical tests used to determine material characteristics.</td>
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<tr>
<td>MCCT 2870</td>
<td>Plastic/Composite Design &amp; Mfg</td>
<td>3 cr</td>
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<td></td>
<td>Prereq: EDDT 2600 and MCCT 2860. Design of plastic and composite parts using CAD. Emphasis in design principles related to plastic products. Analysis of functional requirements, structural properties, aesthetic qualities, cost. Experience in product design and material.</td>
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<tr>
<td>MEEN 1050</td>
<td>Design &amp; Visual Communications</td>
<td>3 cr</td>
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<td></td>
<td>Prereq: MATH 1050 or MATH 1080; and MEEN 2655 (may be taken concurrently). The design process, sketching, three-dimensional visualization and communication, engineering drawing, CAD systems, data presentation and computer graphics are discussed in this class.</td>
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<tr>
<td>MEEN 2000</td>
<td>Cooperative Education In Mechanical Engineering</td>
<td>1-2 cr</td>
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<td>Prereq: Sophomore standing, minimum 2.0 GPA, and instructor approval. A supervised work experience in a business, industrial or government related to the program major. Credit is awarded for successful completion of specific learning objectives that provide new learning related to the major.</td>
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<tr>
<td>Course Code</td>
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<tr>
<td>MEEN 2010</td>
<td>Statics</td>
<td>3 cr</td>
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<tr>
<td>Prereq: MATH 1210. Recommended prereq: PHYS 2210. Principles of forces and motion, moments and couples; resultant and static equilibrium of general force system; statically equivalent systems, moment of area, centroid, center of mass, gravity and pressure; friction; moment of inertia. Free body method of analysis and principles applied to engineering problems.</td>
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<tr>
<td>MEEN 2020</td>
<td>Dynamics I</td>
<td>2 cr</td>
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<tr>
<td>Prereq: MEEN 2010. Recommended prereq: MATH 2210. Position, velocity and acceleration, vector calculus, particle kinematics, kinetics of particles, including Newton's Laws, conservation of momentum and energy, and impact vibratory motion of particles are covered.</td>
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<tr>
<td>MEEN 2060</td>
<td>Dynamics II</td>
<td>2 cr</td>
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<tr>
<td>Prereq: MEEN 2020. Recommended prereq: MATH 2250. This course examines Kinetics and Kinematics of rigid bodies in 2-D and 3-D motion. It also covers moving frames, 3-D mass moment of inertia, conservation of momentum, energy, impact and an introduction to vibration analysis of mechanical systems.</td>
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<tr>
<td>MEEN 2140</td>
<td>Strength of Materials</td>
<td>2 cr</td>
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<tr>
<td>Prereq: MEEN 2010; MATH 2250 (may be taken concurrently). Recommended coreq: MEEN 2145. Internal forces in members, concept of stress and strain, axial loading, Hookes Law, torsion, pure bending, traverse loading, transformations of stress and strain, pressure vessels, beam deflection and column bending are discussed.</td>
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<tr>
<td>MEEN 2145</td>
<td>Testing Of Engineering Materials</td>
<td>1 cr</td>
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<td>Recommended coreq: MEEN 2140. This is an introductory laboratory in mechanical behavior of materials using basic testing methods and instrumentation, column bending, tension and compression of metals, concrete failure, Chempys Impact, and creep tests.</td>
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<tr>
<td>MEEN 2300</td>
<td>Thermodynamics for Mechanical Engineers</td>
<td>3 cr</td>
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<tr>
<td>Prereq: CHEM 1210 and MATH 1220. Recommended prereq: PHYS 2210. First and second law of thermodynamics, internal energy, enthalpy, entropy and open and closed systems are covered. Engineering cycles including Carnot, Otto, Diesel, Brayton and Refrigeration are introduced. Integrated lab/hands-on activities.</td>
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<tr>
<td>MEEN 2450</td>
<td>Numerical Methods</td>
<td>3 cr</td>
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<tr>
<td>Prereq: ENGR 1030 or 1040; and MATH 2250. Recommended Prereq: MATH 2210. Numerical techniques used in engineering computing, including: convergence, error accumulation, roots, solution of linear and nonlinear equations, numerical integration and differentiation, and solutions to differential equations.</td>
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<td>Course Code</td>
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<tr>
<td>MEEN 2650</td>
<td>Manufacturing Engineering &amp; Technology</td>
<td>4 cr</td>
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<td>Prereq: MEEN 2010. Structures and properties of ferrous and nonferrous materials casting, forging, welding, heat treating, machining, grinding, theory of metal cutting will be covered. Hands-on introduction to machine tools.</td>
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<tr>
<td>MEEN 2655</td>
<td>Engineering Manufacturing Lab</td>
<td>1 cr</td>
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<td>Prereq: MEEN 1050 (may be taken concurrently). The manufacturing processes used to produce parts designed by mechanical engineers are introduced, including; casting, forging, molding, forming, grinding, manual and CNC machining. The focus is not to develop skills in the manufacturing arena, but to provide an understanding of the scope as well as the limitations of the manufacturing process, through a hands-on introduction.</td>
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<tr>
<td>MEEN 2900</td>
<td>Special Topics In Mechanical Engineering</td>
<td>1-3 cr</td>
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<td></td>
<td>Special Topics reflecting items of current interest in Mechanical Engineering.</td>
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<tr>
<td>MET 1010</td>
<td>Intro to Meteorology (PS)</td>
<td>3 cr</td>
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<td>Meteorology introduces the characteristics and dynamics of the atmosphere and their daily application. Nutrition, clothing, shelter, economics, and recreational activities are representative samplings of human activities affected by climate.</td>
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<td>METE 1110</td>
<td>Meter Apprentice 1A</td>
<td>5 cr</td>
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<td>This course is for meter apprentices. It introduces electrical principles and principles of magnetism AC concepts. Students will learn about atomic structure, electrical qualities, Ohm's Law, resistors, parallel circuits, trigonometry and alternating current.</td>
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<tr>
<td>METE 1120</td>
<td>Meter Apprentice 1B</td>
<td>5 cr</td>
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<td></td>
<td>Prereq: METE 1110 or departmental approval. This course is for meter apprentices. Students will learn about math for metering, safety, watt hour meter principles and wire tables.</td>
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<tr>
<td>METE 1210</td>
<td>Meter Apprentice 2A</td>
<td>5 cr</td>
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<td></td>
<td>Prereq: METE 1120 or departmental approval. This course is for meter apprentices. Students will learn about meter watt hour constants, register ratios and formulas. Also covers principles of accuracy testing, meter testing and calibration.</td>
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<tr>
<td>METE 1220</td>
<td>Meter Apprentice 2B</td>
<td>5 cr</td>
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<td></td>
<td>Prereq: METE 1210 or departmental approval. Students will learn about single phase meter application and installation; polyphase power systems and meter application; meter testing and calibration; instrument transformers, testing single phase transformers; and Blondel's Theorem.</td>
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</tbody>
</table>
METE 2310 – Meter Apprentice 3A 5 cr
Prereq: METE 1220 or departmental approval. This course is for meter apprentices. Students will learn about self contained polyphase meter testing and polyphase transformer related application. The course also covers demand metering concepts.

METE 2320 – Meter Apprentice 3B 5 cr
Prereq: METE 2310 or departmental approval. This course is for meter apprentices. Students will learn about testing and calibrating demand meters, meter mounting devices and test switches. The course also covers reactive metering and reactive meter testing.

METE 2410 – Meter Apprentice 4A 5 cr
Prereq: METE 2320 or departmental approval. This course is for meter apprentices. Students will learn about totalizing meters; installation checks and inspections; and customer relations. The course also covers solid state meters and associated devices.

METE 2420 – Meter Apprentice 4B 5 cr
Prereq: METE 2410 or departmental approval. This course is for meter apprentices. Students will learn about energy diversion, troubleshooting techniques and pulse initiators and recorders. The course also covers electronic metering, register programming and computers.

MGT 1020 – Distribution Systems 3 cr
Principles of transportation systems, understanding the economic, political and social functions of transportation in the economy. Inflow, outflow, warehousing and their role in the physical distribution process is taught.

MGT 1100 – Small Business Management 3 cr
Meets needs of ATE programs in Small Business Management. Educates students in Vocational programs about small business management/ownership fundamentals. Curriculum learning will be industry specific.

MGT 1600 – Management Essentials 3 cr
Recommended Prereq: BUS 1050. This course is comprised of basic managerial skills to include, but not limited to: planning, organizing, leading, and controlling. Topics covered include conflict management, stress management, decision-making, international business, Total Quality Management (TQM), team building, and communication.

MGT 2000 – Business Management CO-OP Ed 1-3 cr
Prereq: Sophomore standing, 2.0 GPA and related employment. Supervised work experience in business, industrial or government environment related to program major. Credit for specific learning objectives that provide new learning that is related to program major.
MGT 2020 – Entrepreneurship 3 cr
Prereq: MKTG 1030, and ACCT 1110 or ACCT 2010. Recommended prereq: BUS 1050. This course is an introduction to starting your own small business. Topics include business models, strategic planning, SWOT analysis, capitalization, borrowing, marketing, purchasing, intellectual property, organization and location, etc. Students will complete a business plan with strategic, market, human resource, and financial components.

MGT 2040 – Business Statistics I 4 cr
Prereq: MATH 1010 (or appropriate Accuplacer score) or FIN 1380; and CIS 1020 or challenge exam. Collection, analysis, and interpretation of business and economic data. Includes measures of location and dispersion, estimation and hypothesis testing, ANOVA, contingency tables, correlation, and regression. Computer for projects/cases.

MGT 2050 – Legal Environment of Business 3 cr
Recommended Prereq: BUS 1050. Principles of business law, including torts, product liability, contracts, intellectual property, banking, agency, commercial law, etc. Common legal problems encountered in business are explored in assigned court case analysis.

MGT 2070 – Human Resource Management 3 cr
Recommended prereq: BUS 1050. This course emphasizes the interdependencies of an organization's people processes from recruitment, selection, evaluation, and compensation, to separation. Specific include job analysis, the employment process, performance appraisal systems, compensation, benefits, training, team development, decision making, and organizational behavior.

MGT 2080 – Employment Law 3 cr
Recommended Prereq: BUS 1050. Significant human resource laws, Supreme Court decisions and executive orders affecting management of human issues within the organization are examined. Legislation in areas of equal employment opportunity, hiring, firing, compensation, discrimination, disabled applicants & employees, immigration, harrassment, and management practices will be studied.

MGT 2350 – Business Statistics II 3 cr
Prereq: MGT 2040 and MATH 1050 or MATH 1090. Analytical methods for decision making in business. Topics include hypothesis testing, ANOVA, design of experiments, goodness-of-fit, multiple-regression, statistical process control, and Six-Sigma as a unifying framework. Computer cases are essential part of this course.

MGT 2500 – Strategic Management Principles 3 cr
Prereq: BUS 2200 and MGT 2070. Strategic management theories and functions explored in greater depth. Discussion focused on theory and practicality of change in business today. Implementation and consequences of strategic management decisions and communication emphasized.
MGT 2600 – International Business  
Recommended Prereq: ECON 2020. This course focuses on international business from a practitioner’s perspective. Emphasis is on globalization, exporting, and importing, opportunity assessment techniques, Foreign Direct Investment & financing, accounting, logistics, marketing, legal issues, human resources, and socio-cultural differences.

MGT 2700 – Production/Operations Mgt  
Prereq: MATH 1050 OR MATH 1090; MGT 2040 & 2350. This course is intended as an introduction to the field of production and operations management. Deals with the management of an organization’s productive resources or its production system; the strategic, operating, and control decisions required to create products and services; and associated computer applications and related models.

MGT 2710 – Quality Control & Six Sigma  
Prereq: MGT 2040 or a course in Statistics. Due to recent globalization and increasing customer quality requirements, the need for high quality/low cost products and services is critical to survival in today’s business environment. The course covers the Six Sigma quality concepts including DMAIC process, GAGE R&R, capability analysis, control charts, etc.

MGT 2720 – Supply Chain Design & Mgmt.  
Prereq: MGT 2700. Focus is on the design, analysis and management of supply chain networks that business entities use to acquire, produce, and deliver goods and services globally; and on decision support systems as the connector of supply chain integration.

MGT 2730 – Lean Production  
Prereq: MGT 2700 and MGT 2710. Focus is on the House of Lean as a model to identify and eliminate waste from business processes. Topics include seven types of waste, waste elimination, value stream mapping, cycle time reduction, and the relationship between lean production, total quality and Six Sigma, etc.

MGT 2740 – Logistics & E-Business  
Prereq: MGT 2700 and MGT 2720. Students develop an understanding of concepts, methods and design of global supply chain networks. Covers the perspectives of global competition, global sourcing, global service issues, and E-Business as it relates to globalization.

MGT 2950 – Entrepreneurship Forum  
Speakers selected from successful business owners across the Wasatch Front will share experiences in business. Students are given the benefit of wisdom acquired through the school of hard knocks.
MGT 2990 – Current Topics in Management 1-3 cr
Prereq: Variable, contact department. Course will vary semester to semester; will present a forum where students will be introduced to topics of current interest and worth in the field of management.

MGT 2999 – Current Topics 1-3 cr

MKTG 1010 – Customer Service (HR) 2 cr
This course studies the basic service skills in business. It looks at the management of conflict, stress, professionalism, time management, and telephone usage. It deals with internal and external customer service concepts. Course may be taught with a Service Learning component.

MKTG 1030 – Introduction To Marketing 3 cr
Students receive a basic understanding of marketing principles and business-to-consumer relationships that influence business marketing strategy. Course may be taught with a Service Learning component.

MKTG 1050 – Consumerism (ID) 3 cr
This course explores marketing from the consumers' perspective. Students will learn to critically evaluate messages communicated through marketing media and determine the impact on individual behavior and society as a whole.

MKTG 1070 – Promotion 3 cr
Concentration on the promotional mix of advertising, publicity, personal selling and sales promotion. Creativity, planning, and budgeting skills are established through development of a promotional campaign.

MKTG 1300 – Business Presentations 2 cr
This course explores visual and oral communication methods which focus on professional presentation skills and their application to the field of business, while offering a variety of presentation methods.

MKTG 1480 – Sales 3 cr
Emphasis is placed on pre-approach, needs, benefits, objections and closes. Students experience basic techniques through participation in a series of simulated sales calls.
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>MKTG 1900</td>
<td>Special Projects (DECA)</td>
<td>2 cr</td>
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<td>Students apply business techniques and strategies to a variety of projects and activities associated with the Collegiate DECA organization. Four basic objectives of the course are to increase skills in: vocational understanding, leadership development, civic consciousness and social intelligence. Course may be taught with a Service Learning component.</td>
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<tr>
<td>MKTG 1910</td>
<td>Event Marketing</td>
<td>3 cr</td>
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<td>This course focuses on planning and implementing events such as trade shows, conferences and large promotions. A group student project will bring community members on campus for a one-day event.</td>
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<tr>
<td>MKTG 1960</td>
<td>Professionalism in Bus. (HR)</td>
<td>3 cr</td>
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<td>This course provides a study of interpersonal and business survival skills including human relations, communication, motivation, self-disclosure, team building, coping with change, and much more. Course may be taught with a Service Learning component.</td>
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<tr>
<td>MKTG 2000</td>
<td>Marketing CO-OP Education</td>
<td>1-3 cr</td>
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<td>Prereq: Sophomore status and instructor approval. Students use in-class and on-the-job training for college credit and a regular salary. This is program-related work in the major field. Credit is awarded for completion of specific learning objectives in the program major.</td>
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<tr>
<td>MKTG 2100</td>
<td>Marketing Info Management</td>
<td>3 cr</td>
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<td>Prereq: MKTG 1030. Students learn the methods of gathering data to make marketing decisions, using various tools to develop questionnaires, set up focus groups, and analyze data for marketing decision-making.</td>
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<tr>
<td>MKTG 2350</td>
<td>Retail Management</td>
<td>3 cr</td>
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<td>Prereq: MKTG 1030, may be taken concurrently. Students research and apply retail concepts of merchandise management, assortment, pricing, visuals, etc. Planning, distribution support functions, selling, advertising and promotion in business to business marketing and regular retail business operations.</td>
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<tr>
<td>MKTG 2400</td>
<td>International Marketing</td>
<td>3 cr</td>
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<td>Prereq: MKTG 1030 and ECON 2020. Students learn the unique issues facing marketing professionals doing business in the global marketplace. Students develop strategies for dealing with political, economic, cultural and language differences encountered in international marketing.</td>
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<tr>
<td>MKTG 2500</td>
<td>Principles of Marketing</td>
<td>3 cr</td>
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<tr>
<td></td>
<td>Prereq: MKTG 1070, MKTG 2350 and MKTG 2100. This capstone course is a synthesis of marketing theory, practical application of marketing techniques, strategic planning, and marketing plan management designed for a business client.</td>
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</tbody>
</table>
MKTG 2810 – e-Commerce Design /Implement 3 cr
Prereq: MKTG 1030 and MKTG 1480 or both concurrently. Students will enhance skills by designing and managing an E-commerce/social media marketing project using skills from sales fundamentals, marketing, accounting, customer service, CIS, and general business management.

MKTG 2990 – Current Topics in Marketing 1-3 cr
Prereq: Variable, contact department. Students develop special projects related to topics.

MLS 1010 – Introduction to Leadership I 2 cr
Acquaints students with leadership, management, and life skills. Builds self-confidence through Army adventure training. Introduces students to the Army culture and lifestyle through basic soldier skills.

MLS 1020 – Intro to Leadership II 2 cr
Continued leadership development and confidence building through practical exercises.

MLS 1060 – Physical Readiness 1 cr
A concentrated physical training program to prepare students for the rigors of military service.

MLS 2010 – Found. of Leadership I 3 cr
Prereq: MLS 1020. Development of leadership and management skills through practical exercises, adventure training, and basic military training.

MLS 2020 – Found. of Leadership II 3 cr
Prereq: MLS 2010. Continued progressive development of leadership and management skills. Implementation of decision-making procedures in a classroom and field environment. Practical application in leadership principles.

MLS 2090 – Ranger Challenge 2 cr
Physical and military skills training program to prepare students for competition at Fort Hunter-Liggett, CA. Intense physical training and rigorous training schedule.

MLS 2950 – Basic Independent Study 2-3 cr
A course of study that combines key elements of MLS 1000/2000 level courses. The purpose is to qualify students for advanced course. This course is for students who have missed one semester of MLS 1000/2000 level classes.

MORT 1010 – Intro to Mortuary Science 3 cr
Introductory course on the history of funeral service including studies of ancient/historical mortuary practices, caskets and burial containers and early anatomists/undertakers and their role in embalming history. Modern funeral service practices and basic embalming procedures will also be discussed.
**MORT 1100 – Dynamics Of Grief, Death and Dying** 3 cr
Prereq: MORT 1010. Introduction and analysis of the attitudes towards death, dying and the grieving process, including cultural, religious and historical perspectives, the differing processes for loss, the environmental factors, the legal aspects of death/dying and medical ethics.

**MORT 1200 – Microbiological Studies for Mortuary Science** 3 cr
Prereq: MORT 1010; Admission to program: Introduction to the basic principles of microbiology as it relates to working in a mortuary. Emphasis will be on sanitation, disinfection, and public health within the practice of embalming. Personal, professional and community hygiene and sanitation practices are also discussed.

**MORT 1300 – Pathology For Funeral Service** 2 cr
Prereq: MORT 1010. Introduction to pathological disease conditions and their affect on various parts of the body. Conditions which affect the embalming or restorative art process will be emphasized. This course will focus on the functions of the human body systems and their reatltionship to diseases.

**MORT 1400 – Embalming I** 3 cr
Prereq: MORT 1300. Coreq: MORT 1405 and 1600. Introduction to embalming theory, procedures, techniques, and instruments used in the sanitation, preparation, and restoration of the deceased human body. The use of the vascular system will be emphasized.

**MORT 1405 – Embalming I Lab** 1 cr
Prereq: MORT 1300. Coreq: MORT 1400 and 1600. Students learn practical application of Embalming lecture content.

**MORT 1600 – Thanatochemistry** 2 cr

**MORT 2330 – Funeral Service Psychology and Counseling** 3 cr
Prereq: MORT 1100. Study of the basic principles of psychology and counseling as they relate to Funeral Service. Emphasis will be given to the role of the funeral director within the psychological concepts of grief, mourning, and bereavement.

**MORT 2400 – Embalming II** 3 cr
MORT 2405 – Embalming II Lab 1 cr
Prereq: MORT 1405. Coreq: MORT 2400. Practical application of the fundamental principles presented in MORT 2400 - Embalming II.

MORT 2600 – Restorative Art 3 cr
Prereq: MORT 1400 and 1405. Coreq: MORT 2605. An introduction to facial restoration techniques, including restoration of facial expressions and proportions by proper use of instruments and special materials. Emphasis is placed on major restoration including problem cases which require illusionary corrections, waxes, cosmetics, hair restoration, color matching, and masking of small and extensive discolorations.

MORT 2605 – Restorative Art Lab 1 cr
Prereq: MORT 1400 and 1405. Coreq: MORT 2600. Practical application of the fundamentals learned in MORT 2600 - Restorative Art.

MORT 2700 – Mortuary Law and Ethics 3 cr
Prereq: MORT 1100. Business/legal principles affecting mortuary practice are surveyed with specific emphasis on business organizational forms, law of sales, funeral disclosure rules, and the legal duties of a funeral service provider. Funeral service ethics are emphasized.

MORT 2730 – Funeral Home Management and Merchandising 4 cr
Prereq: MORT 1100. Principles of funeral home management will be introduced including funeral home operations, management functions, current trends and computer applications. Buying/selling, pricing/displaying and features of merchandise will be studied.

MORT 2750 – Funeral Directing 4 cr
Prereq: MORT 1100. Introduction of various cultural, ethnic and geographic funeral customs. Discussion of death notification, timeframe for pre/at/post need services, transfer of remains, religious, fraternal and military practices, and cremation procedures.

MORT 2770 – National Board Exam Professional Review 2 cr
Prereq:MORT 2400/2405; 2600/2605. This course prepares students to take the National Board Exam. The course is designed to allow for extensive testing of the student's knowledge, both theoretical and technical. A review of subject areas on the exam will take place. Both sections of the official National Board Exam must be completed to finish the course and for graduation.

MOTO 1111 – Engine Fundamentals & Repair 3 cr
Coreq: MOTO 1112. A comprehensive program consisting of safety, proper use of shop tools, fasteners, fuels, lubricants and coolants, 2 and 4 stroke engine theory, proper use of reference materials, and physical principles of engine operation.
MOTO 1112 – Engine Fund. & Repair Lab
Coreq: MOTO 1111. Hands-on component of the fundamentals learned in MOTO 1111.

MOTO 1111 – Engine Fundamentals

MOTO 1121 – Motorcycle/OPE Electrical
Coreq: MOTO 1122. This course will train technicians in electrical theory and proper diagnosis and repair of chassis harnesses, charging, starting and lighting systems. Students will also be taught trailer wiring.

MOTO 1122 – Motorcycle/OPE Electrical Lab
Coreq: MOTO 1121. Hands-on component of fundamentals learned in MOTO 1121.

MOTO 1131 – M/C & OPE Engine Performance
Coreq: MOTO 1132. A course to teach carburetor, fuel injection and ignition theory, diagnostic, repair and tuning.

MOTO 1132 – M/C & OPE Engine Perform Lab
Coreq: MOTO 1131. Hands-on component of fundamentals learned in MOTO 1131.

MOTO 1141 – M/C & OPE Drive Train/Chassis
Coreq: MOTO 1142. This course is designed to teach technicians transmissions (both belt and gear), clutch, final drive, brake, and suspension system diagnosis and repair.

MOTO 1142 – M/C & OPE Drive Train Lab
Coreq: MOTO 1141. Hands-on component of fundamentals learned in MOTO 1141.

MSE 2000 – Cooperative Education In Material Science Engineering
Prereq: Sophomore standing, minimum 2.0 GPA, and departmental approval. This is a supervised work experience in a business, industrial or government environment, related to the program major. Credit is awarded for successful completion of specified learning objectives.

Prereq: CHEM 1210. An introduction to materials science for majors. The five material categories; metals, ceramics, polymers, composites, semiconductors are introduced. Concepts are reinforced with hands-on experiences.

MSE 2160 – Elements of Material Science
Prereq: CHEM 1210. The five classes of materials; metals, ceramics, polymers, composites and semiconductors are introduced. The effect of structure on material properties is explored on both the macroscopic and microscopic level.
MSE 2170 – Material Science for Civil 1.5 cr
Prereq: CHEM 1210. Five classes of materials metals, ceramics, polymers, composites and semiconductors are introduced. The effect of structure on material properties is explored on both the macroscopic and microscopic level.

MSE 2320 – Introduction To Scanning Probe Microscopy 2 cr
Prereq: CHEM 1110 or 1210. Theory and practice related to the use of Scanning Probe Microscopes, including Atomic Force Microscopes (AFM) and Scanning Tunneling Microscopes (STM). Experience with Contact Mode, Tapping Mode and Friction Mode and lithographic applications such as dip pen lithography and nano shaving. Students will create their own samples as well as imaging commercially available samples.

MSE 2330 – Introduction to Scanning Electron Microscopy 2 cr
Prereq: CHEM 1110 or CHEM 1210 Recommended Prereq: PHYS 2220. This course introduces students to the use of the Scanning Electron Microscope, in both standard and EDS mode. Includes both theory and practical applications.

MSE 2900 – Special Topics In Materials Science Engineering 1-3 cr
Special Topics reflecting items of current interest in Materials Science Engineering.

MUSC 0990 – Recital Attendance 0 cr
A course to broaden the music majors vision of performance: staging, interpretation, execution and removing barrier between performer and audience. Major attend departmental recitals and concerts.

MUSC 1010 – Introduction to Music (FA) 3 cr
An introductory survey of Western music from chant to jazz highlighting major contributions from the Middle Ages, Renaissance, Baroque, Classical, Romantic, 20th Century and American musical styles.

MUSC 1020 – History of Rock and Roll (FA) 3 cr
A comprehensive introduction to rock history providing a look at the evolution of rock music from its roots to the present.

MUSC 1030 – Survey of Jazz (FA) 3 cr
A chronology of jazz from its roots in blues and ragtime to swing, bebop, fusion, and funk.

MUSC 1040 – U.S. Music & Culture (FA,DV) 3 cr
A survey of music in the United States exploring the diverse musical traditions of this country. Students will apply listening and analytical skills to understand current topics of diversity in American culture as they relate to music.
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MUSC 1050</td>
<td>Songwriting I</td>
<td>2 cr</td>
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<td>Learn songwriting skills including</td>
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<td>song forms, melody and text. Students</td>
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<td>MUSC 1060</td>
<td>Songwriting II</td>
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<td>Prereq: MUSC 1050 w/C grade or better</td>
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<td>instruction in basic songwriting</td>
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<td>MUSC 1090</td>
<td>Bridging the Arts (FA)</td>
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<td>Course examines the interconnectedness</td>
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<td>and common thread within the creative</td>
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<td>MUSC 1100</td>
<td>Introduction to Music Theory</td>
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<td>Music fundamentals course. Materials</td>
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<td>construction and simple chord</td>
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<td>progressions.</td>
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<tr>
<td>MUSC 1110</td>
<td>Music Theory I</td>
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<td>Recommended prereq: MUSC 1100 or</td>
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<td>Music majors. First semester of a</td>
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<td>voice leading.</td>
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<td>MUSC 1120</td>
<td>Music Theory II</td>
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<td>majors. 2nd semester of a 4-semester</td>
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<td>secondary dominant and leading-tone</td>
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<td>MUSC 1130</td>
<td>Sight Singing/Ear Training I</td>
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<td>of rhythms, melodies, and harmonic</td>
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<td>MUSC 1140</td>
<td>Sight Singing/Ear Training II</td>
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<td>and MUSC 1130 (both w/C grade or</td>
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<td>MUSC 1145</td>
<td>Introduction to Piano</td>
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<td>Beginning piano instruction in a</td>
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<td>group setting for non-music majors.</td>
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MUSC 1150 – Group Piano I  1 cr  
First semester of beginning piano instruction in a group setting for music majors.

MUSC 1160 – Group Piano II  1 cr  
Prereq: MUSC 1150 or instructor approval. Second semester of beginning piano instruction in a group setting for music majors.

MUSC 1200 – Introduction to the Music Industry  1 cr  
This course gives a fundamental overview of the workings of the music industry and encourages students to use entrepreneurial thinking to seek opportunities in this rapidly changing business.

MUSC 1300 – Money & Creative Professionals  1 cr  
Basic financial information for creative professionals or students interested in freelance work or setting up a studio. This course is useful for artists working in the areas of fine art, the many forms of design, photography, film/video, music, advertising, the performing arts and creative or technical writing.

MUSC 1310 – Group Voice  2 cr  
Individual student vocal skills developed in a group setting. Music fundamentals are introduced.

MUSC 1350 – College Chorale  1 cr  
A non-audition choir. Teaches choral singing skills. Open to all students who would like to sing. May be repeated for credit.

MUSC 1360 – College Chorale  0 cr  
Same as MUSC 1350 with no credit. Special fee required.

MUSC 1370 – Concert Choir  1 cr  
Prereq: Audition. A large four-part select ensemble that specializes in large choral/orchestral works by major composers. Participation in Concert Choir meets the ensemble requirements for a music degree and may be repeated for credit.

MUSC 1380 – Chamber Singers  1 cr  
Prereq: Audition. A select mixed-voice chamber choir that performs smaller works from all stylistic periods. Concurrent participation in Concert Choir is a requirement for membership in Chamber Singers. May be repeated for credit.

MUSC 1390 – South City Jazz  1 cr  
Prereq: Audition. A highly select vocal ensemble devoted to performing contemporary music of exceptional quality. Concurrent participation in Concert Choir is a requirement for membership in South City Jazz. May be repeated for credit.
MUSC 1400 – Copyrights for Creative Professionals 1 cr
This introductory short course focuses on U. S. copyrights given to creative individuals who produce visual, musical, literary works of art or performing arts. The course also covers licensing and trademarking.

MUSC 1420 – Salesmanship And Promotion For Creative Professionals 2 cr
This introductory short course will introduce basic sales and self-promotional principles and techniques specifically tailored for creative artists.

MUSC 1440 – Building A Creative Business 2 cr
This introductory short course will introduce basic business structures and examine the process of setting up a business for creative professionals working in the areas of music, the many forms of visual design, fine art, animation, film and video, and the literary arts.

MUSC 1450 – Concert Band 1 cr
Concert Band is for woodwind, brass and percussion students performing a wide range of music styles from classical to jazz.

MUSC 1460 – Symphony Orchestra 1 cr
Prereq: Audition. Symphony Orchestra is for concert strings, woodwind, and percussion students who perform a wide range of styles from the symphony orchestra repertoire.

MUSC 1470 – Jazz Ensemble 1 cr
Prereq: Audition. A jazz ensemble that will work on individual skills in large and small ensemble jazz performance.

MUSC 1480 – Guitar Ensemble 1 cr
Prereq: Audition. A performing guitar ensemble for intermediate to advanced students.

MUSC 1500 – Music and Technology (ID) 3 cr
Explores the influence of technology on musical creation and introduces students to current music-related technologies, including digital audio recording, MIDI, music notation software, computer-aided music instruction, etc.

MUSC 1510 – Desktop Music Publishing 3 cr
Recommended prereq: MUSC 1100 or concurrently; or equivalent proficiency in reading musical notation. Instruction in music notation engraving and publishing using MIDI-based music notation software.
MUSC 1515 – Basic Audio Production 3 cr
A broad overview of sound, sound systems, recording, and live sound reinforcement providing basic training in the physics of sound and the hardware and systems used to control and record it.

MUSC 1520 – Intro to MIDI/Elec Music Comp 3 cr
Introduction to electronic instruments, including synthesis and sampling: digital communication between electrical musical devices (MIDI); basic principles of music comp. and performance for electronic instruments and computer-based arranging.

MUSC 1530 – Music Recording Techniques 4 cr
Prereq: MUSC 1515 or instructor approval. Instruction in digital music recording in both studio and live performance settings.

MUSC 1540 – MIDI II/Media Music Comp 3 cr
Prereq: MUSC 1520 or instructor approval. Continued instruction in music composition using computers and MIDI-compatible elec. instruments; introduces students to professional-type projects.

MUSC 1550 – Musical Acoustics 3 cr
Recommended prereq: Math proficiency Algebra and Geometry. Basic instruction in musical acoustics beginning with a foundation in the physics of sound waves, sound measurement, and the human ear. Students will learn how different instruments create musical sounds and fundamental aspects of room acoustics and sound reproduction. They will also learn how these principles affect human perception of musical experiences.

MUSC 1560 – Music Mixing Techniques 3 cr
Prereq: MUSC/COMM/FLM/THEA 1515. Music Mixing Techniques is designed to teach intermediate to advanced concepts in editing and mixing of digital multitrack audio. Students will be given the opportunity to work in a commercial style recording facility and learn to use equipment and methods that are consistent with current recording industry practices.

MUSC 1610 – Group Guitar I 2 cr
Beginning guitar in a group setting. Includes basic chords in open position, strumming, finger style accompaniment patterns, standard notation, transposition and construction of chord progressions.

MUSC 1620 – Group Guitar II 2 cr
Prereq: MUSC 1610. Intermediate level guitar in a group setting. Includes chords with added bass notes, bar chords, single note melodies, combining notes and chords, tablature and improvisation.

MUSC 1660 – Fretboard Theory I 2 cr
Music theory for guitar. Includes scales, intervals, triads, seventh chords, harmonizing simple melodies and basic rhythm reading.
MUSC 1670 – Fretboard Theory II 2 cr

MUSC 1710 – Pvt Lessons: Guitar 1 cr
12 one-half hour private music lessons for non-music majors on fretted string instruments; guitar, bass. Additional fee is required.

MUSC 1712 – Pvt Lessons: Guitar 1 cr
Prereq: Audition (Must be able to perform NYSSMA Grade 4 Literature at a minimum). 12 one-half hour private music lessons for music majors on fretted string instruments: Guitar, Bass. Additional fee is required.

MUSC 1715 – Pvt Lessons: Guitar 2 cr
Prereq: Audition (Must be able to perform NYSSMA Grade 4 Literature at a minimum). 12, 45 minute private music lessons for music performance majors on fretted string instruments: Guitar/Bass. Additional fee is required.

MUSC 1720 – Pvt Lessons: Strings 1 cr
12 one-half hour private music lessons for non-music majors on string instruments: violin, viola, cello, contrabass. Additional fee is required.

MUSC 1722 – Pvt Lessons: Strings 1 cr
Prereq: Audition (Must be able to perform NYSSMA Grade 4 Literature at a minimum). 12 one-half hour private music lessons for music majors on string instruments: violin, viola, cello, contrabass. Additional fee is required.

MUSC 1725 – Pvt Lessons: Strings 2 cr
Prereq: Audition (Must be able to perform NYSSMA Grade 4 Literature at a minimum). 12, 45 minute private music lessons for music performance majors on string instruments: violin, viola, cello, contrabass. Additional fee is required.

MUSC 1730 – Private Lessons: Piano 1 cr
12 one-half hour private music lessons for non-music majors on keyboard instruments: piano, organ, keyboards. Additional fee is required.

MUSC 1732 – Private Lessons: Piano 1 cr
Prereq: Audition (Must be able to perform NYSSMA Grade 4 Literature at a minimum). 12 one-half hour private music lessons for music majors on keyboard instruments: piano, organ, keyboards. Additional fee is required.
MUSC 1735 – Private Lessons: Piano 2 cr
Prereq: Audition (Must be able to perform NYSSMA Grade 4 Literature at a minimum). 12, 45 minute private music lessons for music performance majors on keyboard instruments: piano, organ, keyboards. Additional fee is required.

MUSC 1740 – Pvt Lessons: Brass 1 cr
12 one-half hour private music lessons for non-music majors on brass instruments: trumpet, French horn, trombone, euphonium or tuba. Additional fee is required.

MUSC 1742 – Pvt Lessons: Brass 1 cr
Prereq: Audition (Must be able to perform NYSSMA Grade 4 Literature at a minimum). 12 one-half hour private music lessons for music majors on brass instruments: trumpet, French horn, trombone, euphonium or tuba. Additional fee is required.

MUSC 1745 – Pvt Lessons: Brass 2 cr
Prereq: Audition (Must be able to perform NYSSMA Grade 4 Literature at a minimum). 12, 45 minute private music lessons for music performance majors on brass instruments: trumpet, French horn, trombone, euphonium or tuba. Additional fee is required.

MUSC 1750 – Private Lessons: Voice 1 cr
12 one-half hour private music lessons for non-music majors on voice: soprano, alto, tenor, bass. Additional fee is required.

MUSC 1752 – Private Lessons: Voice 1 cr
Prereq: Audition (Must be able to perform NYSSMA Grade 4 Literature at a minimum). 12 one-half hour private music lessons for music majors on voice: soprano, alto, tenor, bass. Additional fee is required.

MUSC 1755 – Private Lessons: Voice 2 cr
Prereq: Audition (Must be able to perform NYSSMA Grade 4 Literature at a minimum). 12, 45 minute private music lessons for music performance majors on voice: soprano, alto, tenor, bass. Additional fee is required.

MUSC 1760 – Pvt Lessons: Woodwinds 1 cr
12 one-half hour private music lessons for non-music majors on woodwind instruments: flute, oboe, clarinet, bassoon, saxophone. Additional fee is required.

MUSC 1762 – Pvt Lessons: Woodwinds 1 cr
Prereq: Audition (Must be able to perform NYSSMA Grade 4 Literature at a minimum). 12 one-half hour private music lessons for music majors on woodwind instruments: flute, oboe, clarinet, bassoon, saxophone. Additional fee is required.
MUSC 1765 – Pvt Lessons: Wwinds 2 cr
Prereq: Audition (Must be able to perform NYSSMA Grade 4 Literature at a minimum). 12, 45 minute private music lessons for music performance majors on woodwind instruments: flute, oboe, clarinet, bassoon, saxophone. Additional fee is required.

MUSC 1770 – Private Lessons: Percussion 1 cr
12 one-half hour private music lessons for non-music majors on percussion instruments: drums, set, xylophone, marimba, timpani, and percussion. Additional fee is required.

MUSC 1772 – Private Lessons: Percussion 1 cr
Prereq: Audition (Must be able to perform NYSSMA Grade 4 Literature at a minimum). 12 one-half hour private music lessons for music majors on percussion instruments: drums, set, xylophone, marimba, timpani, and percussion. Additional fee is required.

MUSC 1775 – Private Lessons: Percussion 2 cr
Prereq: Audition (Must be able to perform NYSSMA Grade 4 Literature at a minimum). 12, 45 minute private music lessons for music performance majors on percussion instruments: drums, set, xylophone, marimba, timpani, and percussion. Additional fee is required.

MUSC 1900 – Special Studies 1-3 cr
Prereq: Instructor approval. Students plan their areas of work or performance with the instructor on an individual basis.

MUSC 2110 – Music Theory III 3 cr
Prereq: MUSC 1120 w/C grade or better. Coreq: MUSC 2130 for music majors. 3rd semester of a 4-semester series. Materials to be covered: chromatic harmony, modulation techniques, basic formal analysis.

MUSC 2120 – Music Theory IV 3 cr
Prereq: MUSC 2110 w/C grade or better. Coreq: MUSC 2140 for Music majors. 4th semester of a 4-semester series. Material to be covered: advanced chromatic harmony, impressionism and 20th century theory including set theory, serialism, etc.

MUSC 2130 – Sight Singing/Ear Training III 1 cr
Prereq: MUSC 2110 or concurrently and MUSC 1140 (both w/C grade or better). Third semester of a four-semester series. Continued development of aural skills, building on those learned in SS-ET I and II.

MUSC 2140 – Sight Singing/Ear Training IV 1 cr
Prereq: MUSC 2120 or concurrently, and MUSC 2130 (both w/C grade or better). Fourth semester of a four-semester series. Continued SS-ET I, II and III.
MUSC 2350 – Conducting Fundamentals 2 cr
Prereq: MUSC 1120. The fundamentals of conducting music, including beat patterns, baton technique, score reading, cuing, subdivisions, fermatas and releases. The class will function as an ensemble and each student will conduct the group.

MUSC 2500 – Music Production Group 4 cr
Prereq: MUSC 1060 (Songwriting II) w/C grade or better, MUSC 1530 (Music Recording Techniques) or MUSC 1540 (MIDI II/Media Music Composition) or instructor approval. Hands-on experience creating music for professional-level projects.

MUSC 2510 – Music Composition for Games and Interactive Media 3 cr
Prereq: MUSC 1540 or MUSC 1120 w/C grade or better; or instructor approval. Instruction and practice in composing music for use in video games and interactive multimedia applications. Students will study existing games and media to learn how music can be effectively used. They will also experience the process of creating and preparing music for a variety of uses in the field.

MUSC 2520 – Music Scoring For Film 3 cr
Prereq: MUSC 1540 w/C grade or better, or instructor approval. Instruction and practice in composing music for use as underscore in film. Students will examine the scores of historical and present-day films to learn different approaches to film scoring and the different roles music can play in film, will learn about the process of creating music for film from the spotting session through the final audio mix and will compose and record their own underscores.

MUSC 2550 – Music Internship 1-3 cr
Prereq: Instructor approval and second year status in the Music Recording Technology or Media Music programs. The Music Internship is an opportunity for students to gain college credit for participating in an internship with a professional recording studio or related business such as an audio post facility or pro-audio dealer under the guidance of an SLCC faculty member in the Fine Arts.

MUSC 2570 – Game Audio Design 3 cr
Prereq: MUSC 1515. This course introduces students to the field of sound design for games and interactive media. Students will develop skills in creation of game audio assets and in the use of middleware programs used in the video game industry for the implementation of assets within the game environment.

MUSC 2710 – Pvt Lessons:Guitar 1 cr
Prereq: MUSC 1710. 12 one-half hour private music lessons for non-music majors on fretted string instruments; guitar, bass. Additional fee is required.
MUSC 2712 – Pvt Lessons: Guitar/Bass 1 cr
Prereq: MUSC 1712 and Audition (Must be able to perform NYSSMA Grade 5 Literature at minimum). 12 one-half hour private music lessons for music majors on fretted string instruments: guitar, bass. Additional fee is required.

MUSC 2715 – Pvt Lessons: Guitar 2 cr
Prereq: MUSC 1715 and Audition (Must be able to perform NYSSMA Grade 5 Literature at minimum). 12, 45 minute private music lessons for music performance majors on fretted string instruments: guitar, bass. Additional fee is required.

MUSC 2720 – Pvt Lessons: Strings 1 cr
Prereq: MUSC 1720. 12 one-half hour private music lessons for non-music majors on string instruments: violin, viola, cello, contrabass. Additional fee is required.

MUSC 2722 – Pvt Lessons: Strings 1 cr
Prereq: MUSC 1722 and Audition (Must be able to perform NYSSMA Grade 5 Literature at minimum). 12, one-half hour private music lessons for music majors on string instruments: violin, viola, cello, contrabass. Additional fee is required.

MUSC 2725 – Pvt Lessons: Strings 2 cr
Prereq: MUSC 1725 and Audition (Must be able to perform NYSSMA Grade 5 Literature at minimum). 12, 45 minute private music lessons for music performance majors on string instruments: violin, viola, cello, bass. Additional fee is required.

MUSC 2730 – Private Lessons: Piano 1 cr
Prereq: MUSC 1730. 12, one-half hour private music lessons for non-music majors on keyboard instruments: piano, organ, keyboards. Additional fee is required.

MUSC 2732 – Private Lessons: Piano 1 cr
Prereq: MUSC 1732 and Audition (Must be able to perform NYSSMA Grade 5 Literature at minimum). 12, one-half hour private music lessons for music majors on keyboard instruments: piano, organ, keyboards. Additional fee is required.

MUSC 2735 – Private Lessons: Piano 2 cr
Prereq: MUSC 1735 and Audition (Must be able to perform NYSSMA Grade 5 Literature at minimum). 12, 45 minute private music lessons for music performance on keyboard instruments: piano, organ, keyboards. Additional fee is required.

MUSC 2740 – Pvt Lessons: Brass 1 cr
Prereq: MUSC 1740. 12, one-half hour private music lessons for non-music majors on brass instruments: trumpet, French horn, trombone, euphonium or tuba. Additional fee is required.
MUSC 2742 – Pvt Lessons: Brass 1 cr
Prereq: MUSC 1742 and Audition (Must be able to perform NYSSMA Grade 5 Literature at minimum). 12, one-half hour private music lessons for music majors on brass instruments: trumpet, French horn, trombone, euphonium or tuba. Additional fee is required.

MUSC 2745 – Pvt Lessons: Brass 2 cr
Prereq: MUSC 1745 and Audition (Must be able to perform NYSSMA Grade 5 Literature at minimum). 12, 45 minute private music lessons for music performance majors on brass instruments: trumpet, French horn, trombone, euphonium or tuba. Additional fee is required.

MUSC 2750 – Private Lessons: Voice 1 cr
Prereq: MUSC 1750. 12, one-half hour private music lessons for non-music majors on voice: soprano, alto, tenor, bass. Additional fee is required.

MUSC 2752 – Private Lessons: Voice 1 cr
Prereq: MUSC 1752 and Audition (Must be able to perform NYSSMA Grade 5 Literature at minimum). 12, one-half hour private music lessons for music majors on voice: soprano, alto, tenor, bass. Additional fee is required.

MUSC 2755 – Private Lessons: Voice 2 cr
Prereq: MUSC 1755 and Audition (Must be able to perform NYSSMA Grade 5 Literature at minimum). 12, 45 minute private music lessons for music performance majors on voice: soprano, alto, tenor, bass. Additional fee is required.

MUSC 2760 – Private Lessons: Winds 1 cr
Prereq: MUSC 1760. 12, one-half hour private music lessons for non-music majors on woodwind instruments: flute, oboe, clarinet, bassoon, saxophone. Additional fee is required.

MUSC 2762 – Private Lessons: Winds 1 cr
Prereq: MUSC 1762 and Audition (Must be able to perform NYSSMA Grade 5 Literature at minimum). 12, one-half hour private music lessons for music majors on woodwind instruments: flute, oboe, clarinet, bassoon, saxophone. Additional fee is required.

MUSC 2765 – Pvt Lessons: Winds 2 cr
Prereq: MUSC 1765 and Audition (Must be able to perform NYSSMA Grade 5 Literature at minimum). 12, 45 minute private music lessons for music performance majors on woodwind instruments: flute, oboe, clarinet, bassoon, saxophone. Additional fee is required.

MUSC 2770 – Private Lessons: Percussion 1 cr
Prereq: MUSC 1770. 12, one-half hour private music lessons for non-music majors on percussion instruments: drums, set, xylophone, marimba, timpani, percussion. Additional fee is required.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 2772</td>
<td>Private Lessons: Percussion</td>
<td>1 cr</td>
<td>MUSC 1772 and Audition (Must be able to perform NYSSMA Grade 5 Literature at minimum). 12, one-half hour private music lessons for music majors on percussion instruments: drums, set, xylophone, marimba, timpani and percussion. Additional fee is required.</td>
</tr>
<tr>
<td>MUSC 2775</td>
<td>Private Lessons: Percussion</td>
<td>2 cr</td>
<td>MUSC 1775 and Audition (Must be able to perform NYSSMA Grade 5 Literature at minimum). 12, 45 minute private music lessons for music performance majors on percussion instruments: drums, set, xylophone, marimba, timpani and percussion. Additional fee is required.</td>
</tr>
<tr>
<td>MUSC 2900</td>
<td>Special Topics</td>
<td>1-4 cr</td>
<td>Department approval. A course in which students explore specific areas of interest under faculty direction.</td>
</tr>
<tr>
<td>MUSC 2990</td>
<td>Fine Arts Project</td>
<td>2 cr</td>
<td>Department approval. A collaboration of dance, music, theatre and/or art students to create individual works to be performed.</td>
</tr>
<tr>
<td>NAV 1010</td>
<td>Beginning Navajo I</td>
<td>5 cr</td>
<td>First in a series of four courses which focus on listening, speaking, reading, writing and culture. Major objective of the first year is to develop functional language ability in the Navajo culture. Lab attendance is required.</td>
</tr>
<tr>
<td>NAV 1020</td>
<td>Beginning Navajo II (LN)</td>
<td>5 cr</td>
<td>NAV 1010 or instructor approval. The second in a four-course series focusing on five skills: listening, speaking, reading, writing and culture; to develop functional language ability in survival and social situations. Emphasis is on proficiency. Attendance in lab is required.</td>
</tr>
<tr>
<td>NDT 1110</td>
<td>Intro./Non-Destructive Testing</td>
<td>3 cr</td>
<td>An introduction to the five major non-destructive testing methods, certification requirements, inspectors responsibilities, visual testing and the use and operation of gauges.</td>
</tr>
<tr>
<td>NDT 1114</td>
<td>Ultrasonics 1 Theory</td>
<td>3 cr</td>
<td>NDT 1115. This course is devised to give the student a complete introduction through hands-on-experience in the ultrasonic method within the field of Nondestructive Testing. The course is designed to meet certain NDT Level I requirements in accordance with A.S.N.T. SNT-TC-1A &amp; NAS-410.</td>
</tr>
<tr>
<td>NDT 1115</td>
<td>Ultrasonics 1 Lab</td>
<td>1 cr</td>
<td>NDT 1114. Students will learn basic applications of ultrasonic inspection. Emphasis is placed on familiarizing students with the components and controls of ultrasonic equipment and calibration.</td>
</tr>
</tbody>
</table>
NDT 1120 – Magnetic Particle I 2 cr
Coreq: NDT 1121. A basic to advanced theory of magnetic particle testing. How magnetizing currents are used, formulas, methods, applications and limitations.

NDT 1121 – Magnetic Particle I Lab 1 cr
Coreq: NDT 1120. Students will learn basic and advanced applications of magnetic fields, material sensitivity and equipment calibration.

NDT 1122 – Eddy Current 1 Theory 3 cr
Coreq: NDT 1123. A basic theory of electromagnetic principles, formulas, material applications, methods and limitations. The course is designed to meet certain NDT Level I requirements in accordance with ASNT-SNT-TC-1A & NAS-410.

NDT 1123 – Eddy Current I Lab 1 cr
Coreq: NDT 1122. Emphasis is placed on familiarizing students with controls of eddy current machines and calibration.

NDT 1130 – Radiation Safety 3 cr
Students are instructed in the rules and regulations of radiation safety, including the characteristics of X-ray and gamma radiation. Use and operation of equipment, calculations, and NRC requirements.

NDT 1132 – Radiography 1 Theory 3 cr
Coreq: NDT 1130. A basic theory of radiography, formulas, inspection methods, film processing, material sensitivity applications and limitations. The course is designed to meet certain NDT Level I requirements in accordance with ASNT-SNT-TC-1A & NAS-410.

NDT 1133 – Radiography I Lab 1 cr
Coreq: NDT 1132. This course familiarizes students with the components and controls of radiographic equipment. Students apply each of the techniques on various lab samples. NRC safety regulations are also emphasized.

NDT 1210 – Liquid Penetrant I & II 2 cr
Coreq: NDT 1211. A basic to advanced theory of liquid penetrant testing. How liquid penetrants are used, formulas, methods, applications and limitations.

NDT 1211 – Liquid Penetrant I & II Lab 1 cr
Coreq: NDT 1210. Students will learn basic and advanced applications of liquid penetrants material sensitivity and equipment calibration.
NDT 1213 – Ultrasonics II 3 cr
Coreq: NDT 1214. Students will learn basic and advanced applications of liquid penetrants material sensitivity and equipment calibration.

NDT 1214 – Ultrasonics II Lab 1 cr
Coreq: NDT 1213. Students perform ultrasonic inspection to applicable codes and standards as they apply techniques developed and special techniques.

NDT 1222 – Eddy Current II 2 cr
Prereq: NDT 1122 and NDT 1123. Coreq: NDT 1223. This advanced theory of eddy current inspection concentrates on codes and standards as they apply to eddy current testing, reporting of test results and developing techniques.

NDT 1223 – Eddy Current II Lab 1 cr
Coreq: NDT 1222. Students perform eddy current inspection to applicable codes and standards, applying techniques developed and special applications.

NDT 1230 – Codes and Procedures 2 cr
Prereq: Instructor approval. Students will learn how to read and interpret a variety of codes including ISO 9712, ASME, API, and ASTM documents.

NDT 1232 – Radiography II 3 cr
Prereq: NDT 1132 and NDT 1133. Coreq: NDT 1233. This advanced theory of radiographic inspection concentrates on codes and standards as they apply to radiography, reporting of test results and developing techniques.

NDT 1233 – Radiography II Lab 1 cr
Coreq: NDT 1232. This advanced course concentrates on film interpretation, multiple film loading techniques and radiographic procedures.

NDT 1234 – Advanced NDT Concepts 3 cr
Prereq: Instructor approval. The study of advanced concepts of NDT including specific methods and applications using radioactive isotopes. Emphasis is placed on procedures and applications.

NSG 1200 – Pharmacology I 2 cr
Prereq: Completion of Prerequisite courses and Admission to the program per established curriculum plan. Introduces the basic concepts of pharmacology. Utilizing the nursing process, students are introduced to the safe administration of medications to clients across the health continuum.
NSG 1300 – Nursing Fundamentals 4 cr
Prereq: Completion of Prerequisite courses and Admission to the program per established curriculum plan. Coreq: NSG 1305 (without exception). Introduces theories basic to the student assuming the role of provider, manager and member of the nursing profession. Emphasis is placed on introduction to critical thinking and the nursing process.

NSG 1305 – Nursing Fundamentals Clinical 2 cr
Prereq: Completion of Prerequisite courses and Admission to the program per established curriculum plan. Coreq: NSG 1300 (without exception). The clinical experience builds upon concepts and skills introduced in NSG 1300. Clinical experience expands critical thinking by incorporating the multidisciplinary team in the care of the Nursing Fundamentals client.

NSG 1400 – Maternal Newborn Nursing 2 cr
Prereq: Completion of prior semester courses per established curriculum plan. Coreq: NSG 1405 (without exception). Provides family centered approach to nursing care of the childbearing client and family across the continuum as provider and manager of care in health care settings.

NSG 1405 – Maternal Newborn Nursing Clin. 1 cr
Prereq: Completion of prior semester courses per established curriculum plan. Coreq: NSG 1400 (without exception). The clinical experience builds upon concepts and skills introduced in NSG 1400. Clinical experience expands critical thinking by incorporating the multidisciplinary team in the care of the Maternal Newborn client.

NSG 1500 – Nursing Care of Children 2 cr
Prereq: Completion of prior semester courses per established curriculum plan. Coreq: NSG 1505 (without exception). Introduces students to family centered pediatric nursing care of infants, children, adolescents and their families across the health continuum in body systems.

NSG 1505 – NSG Care of Children Clinical 0 cr
Prereq: Completion of prior semester courses per established curriculum plan. Coreq: NSG 1500 (without exception). The clinical experience builds upon concepts and skills introduced in Nursing Care of Children. Clinical experience expands critical thinking by incorporating the multidisciplinary team in the care of the pediatric client.

NSG 1700 – Medical Surgical Nursing I 4 cr
Prereq: Completion of prior semester courses per established curriculum plan. Coreq: NSG 1705 (without exception). Builds upon prior curriculum content to introduce the student to basic medical/surgical nursing care across the health continuum.
NSG 1705 – Med/Surg Nursing I Clinical  
Prereq: Completion of prior semester courses per established curriculum plan. Coreq: NSG 1700 (without exception). The clinical experience builds upon concepts and skills introduced in NSG 1700. Clinical experience expands critical thinking by incorporating the multidisciplinary team in the care of the basic medical surgical client.

NSG 1800 – Transition Into Practical Nur  
Prereq: Completion of the first year of nursing and all co-requisites (English 1010, Psych 1100 and Health 1020). Coreq: NSG 1805 (without exception). Prepares the qualified student to transition into the role of practical nurse. The nursing process and critical thinking skills are utilized in the study and application of contents essential to client care across the health continuum.

NSG 1805 – Trans/Pract. Nursing Clinical  
Prereq: Completion of the first year of nursing and all co-requisites (English 1010, Psych 1100 and Health 1020). Coreq: NSG 1800 (without exception). The clinical experience builds upon the concepts and skills introduced in the first year of the nursing program. Clinical experience expands critical thinking related to the role and scope of practice of the LPN.

NSG 1900 – Transition into A.S. Nursing  
Prereq: Acceptance into the Advanced Placement Nursing Program. This course is designed to assist the licensed practical nurse in adapting to the new role of a registered nurse as provider, manager and member of the nursing profession. The student will identify critical thinking skills necessary to provide complex client care across the health continuum.

NSG 1990 – Independent Study Course  
Prereq: Actively enrolled in the Nursing Program. This course is offered on an individual basis to student nurses. It allows the student to complete one to five hours of guided independent learning experiences within the first year.

NSG 2100 – Pharmacology II  
Prereq: Admission to the program per established curriculum plan. Continues to build upon the concepts introduced in NSG 1200 Pharmacology I, in the safe administration of medications of clients across the health continuum.

NSG 2200 – Med/Surg Nursing II  
Prereq: Completion of prior semester courses per established curriculum plan. Coreq: NSG 2205 (without exception). Builds upon concepts introduced in NSG 1700. Course content expands critical thinking by reviewing body systems and the nursing process for the care of the intermediate medical/surgical client.
NSG 2205 – Med/Surg Nursing II Clinical  2 cr
Prereq: Completion of prior semester courses per established curriculum plan. Coreq: NSG 2200 (without exception). The clinical experience builds upon concepts and skills introduced in NSG 2200. Clinical experience expands critical thinking by incorporating the multidisciplinary team in the care of the intermediate medical surgical client.

NSG 2300 – Community Nursing  2 cr
Prereq: Completion of prior semester courses per established curriculum plan. Coreq: NSG 2305 (without exception). Introduces students to various health care delivery systems within the community. Concepts of holistic care are emphasized in providing primary, secondary and tertiary prevention to aggregates across the health continuum.

NSG 2305 – Community Nursing Experience  0 cr
Prereq: Completion of prior semester courses per establish curriculum plan. Coreq: NSG 2300 (without exception). This experience builds upon concepts and skills introduced in NSG 2300. Discretionary hours experience expands critical thinking by incorporating the multidisciplinary team in the care of the Community Nursing client.

NSG 2400 – Medical/Surgical Nursing III  3 cr
Prereq: Completion of prior semester courses per established curriculum plan. Coreq: NSG 2405 (without exception). This course integrates all previous curricular concepts in medical/surgical nursing into the care of the critically ill client. Course content expands critical thinking by reviewing body systems and the nursing process for the care of the critically ill client.

NSG 2405 – Med/Surg Nursing III Sim  0 cr
Prereq: Completion of prior semester courses per established curriculum plan. Coreq: NSG 2400 (without exception). The simulation experience builds upon concepts and skills introduced in NSG 2400. Simulation experience expands critical thinking by incorporating the multidisciplinary team in the care of the advanced medical surgical nursing client.

NSG 2500 – Nursing Management: A Clinical Synthesis  3 cr
Prereq: Completion of prior semester courses per established curriculum plan. Introduces the student to current trends and issues affecting client care and the nursing profession. Students will participate in 100 hours of capstone/synthesis clinical experience.

NSG 2600 – Mental Health Nursing  2 cr
Prereq: Completion of prior semester courses per established curriculum plan. Coreq: NSG 2605 (without exception). Intended to provide basic understanding of psychiatric nursing care principles to clients across the health continuum.
NSG 2605 – Mental Health Nursing Clinical 1 cr
Prereq: Completion of prior semester courses per established curriculum plan. Coreq: NSG 2600 (without exception). The clinical experience builds upon concepts and skills introduced in NSG 2600. Clinical experience expands critical thinking by incorporating the multidisciplinary team in the care of the Mental Health client.

NSG 2900 – Pathophysiology 4 cr
Prereq: Completion of Nursing Program prerequisite courses. Intended to provide basic understanding of pathophysiologic principles and processes across the health continuum. These are discussed and applied to the most common disease states according to each body system.

NSG 2990 – Independ Study Course 2nd Year 1-5 cr
Prereq: Actively enrolled in the Nursing Program. This course is offered on an individual basis to student nurses. It allows the student to complete one to five hours of guided independent learning experiences within the second year.

OTA 1020 – Intro to Occupational Therapy 2 cr
Students learn a general overview of Occupational Therapy which includes three required job shadow experiences that the student must arrange independently.

OTA 1100 – Functional Anatomy 3 cr
Prereq: Acceptance to the OTA program. Coreq 1105. Students will explore neuro-musculoskeletal anatomy in depth and relate it to functional activity. Topics include neuroanatomy, structure and function of the musculoskeletal system, and components of human motion.

OTA 1105 – Functional Anatomy Lab 1 cr
Prereq: Acceptance into the OTA Program: Corequ: OTA 1100. Students will explore neuro-musculoskeletal anatomy in depth and relate it to functional activity. Topics include neuroanatomy, structure and function of the musculoskeletal system, and components of human motion.

OTA 1120 – OT Modalities I Lecture 2 cr
Prereq: Acceptance to the OTA program. Coreq: OTA 1130. Students study manual wheelchair parts/use/design/fit, ADL and IADL techniques & adapted devices; activity analysis; architectural accessibility and universal design; ergonomics; static splints/hand assessments, workplace design and patient cognitive levels. Designated as a service learning course.

OTA 1130 – OT Modalities I Lecture/Lab 3 cr
Prereq: Acceptance into the OTA program Coreq: OTA 1120. Students have practical application and active learning in lecture content. Designated service learning course.
OTA 1140 – Physical Dysfunction Lecture 3 cr
Prereq: Acceptance into the OTA Program. Corequisite: OTA 1150. Students learn the effects of dysfunction on occupational habits and occupational roles, apply the OT process, problem-solve ideas, become introduced to rehabilitation assessment, treatment techniques, and community resources.

OTA 1150 – Physical Dysfunction Lec/Lab 3 cr
Prereq: Acceptance into the OTA Program. Coreq: OTA 1140. Students learn practical application and apply active learning in lecture content. Designated as a service learning class.

OTA 1170 – Physical Dysfunction Fieldwork I Experience 2 cr
Prereq: Acceptance into the OTA program. This course prepares students for an adult rehab off-site experience along with instruction on quantitative competencies for the profession. Designated service learning course.

OTA 1180 – OT Domain & Process 2 cr
Prereq: Acceptance into the OTA program. Students learn the history, models of practice and frames of reference in occupational therapy, along with the domain and process of the profession. Students will have an introduction to documentation, medical terminology, and goal writing formats.

OTA 1210 – OT Professional Issues I 2 cr
Prereq: Acceptance into the OTA program. Students will study professional behaviors appropriate for placement in fieldwork sites. Successful work skills, advocating for the Occupational Therapy (OT) profession, creative planning and client-centered practice in the community will be explored. This is a designated service learning course.

OTA 1220 – OT Modalities II Lecture 2 cr
Prereq: Complete all 1st semester OTA courses. Coreq: OTA 1230. Students will learn theory of assistive technology and application of upper extremity splinting, prostheses, orthotic devices, computer technology and environmental controls.

OTA 1230 – OT Modalities II Lecture/Lab 3 cr
Prereq: Complete all 1st semester courses. Coreq: OTA 1220. Students learn practical application and active learning from OTA 1220. This course is a designated service learning course.

OTA 1240 – Physical Dysfunction II 3 cr
Prereq: Complete all 1st semester courses. Coreq: OTA 1250. Students continue the study of additional adult disabilities to learn how effects of dysfunction on occupational habits and occupational roles, apply the Occupational Therapy (OT) process, problem-solve ideas, become introduced to rehabilitation assessment, treatment techniques, and community resources.
OTA 1250 – Physical Dysfunction II Lab  3 cr
Prereq: Complete all 1st semester courses. Coreq: OTA 1240. Students learn practical application and active learning in lecture content. Designated as a service learning class.

OTA 1270 – Pediatrics Fieldwork I Experience  2 cr
Prereq: Complete all 1st semester courses. This course prepares students for a pediatric off-site experience along with instruction on evidence based treatment. Designated service learning course.

OTA 1280 – Pediatric/Adolescence Lecture  3 cr
Prereq: Complete all 1st semester courses. Coreq: OTA 1290. Students will study normal human development and common disabilities related to childhood from birth through adolescence.

OTA 1290 – Pediatric/Adolescence Lab  1 cr
Prereq: Complete all 1st semester courses. Coreq: OTA 1280. Students learn practical application and active learning in lecture content. This is a designated service-learning course.

OTA 2310 – OT Professional Issues II  2 cr
Prereq: Complete all 2nd semester courses. Students will study professional behaviors appropriate for placement in FW II sites. Successful work skills, advocating for the Occupational Therapy (OT) profession, creative planning and client-centered practice in the community will be explored. Designated service learning course.

OTA 2320 – OT Modalities III Lecture  2 cr
Prereq: Complete all 2nd semester courses. Coreq: OTA 2330. Students will learn tool usage and basic craft techniques for therapeutic application, skill development, activity analysis, and group therapy process.

OTA 2330 – Modalities III Lecture/Lab  3 cr
Prereq: Complete all 2nd semester courses. Coreq: OTA 2320. Students learn practical application and active learning of lecture content. Designated as a service learning course.

OTA 2340 – Psychosocial Behavior  3 cr
Prereq: Complete all 2nd semester courses. Students will study psychological dysfunction across the life span, OT interventions through current Occupational Therapy (OT) models of practice/frames of reference, and treatment planning interventions including group dynamics and operations.

OTA 2350 – Geriatrics  3 cr
Prereq: Complete all 2nd semester courses. Students will learn about the normal aging process and performance skill deficits common to the aging population, and interventions to bridge the gap between performance and dysfunction. Designated as a service-learning course.
OTA 2370 – Psychosocial/Geriatric Fieldwork I Experience  
Prereq: Complete all 2nd semester courses. This course prepares students for a geri-psych rehab off-site experience along with instruction on preparation for fieldwork IIs. Designated service learning course.

OTA 2450 – Fieldwork Experience II Part 1  
Prereq: Complete all 3rd semester courses. Students will complete a full-time eight week clinical fieldwork experience in a community setting arranged by Occupational Therapy Assistant (OTA) faculty along with instruction from a course instructor. Students will practice skills necessary for entry-level performance as an occupational therapy assistant. Designated service learning course.

OTA 2460 – Fieldwork Experience II Part 2  
Prereq: Completed all 3rd semester courses. Students will complete a full-time eight week clinical fieldwork experience in a community setting arranged by Occupational Therapy Assistant (OTA) faculty along with instruction from a course instructor. Students will practice skills necessary for entry-level performance as an occupational therapy assistant. Designated service learning course.

OTA 2960 – OT and PT in the Workplace  
Prereq: Instructor approval. Students learn principles of work hardening, work conditioning, industrial rehab as well as workplace safety, injury prevention, ergonomics and ADA implementation.

OTA 2990 – Special Topics  
Prereq: Instructor approval. This course will cover special topics such as: Review materials for NBCOT Exam. Enrollment requires faculty approval.

PED 1010 – Introduction to Paraeducation  
This course overviews concepts relevant to paraeducation including working with teachers, relating to students with disabilities, history of special education services, legal issues and communication techniques. *Note: The Para Education program is scheduled to be discontinued effective Summer Semester 2015.

PED 1500 – Behavioral Observations  
Prereq: PED 1010. This course introduces students to basic behavior management principles used in educational settings. Students will complete experiences within a classroom setting under the direction of a supervising educator. *Note: The Para Education program is scheduled to be discontinued effective Summer Semester 2015.

PED 1700 – Collaboration in the Classroom  
Prereq: PED 1010. A student successfully completing this class will combine the historical foundations and rational with definitions and dimensions of interactive teams for a solid foundation in collaboration within the educational community. Designated as a Service Learning course. *Note: The Para Education program is scheduled to be discontinued effective Summer Semester 2015.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PED 2100</td>
<td>Health Needs in the Classroom</td>
<td>3 cr</td>
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<tr>
<td></td>
<td>Prereq: PED 1010. This class includes how to ensure health care for students who have health impairments. Students will learn about the relationship between school and medical professionals. Designated as a Service Learning course. *Note: The Para Education program is scheduled to be discontinued effective Summer Semester 2015.</td>
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<tr>
<td>PED 2150</td>
<td>Introductory Experience</td>
<td>3 cr</td>
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<td>Prereq: PED 1010. Course overviews classroom techniques and will address ethical and professional responsibilities. Under the direction of a supervising educator, students will learn to implement teaching programs using a variety of techniques. *Note: The Para Education program is scheduled to be discontinued effective Summer Semester 2015.</td>
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<tr>
<td>PED 2160</td>
<td>Intro Experience Practicum</td>
<td>1 cr</td>
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<td>Coreq: PED 2150. Course provides a supervised classroom experience that allows students to apply what they are learning in the classroom to public education settings. *Note: The Para Education program is scheduled to be discontinued effective Summer Semester 2015. *Note: The Para Education program is scheduled to be discontinued effective Summer Semester 2015.</td>
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<tr>
<td>PED 2200</td>
<td>Introduction to Deafblindness</td>
<td>3 cr</td>
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<td>This course is an introduction to deafblindness and its impact on learning and development. It is an overview of the sensory systems and the issues that arise when an individual has a combined loss of vision and hearing. *Note: The Para Education program is scheduled to be discontinued effective Summer Semester 2015.</td>
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<tr>
<td>PED 2250</td>
<td>Communication and Interaction</td>
<td>3 cr</td>
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<td></td>
<td>An introduction to the communication needs and relationship development of individuals with deafblindness. This course will explain the unique impact of deafblindness on communication, language, and speech. *Note: The Para Education program is scheduled to be discontinued effective Summer Semester 2015.</td>
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<tr>
<td>PED 2260</td>
<td>Deafblindness w/ Disabilities</td>
<td>3 cr</td>
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<tr>
<td></td>
<td>An overview of modifications and adaptations in accommodating persons with deafblindness and additional disabilities. Introduction of various instructional, material, and environmental strategies will be presented. *Note: The Para Education program is scheduled to be discontinued effective Summer Semester 2015.</td>
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</tr>
<tr>
<td>PED 2990</td>
<td>Special Studies in Paraed</td>
<td>1-3 cr</td>
</tr>
<tr>
<td></td>
<td>Prereq: Instructor approval. This course focuses on special projects and/or current topics arranged as needed or as available. Paraeducation students will benefit from selected instructors who specialize in the subject area presented. *Note: The Para Education program is scheduled to be discontinued effective Summer Semester 2015.</td>
<td></td>
</tr>
</tbody>
</table>
PFA 1110 – Trade Related Math 2 cr
Applied related grade math required for the core curriculum success of each student. This course covers basic math through Triangular Trigonometry.

PFA 1111 – Soldering and Brazing 2 cr
Theory and application of soldered and brazed joints, pipe preparation, and reaming.

PFA 1140 – Principles of Technology 2 cr
This class will provide training in basic principles of physics and practical examples that relate to the industry.

PFA 1150 – Job Safety and Heritage 2 cr
Brief history of the Plumbing/Pipefitting industry and the organizational structure of the trade. Emphasis on the importance of job safety, personal safety, and the well being of others on the job site.

PFA 1160 – Use and Care, Pipe Fittings 2 cr
Theory and practical hands on applications of various pipe fittings, their uses and purposes, use and care of the materials and equipment used in the trade.

PFA 1170 – Plumbing Science & Mechanics 2 cr
Course includes the basics of theory involving water, steam, hydraulics, pneumatics, and metals in preparation for deeper understanding of the trade.

PFA 1210 – Gas Installations 2 cr
Code and local amendments as they pertain to the natural gas and industrial gas usages, various materials required, use applications, and methods of installation accepted by the gas industry.

PFA 1211 – Hydronic Heating Cooling Sys 2 cr
Hydronics is the science of heating and cooling with water. Curriculum includes technical aspects of design, calculation, and installation of hydronic systems.

PFA 1250 – Basic Electricity 2 cr
Basic principles and applications of electricity common to Plumbers and Pipefitters. Safety requirements, basic devices and tools, circuits, and electrical measuring instruments are included.

PFA 1260 – Drafting and Plan Reading 2 cr
This course provides the student with basic principles and practices of plan drafting and interpretation.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFA 2151</td>
<td>Welding I</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Theory and application of shielded metal arc welding, oxy-acetylene welding and oxy-acetylene cutting. A study of electrode classification and welding procedures with proper safety and safe use of equipment.</td>
<td></td>
</tr>
<tr>
<td>PFA 2152</td>
<td>Welding II</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Structural plate welding including flat, horizontal and overhead welding. Weld defects and the properties of metals. Destructive testing and welding procedures for code work.</td>
<td></td>
</tr>
<tr>
<td>PFA 2153</td>
<td>Welding III</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Advanced plate welding and certification. Introduction to pipe welding.</td>
<td></td>
</tr>
<tr>
<td>PFA 2154</td>
<td>Welding IV</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Advanced welding practices in the pipefitting industry, preparation for certification and code welding methods.</td>
<td></td>
</tr>
<tr>
<td>PFA 2155</td>
<td>Welding V</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Theory and application of shielded metal arc welding, oxy-acetylene welding and oxy-acetylene cutting. A study of electrode classification and welding procedures with proper safety and safe use of equipment.</td>
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</tr>
<tr>
<td>PFA 2156</td>
<td>Welding VI</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Structural welding including flat horizontal, vertical, and overhead welding. Weld defects and the properties of metals Destructive testing and welding procedures for code work.</td>
<td></td>
</tr>
<tr>
<td>PFA 2157</td>
<td>Welding VII</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Advanced welding practices in the pipefitting industry, preparation for certification and code welding methods.</td>
<td></td>
</tr>
<tr>
<td>PFA 2158</td>
<td>Welding VIII</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Structural plate welding including flat horizontal, vertical and overhead welding. Weld defects and the properties of metals. Destructive testing and welding procedures for code work.</td>
<td></td>
</tr>
<tr>
<td>PFA 2159</td>
<td>Welding IX</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Advanced plate welding and certification. Introduction to pipe welding.</td>
<td></td>
</tr>
<tr>
<td>PFA 2160</td>
<td>Welding X</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Advanced welding practices in the pipefitting industry, preparation for certification and code welding methods.</td>
<td></td>
</tr>
</tbody>
</table>
PFA 2161 – Pipe Bending 2 cr
Theory and application of practical pipe bending and methods utilized in the industry.

PFA 2162 – Orbital Welding 2 cr
This course will include study and training on industry specific power supplies, weld heads and preparation for orbital welding certification.

PFA 2311 – Pumps and Steam Systems 2 cr
Theory and application of a variety of pumps and pumping processes. Study also includes hot steam systems and the application of pumps and processes utilized in the industry.

PFA 2331 – Brazing, Compressor Overhaul 2 cr
Basic instruction in brazing and brazing methods, materials used and good practices. Compressor function and utilization. Breakdown of a compressor and component parts testing and inventory.

PFA 2350 – Drainage I 2 cr
Utilization of drainage in commercial and industrial applications including various materials, applicable piping for drainage systems, installation and joint connections.

PFA 2351 – Drainage II 2 cr
Industrial and commercial drainage systems, sumps, drain fields and hazardous material handling.

PFA 2360 – Water Supply I 2 cr
Water supply systems including potable and non-potable water systems. Material usage and application.

PFA 2361 – Water Supply II 2 cr
Advanced water supply system study including commercial and industrial applications.

PFA 2441 – Advanced Plan Reading 2 cr
Study of isometric pipe and plumbing drawings and shop drawings as used in the industry.

PFA 2450 – Bldrs Level and Special Inst. 2 cr
Instruction in the set-up and use of a builders level, lasers, and special instruments for layout and leveling.

PFA 2460 – Hydronics Systems 2 cr
Advanced course in hydronics systems, use and installation and fabrication of joints and materials.

PFA 2470 – Plumbing Fixtures, Appliances 2 cr
Detailed course in plumbing fixtures and appliances used in the industry including use, installation, and code requirements.
**PFA 2541 – Medical Gas Certification**  
2 cr  
Instruction on requirements and competencies for Certification in medical gas installation and repair.

**PFA 2550 – Back Flow Testing Cert.**  
2 cr  
Instruction on code and Utah requirements and competencies for Certification to install and/or repair back flow prevention systems.

**PFA 2551 – General Pipe Fitting**  
2 cr  
This course introduces students to general pipefitting principles and techniques.

**PFA 2552 – General Pipe Fitting II**  
2 cr  
Prereq: PFA 2551. This course will continue study of general pipe fitting principles and techniques and introduce hands on application of the skills and knowledge learned.

**PFA 2560 – International Plumbing Code**  
2 cr  
Detailed course on the International Plumbing Code with any amendments and provisions.

**PFA 2570 – Test Prep-Code**  
2 cr  
New code updates and amendments as needed and practical hands on applications.

**PFA 2571 – Test Prep-Math**  
2 cr  
Applied mathematical conclusions for plumbing and pipefitting code applications and installation.

**PFA 2572 – Test Prep-Shop**  
2 cr  
Safety requirements and detail work in shop environments including tools, materials, and MSDS sheets.

**PFA 2573 – Pipe Fitting Test Prep**  
2 cr  
Course includes applied mathematical conclusions, code and safety requirements related to the pipe fitting industry as preparation for the industry Pipe Fitting Journeyman exam.

**PHAR 1010 – Intro. to Pharmacy Practice**  
2 cr  
Prereq: MATH 0920 or MATH 0950 w/C or better or Accuplacer placement in Math 0990. Students need to apply and qualify for program admission. Course reviews fundamentals of pharmacy practice in variety of settings. Career opportunities, terminology, prescription processing, dosage forms, routes of administration, quality control, technician roles and responsibilities are explored.

**PHAR 1020 – Pharmacology**  
2 cr  
Prereq: MATH 0920 or MATH 0950 w/C or better or Accuplacer placement into MATH 0990. Students need to apply and qualify for program admission. The course covers the nature of drugs, drug absorption, and patient variables that affect drug therapy. Course reviews the classification of drug treatment and reviews generalities of physiology involved with various disease states.
PHAR 1030 – Compounding/Sterile Products  
Prereq: PHAR 1010, PHAR 1020, and PHAR 1040. This course reviews the packaging, preservation and storage of compounded drugs. Coated tablets, solutions and suspensions are examined. Sterile procedures with vials and IV bottles and bags are explained.

PHAR 1040 – Calculations and Law  
Prereq: MATH 0920 or MATH 0950 w/C grade or better, or Accuplacer placement into MATH 0990. Students need to apply and qualify for program admission. Course covers pharmaceutical math, dosage calculations, and conversion skills needed by technicians. Medical terminology related to pharmacy practice and practical application of state and federal pharmacy law are reviewed.

PHAR 1050 – Pharmacy Computers  
Prereq: PHAR 1010 and MA 1100. This course stresses practical applications of the concepts learned in PHAR 1010. Hands-on experience with a computerized system for dispensing prescriptions and preparing third party pay documents is the focus.

PHAR 1065 – Pharmacology III OTC  
Prereq: PHAR 1020. Specific classes of over-the-counter medications/products will be discussed with emphasis on knowledge required for making appropriate recommendations for selections and use of these products by consumers.

PHAR 1070 – Fieldwork Preparation  
Prereq: PHAR 1010, 1020, 1030, 1040, 1050, 1065; MA 1100. Course places students in on-the-job training in community, retail, hospital practice sites with review of specific tech duties in each site. Top 300 prescription drugs are covered in preparation for PTCB National Certification Exam.

PHAR 1075 – Pharmacy Adjudication  
Prereq: MA 1100, PHAR 1010, PHAR 1020, PHAR 1030, PHAR 1040, PHAR 1050, PHAR 1065. This course acquaints students with knowledge of electronic billing and adjudication procedures used in a pharmacy setting. Rejections and third party billing requirements will be covered.

PHIL 1000 – Intro to Philosophy (HU)  
This introductory survey of philosophy examines the historical development of Western philosophy and philosophical problems concerning truth, reality, and values. The course introduces philosophical methods of inquiry and argumentation.

PHIL 1120 – Ethics and Moral Problems (ID)  
Explores classic moral philosophies (e.g. Mill, Kant, Rawls, Aristotle); and principles and arguments regarding moral dilemmas such as war, death penalty, euthanasia, abortion, poverty, globalization, oppression, animal rights and more.
**PHIL 1250 – Resn. & Rat’l Decsn-Makng (IN)** 3 cr
Strengthens critical thinking skills through analyzing and evaluating arguments, basic logical framework, Aristotelian logic, beginning logic of sentences, fallacies, probability, statistical reasoning and other forms of inductive argument.

**PHIL 2300 – Intro Environmental Ethics(HU)** 3 cr
Philosophical analyses of our ethical relationships to the environment, such as moral extensionism, deep ecology, ecofeminism, and environmental justice. Application to classic and contemporary environmental issues.

**PHIL 2350 – Phil. of Religion (HU)** 3 cr
This course will explicate and evaluate some of the truth-claims made by the major world religions concerning the nature of reality and humanity’s relationship to it. It will address such classic topics in Philosophy of Religion as conceived of by the major Western monotheistic traditions (i.e., Judaism, Christianity, Islam).

**PHYS 1010 – Elementary Physics (PS)** 3 cr

**PHYS 1040 – Elementary Astronomy (PS)** 3 cr
Course includes structure, scale, and behavior of the universe and its underlying laws presented in a conceptual format. It shows examples of formation and workings of the sun and planets. Also teaches earth as a planet and as a reference for reckoning of the celestial sphere.

**PHYS 2010 – College Physics I** 4 cr
Prereq: MATH 1060 or 1080. Recommended coreq: PHYS 2015. For pre-professional, non-science, non-engineering majors. Newton’s laws of motion, gravity, work and energy, solid body motion, fluid motion, vibrations and waves, and thermal physics.

**PHYS 2011 – Physics Problem Session** 1 cr
Problem session for PHY 2010, based on the lecture class. Though not required, students are strongly encouraged to register for this session.

**PHYS 2015 – College Physics Lab I** 1 cr
Prereq: MATH 1060 or 1080. Recommended coreq: PHYS 2010. Graded laboratory may be taken concurrently with PHYS 2010.

**PHYS 2020 – College Physics II** 4 cr
PHYS 2021 – Physics Problem Session 1 cr
Problem session for PHYS 2020, based on lecture classes. Though not required, students are strongly encouraged to register for this session.

PHYS 2025 – College Physics Lab II 1 cr

PHYS 2210 – Physics For Science And Engineering I 4 cr

PHYS 2211 – Physics Problem Session 1 cr
Problem session for PHYS 2210, based on lecture classes. Though not required, students are strongly encouraged to register for this session.

PHYS 2215 – Physics for Sci & Eng Lab I 1 cr
Prereq: MATH 1210. Recommended coreq: PHYS 2210. Graded laboratory may be taken concurrently with PHYS 2210.

PHYS 2220 – Physics For Science And Engineering II 4 cr

PHYS 2221 – Physics Problem Session 1 cr
Problem session for PHYS 2220, based on lecture classes. Though not required, students are strongly encouraged to register for this session.

PHYS 2225 – Physics for Sci & Eng Lab II 1 cr
Prereq: PHYS 2210 and MATH 1220. Recommended coreq: PHYS 2220. Graded laboratory may be taken concurrently with PHYS 2220.

PHYS 2500 – Introduction To Computer Methods In Physics 2 cr
Prereq: PHYS 2210. Recommended prereq: PHYS 2220. Computer software and methods commonly used in physics are introduced including the use of numerical, graphical, and symbolic manipulation software to solve common physics problems. Other common applications encountered by the physics professional will be explored.
PHYS 2710 – Introductory Modern Physics For Scientists And Engineers 3 cr
Prereq: MATH 2210, PHYS 2220, PHYS 2225 w/ C grade or better. Recommended prereq: MATH 2250.
Introduction to Modern Physics with a focus on relativity, quantum mechanics, and atomic physics.
Applications in solid-state physics, bonding in molecules and solids, and nuclear physics.

PILT 1010 – Air Transportation 3 cr
This course includes a survey of the air transportation industry to include airline deregulation,
government regulatory agencies, general aviation, and airline management operations and aircraft.

PILT 1040 – Aviation Orientation 1 cr
Students will be introduced to many aspects of the aviation industry, job opportunities, flight program,
procedures, and how to finance flight training. Students will be given the opportunity to meet with
industry personnel.

PILT 1050 – Aviation History 2 cr
Prereq: PILT 1010 (may be taken concurrently). The history of aviation from the earliest times through
the modern jet age will be covered. Students will discover significant aviation developments and how
they came about.

PILT 1100 – Private Pilot Ground School 4 cr
Coreq: PILT 1140, 1145, 1110 or 1115, or instructor approval. A study of aviation fundamentals,
principals of flight, aircraft & engine operations, weather, navigation & radio communications as
required by FAA regulations. Students will be prepared to begin flight training.

PILT 1110 – Priv. Fixed Wing Simulator Lab 1 cr
Coreq: PILT 1100 required for non-flying student enrolled in PILT 1100 or AS Degree Dispatch Track or
Aviation Maintenance Track; optional for Continuing Education students. Practical application in a
simulation lab to include the information for private pilot flight maneuvers and procedures and
regulations for takeoff, cruise, traffic pattern operations, approach, emergencies, and cross-country
operations. One hour per week lab time is required.

PILT 1115 – Priv. Rotor Wing Simulator Lab 1 cr
Coreq: PILT 1100 required for nonflying student enrolled in 1100. Practical application in a simulation lab
to include private pilot flight maneuvers, procedures and regulations associated with takeoff, cruise,
traffic pattern operations, approach, emergencies, and cross-country operations. One hour per week lab
time is required.

PILT 1140 – Solo Pilot F-W Cert Lab 1 cr
Prereq: PILT 1100 (may be taken concurrently). Students will begin flight training with an FAA-certified
flight instructor. Training will include all skills necessary to fly solo.
PILT 1145 – Solo Pilot R-W Cert Lab  
Prereq: PILT 1100 (may be taken concurrently). Students will begin flight training with an FAA-certified flight instructor. Training will include all skills necessary to fly solo in a rotorcraft.

PILT 1150 – Priv Pilot F-W Cert Lab  
Prereq: PILT 1140. Students continue to fly with an FAA-certified flight instructor. Training will include all the skills necessary for a private pilots license. The student will fly under Part 141 of the FAA regulations.

PILT 1155 – Priv Pilot R-W Cert Lab  
Prereq: PILT 1145. Students will gain basic aeronautical knowledge to safely operate the rotorcraft within FAA guidelines including skills to perform basic maneuvers. Students will fly under Part 141 of the FAA regulations.

PILT 1200 – Multi Engine Add On Fixed Wing Lab  
Prereq: PILT 1150 and instructor approval. This course is taught one-on-one with a flight instructor. It includes the practical knowledge to fly a multi engine aircraft safely and to the standards required for FAA certification.

PILT 1250 – Instrument Ground School  
Prereq: PILT 1150 or 1155; or instructor approval. Coreq: PILT 1260 or 1265; or instructor approval. A more in-depth study of the purpose, operations, and use of aircraft instrumentation in airport departures, en-route, navigation, & instrument approaches. Student will be prepared to qualify as an instrument-rated pilot.

PILT 1260 – Instr Simulator Fixed-Wing Lab  
Prereq: PILT 1150. Coreq: PILT 1250. Practical application in a simulation lab to include the information for instrument flight procedures and regulations for departures, en route, approach and landing. Two hours per week lab time is required.

PILT 1265 – Inst Simulator Rotor-Wing Lab  
Prereq: PILT 1155. Coreq: PILT 1250. Practical application in a simulation lab to include the information for instrument flight procedures and regulations for departure, en route, approach and landing. Two hours per week lab time is required.

PILT 1300 – Inst Cert FW Lab  
Prereq: PILT 1250 (may be taken concurrently). Flight navigation will emphasize radio navigation as it relates to instrument approaches, en route procedures, and departures. Students will be prepared to take the FAA evaluations. Approximate flight time is 35 hours.
SLCC COURSE DESCRIPTIONS

PILT 1315 – Instrument Rotor Wing Certification Lab 3 cr
Prereq: PILT 1250 (may be taken concurrently). The student will develop the skills, knowledge and aeronautical experience necessary to transition into an Instrument helicopter and to meet the requirements for an instrument rating, as specified in FAA Part 141 with a helicopter class rating.

PILT 1400 – Intro. to Air Traffic Control 3 cr
This course overviews Air Traffic Control principles, rules, regulations, positions, responsibilities, terms and techniques. Pilots and perspective controllers will gain fundamental insight into the National Airspace System.

PILT 1420 – Aircraft Systems 3 cr
This is an introductory course to provide pilots with the understanding of aircraft systems, components, and basic operations general to all aircraft. Included will be information about power plants, fuel, and electrical systems.

PILT 1800 – Ground Tutoring Lab 1 cr
Coreq: PILT 1100, PILT 1250, PILT 2100 or PILT 2210; instructor approval. This course is designed to assist students enrolled in the Professional Pilot program for fixed-wing and/or rotor-wing. The design of this course is to provide enhanced focused learning with the concepts and procedures with the academic ground courses and on areas of student deficiency.

PILT 1840 – Simulator Tutoring Lab 1 cr
Coreq: PILT 1140, 1145, 1150, 1155, 1300, 1315, 2200, 2205, 2220, 2240, 2245, 2300, 2305, 2350, or 2355, or instructor approval. This course is designed to assist students enrolled in the Professional Pilot program for fixed-wing and/or rotor-wing. The design of this course is academic flight labs and on areas of student deficiency.

PILT 1990 – Special Studies 1-5 cr
Prereq: Instructor permission. Students will plan a special project in an area of study in cooperation with program coordinator or advisor. Students may also be granted credit for a specialized area of training already completed.

PILT 2000 – Aviation CO-OP 1-2 cr
Prereq: Second-year student, instructor approval. Aviation CO-OP is open to second-year students. This elective class requires special approval prior to registration. See program coordinator for more information.

PILT 2010 – Pre-Graduation Seminar 1 cr
Prereq: Second-year student. Students will learn techniques for finding, applying for, interviewing and testing for pilot positions. Employers will discuss their hiring requirements, procedures, and what qualities they are expecting from applicants.
PILT 2050 – Aviation Meteorology 3 cr
Students will learn about atmospheric conditions, weather patterns and observations and their effect on aeronautical applications. Students will learn to read pilot weather reports and obtain pre- and in-flight weather information.

PILT 2100 – Commercial Ground School 3 cr
Prereq: PILT 1150 or 1155; and PILT 1250. All previous materials & concepts will be reviewed and the development of complex applications. Fundamentals of a professional pilot will be presented to prepare students to complete the FAA commercial rating.

PILT 2150 – ATP Written Exam Prep 1 cr
Prereq: DISP 1500, PILT 1400, 2050, or instructor approval. Course will overview theories and applications discussed in the 200 hours of dispatcher training. Course is designed to prepare students to take the FAA exam for certification.

PILT 2200 – Cross Country F-W Lab 2 cr
Prereq: PILT 1300; PILT 2100 (may be taken concurrently). A thorough introduction to Pilot-in-Command duties, day and night VFR cross-country planning and associated flight procedures.

PILT 2205 – Cross Country R-W Lab 2 cr
Prereq: PILT 1315; PILT 2100 (may be taken concurrently). A thorough introduction to Pilot in Command duties and IFR/night cross-country planning and associated flight procedures.

PILT 2210 – Multi-Engine Ground School 1 cr
Prereq: PILT 1150. Coreq: PILT 2220. Student will obtain the knowledge, skill, and aeronautic experience necessary to meet the requirements of the multiengine certificate and multi-engine class rating.

PILT 2240 – Comm. Pilt F-W Cert Lab 2 cr
Prereq: PILT 2200. Course completes the foundation necessary to prepare student for the FAA Part 141 commercial pilot certification examination. Commercial maneuvers in a complex aircraft will be conducted.

PILT 2245 – Comm Pilt R-W Cert Lab 2 cr
Prereq: PILT 2205. Course will complete the foundation necessary to prepare the student to take FAA Part 141 commercial pilot certification examination.

PILT 2250 – Aerodynamics 3 cr
Theory and practical application of the laws of physics as they pertain to pilots. An understanding of the elements of aerodynamics affecting the control of the flight of an aircraft will be taught.
PILT 2260 – Commercial Fixed-Wing Category Add-On Lab 2 cr
Prereq: PILT 2245. The flight lab is designed to broaden the student’s knowledge and provide the skill necessary to safely fly a fixed wing aircraft. The student will be introduced to and practice commercial maneuvers. The student will be provided instruction and practice necessary to attain the proficiency level required for a category fixed wing add on to a commercial pilot certificate.

PILT 2265 – Commercial Rotor-Wing Category Add-On Lab 2 cr
Prereq: PILT 2240. The flight lab is designed to broaden the student's knowledge and provide the skill necessary to safely fly a rotorcraft. The student will be introduced to and practice commercial maneuvers. The student will be provided instruction and practice necessary to attain the proficiency level required for a category rotor wing add on to a commercial pilot certificate.

PILT 2300 – CFI/Airplane Lab 2 cr
Prereq: PILT 2240. Coreq: PILT 2340. Students desiring to instruct other pilot candidates are prepared in the aircraft by a flight instructor. This course will include flight maneuvers required for the FAA CFI certification process.

PILT 2305 – CFI/R-W Lab 2 cr
Prereq: PILT 2245. Coreq: PILT 2340. Students desiring to instruct other pilot candidates are prepared in the aircraft by a flight instructor. Course will include flight maneuvers required for the FAA CFI certification Appendix F.

PILT 2310 – Human Factors and Safety 3 cr
Pilot performance affected by training, environment, stress, fatigue, and cockpit design will be discussed. Study of accidents and pilot error as they relate to safety. Illusions, vertigo, and disorientation will be studied.

PILT 2340 – CFI Ground School 3 cr
Prereq: PILT 2100. Designed to teach learning theories, styles, domains, communication techniques, teaching process, teaching methods, lesson plans, evaluation of student performance and human factors resulting in knowledge required to teach students.
PILT 2350 – Certified Flight Instructor Instrument Fixed Wing Lab 1 cr
Prereq: PILT 1300 and PILT 2240. Coreq: PILT 2340. This course will prepare the student with the requirements to become FAA certified to instruct in instrument flight.

PILT 2355 – Certified Flight Instructor Instrument Rotor Wing Lab 1 cr
Prereq: PILT 1315 and PILT 2245. Coreq: PILT 2340. Course prepares flight instructor to become FAA certified to instruct students in rotorcraft for instrument flight. Includes maneuvers required for the FAA CFI/Instrument Rotorcraft-Helicopter Practical Test Standards.

PILT 2400 – Certified Flight Instructor Multi-Engine Fixed Wing Lab 1 cr
Prereq: PILT 2240; PILT 2340 (may be taken concurrently). This course will prepare a student with the requirements to become FAA certified to instruct in Multi Engine aircraft.

PILT 2405 – Turbine Transtn Rotor-Wing Lab 1 cr
Prereq: Instructor approval. Certified flight instructors master Turbine-engine aircraft operation to proficiency level that meets or exceeds the criteria outlined in the turbine-engine rotorcraft manufactures ground and flight procedures handbook.

PILT 2440 – Mountain Flying F-W Lab 1 cr
Prereq: PILT 1150 and PILT 2050. Students will learn proper techniques for safe mountain flying operations. This course includes practical application under the direction of an experienced FAA Part 141 mountain pilot.

PILT 2445 – Mountain Ops R-W Lab 1 cr
Prereq: PILT 2050 and PILT 2245. Students will learn proper techniques for safe mountain flying operations. This course includes practical application under the direction of an experienced mountain pilot.

PILT 2455 – Utility Oper R-W Lab 1 cr
Prereq: PILT 2245. Students will learn proper techniques for safe procedures in specialized areas of rotorcraft operations. This course includes practical applications with external loads under the direction of an experienced utility pilot.

PILT 2460 – Turbo Transition Fixed Wing Lab 1 cr
Prereq: PILT 1150 & 2220. Students will learn the proper techniques for the use and limitations of high altitude operations, and the aeromedical factors related to changes in pressure and the use of oxygen at high altitude. The course will provide training on turbo charged engines. Preflight & in-flight ops during various phases of flight, and abnormal & emergency flight operations will be covered.
PILT 2465 – Night Vision Goggles Operations RW Lab 2 cr
Prereq: PILT 2245 & 2310. Students will learn the proper techniques for the use and limitations of night vision goggles during flight operations, and the aeromedical factors related to the use of night vision goggles. The course will further cover preflight operations, in-flight operations during various phases of flight, and abnormal & emergency flight operations while using night vision goggles.

PILT 2470 – Corporate/Business Aviation 2 cr
This course will acquaint the student with a broad range of topics including corporate and business flight management, type of aircraft used, operational considerations and regulations of the industry.

PILT 2475 – Medium Transition Rotor Wing Lab 2 cr
Prereq: PILT 2405 & 2455. This course will prepare the student to safely operate a medium classified helicopter aircraft in Visual Flight Rules [VFR] conditions. Specific topics will address medium helicopter normal and emergency procedures, aircraft systems, aircraft performance characteristics, and maneuvers specific to medium aircraft operations.

PILT 2485 – Twin Engine Transition Rotor Wing Lab 2 cr
Prereq: PILT 2475. This course will prepare the student to safely operate a twin turbine engine medium classified helicopter aircraft in Visual Flight Rules [VFR] conditions. Specific topics will address twin turbine engine medium helicopter normal and emergency procedures, aircraft systems, aircraft performance characteristics, and maneuvers specific to twin engine turbine medium aircraft operations.

PILT 2500 – Single Engine Add On Fixed Wing Lab 1 cr
Prereq: PILT 2240 or instructor approval. This course is taught one-on-one with a flight instructor. It includes the practical knowledge to fly a single engine aircraft safely and to the standards required for FAA certification.

PLI 1110 – Plumbing I A 5 cr
Prereq: MATH 0920 or MATH 0950, w/C grade or better; or Accuplacer score of 75 Arithmetic and 40-53 Algebra or PLI 1470. This is an introduction to the plumbing trade, history, plumbing as a career. Safety on the job site and with tools including safe handling and use, applied mathematics for plumbers and the study of water sources and gases are covered.

PLI 1120 – Plumbing I B 5 cr
Prereq: PLI 1110. This is the study of mathematics for plumbers, first aid and CPR certification and safety on the job site and with tools and equipment. Course of study includes plumbing fixtures, faucets, valves and blueprint reading.
<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>PLI 1210</td>
<td>Plumbing II A</td>
<td>5 cr</td>
</tr>
<tr>
<td></td>
<td>Prereq: PLI 1120. Installation practices, introduction to blueprint reading and applied mathematics for plumbers. Properties of water, water pressure, safety on the job site and tools and equipment scaffolding and safety above ground.</td>
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<tr>
<td>PLI 1220</td>
<td>Plumbing II B</td>
<td>5 cr</td>
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<tr>
<td></td>
<td>Prereq: PLI 1210. This is the study of installation practices and applied mathematics for plumbers. Theory and practice of seals, traps, air chambers, manometers and u-tubes will be covered.</td>
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<tr>
<td>PLI 1470</td>
<td>Math for the Trades (QS)</td>
<td>5 cr</td>
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<tr>
<td></td>
<td>This is a customized plumbers course in applied mathematics for the trades including algebraic and trigonometric functions.</td>
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<tr>
<td>PLI 2000</td>
<td>Plumbing CO-OP</td>
<td>3-6 cr</td>
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<td></td>
<td>Prereq: Instructor approval. College credit for experience on the job site. Arranged in advance. Requirements are determined by the employer.</td>
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<tr>
<td>PLI 2310</td>
<td>Plumbing III A</td>
<td>5 cr</td>
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<tr>
<td></td>
<td>Prereq: PLI 1220. This is the study of fixtures, testing of systems, measurements and grease traps. Intense study of the applicable code and continued mathematics for plumbers will be taught.</td>
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<tr>
<td>PLI 2320</td>
<td>Plumbing III B</td>
<td>5 cr</td>
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<tr>
<td></td>
<td>Prereq: PLI 2310. This is an introduction to water heaters and appliance venting, fuel gas piping and control devices. Applied mathematics for plumbers, study of the applicable codes, roof drains and blueprint readings will be covered.</td>
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<tr>
<td>PLI 2410</td>
<td>Plumbing IV A</td>
<td>5 cr</td>
</tr>
<tr>
<td></td>
<td>Prereq: PLI 2320. Installation practices, repair and service work. Blueprint reading, indirect water systems and special waste systems. Hydraulic theory, heating systems and their practical application.</td>
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</tr>
<tr>
<td>PLI 2420</td>
<td>Plumbing IV B</td>
<td>5 cr</td>
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<td>Prereq: PLI 2410. This is the continuation of blueprint reading, gas appliance venting and piping, practical applied application and estimating. Study of the applicable code and review will be included.</td>
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<tr>
<td>PLI 2510</td>
<td>Plumbing Labs</td>
<td>5 cr</td>
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<td>Special course requested by the Utah State Licensing Board for applicant plumbers to review lab projects prior to retaking practical journeymans examination.</td>
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<tr>
<td>PLI 2990</td>
<td>Plumbing Special Studies</td>
<td>5 cr</td>
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<td></td>
<td>Special course requested by the Utah State Licensing Board for applicant plumbers to review lab projects prior to retaking practical journeymans examination.</td>
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PLI 2991 – Plumbing Special Projects II 5 cr
Special course requested by the Utah State Licensing Board for applicant plumbers to review theory and code issues prior to retaking the written portion of the journeymen’s examination.

PLS 1010 – Introduction to Law 3 cr
Introductory course into the study of law and the legal system. Students will be introduced to legal vocabulary terms, critical thinking and legal reasoning and analysis. Course will also overview most substantive areas of law. Paralegal majors must complete this course with a grade of B or better.

PLS 1020 – Intro to Civil Litigation 3 cr
This course overviews the federal and state civil court systems. Students will examine civil procedural rules and stages of litigation. The role of the paralegal will be examined at each stage of the litigation process. Paralegal majors must complete this course with a grade of C or better.

PLS 1030 – Intro to Research & Writing 3 cr
Prereq: Eng 1010. Students learn and apply basic research principles to fact situations encountered in a law office. Students will gain familiarity with research tools and methodologies including preparing simple office memoranda and citation style. Paralegal majors must complete this course with a grade of B or better.

PLS 1050 – Legal Research & Writing II 3 cr
Prereq: PLS 1020 and PLS 1030. Continues and builds on the study of research skills begun in PLS 1030. Emphasizes legal writing aspect of research and writing: appropriate formats, styles and analysis. Paralegal majors must complete this course with a grade of B or better.

PLS 1070 – Criminal Law & Procedure 3 cr
Overview of criminal law and criminal procedure topics such as elements of crime, mental states, defenses to crimes, constitutional and statutory limitations on prosecutions, the trial process, sentencing and appellate issues, the trial process, sentencing and appellate issues. Paralegal majors must complete this course with a grade of C or better.

PLS 1080 – Contracts 3 cr
Class examines the elements of basic contracts. It covers sales of goods, sales discharge and damages. Students will analyze various types of contracts and learn to draft a simple contract. Paralegal majors choosing this elective must complete the course with a grade of C or better.

PLS 1100 – Bankruptcy and Collections 3 cr
This course examines the collection of debts and the discharge of certain financial obligations in bankruptcy, including Chapter 7, 11 and 13 filings. It includes basic collections, bankruptcy law, pleadings and schedules. Paralegal majors choosing this elective must complete the course with a grade of C or better.
PLS 1110 – Wills, Probate and Estates 3 cr
Course covers preparation of wills, disposition of property other than by will, probate administration and estate litigation. Estate planning and functions of paralegals in this legal area discussed. Paralegal majors choosing this elective must complete the course with a grade of C or better.

PLS 1120 – Paralegal Proc. I 3 cr
Course covers principles and practice of legal interviewing and fact investigation. Students practice initial client interviews, field investigation, follow up interviews and develop effective human relations and communication skills. Paralegal majors must complete this course with a grade of B or better.

PLS 1130 – Administrative Law 3 cr
This survey class covers variety of paralegal opportunities, duties and tasks available in the active practice of government offices and agencies. Paralegal majors must complete this course with a grade of C or better.

PLS 1140 – Environmental Law 3 cr
Students will study the legal aspects of environmental law: issues such as EPA regulations, endangered species, mining, oil and gas leases, clean air and water. Paralegal majors must complete this course with a grade of C or better.

PLS 1160 – Immigration Law and Procedure 3 cr
Overview of immigration law and procedures. Will focus on practical skills, relevant legal terms, unique immigration court structure, eligibility requirements for citizenship and how to assist in the preparation of required immigration documents.

PLS 1170 – Family Law 3 cr
The class focuses on Utah statutes and case law governing relationships between husband and wife and their relationship with their offspring. Also basic elements of marriage, divorce, alimony, property distribution and child custody. Paralegal majors must complete this course with a grade of C or better.

PLS 1180 – Evidence 3 cr
Prereq: PLS 1070. This course examines the Utah Rules of Evidence. Students will also apprehend differences in the Federal Rules. The course demonstrates the applicability of the rules as they pertain to the in-court admission of evidence and testimony. Paralegal majors must complete this course with a grade of C or better.

PLS 1190 – Constitutional Law 3 cr
Course exposes students to the history and substance of the Constitution and the Bill of Rights. Students will discover the role of the Constitution in our legal system and government. The role of the state constitution will be reviewed. Paralegal majors must complete this course with a grade of C or better.
PLS 1300 – Torts 3 cr
This is an overview of tort law. The course includes intentional torts, negligence and specialized torts such as products liability, medical malpractice, wrongful death and class actions. Paralegal majors must complete this course with a grade of C or better.

PLS 1530 – Real Estate Law 3 cr
Study of principles of title, ownership and transfer, joint tenants and tenants in common. Documents of conveyance, security instruments, notes and contracts, liens, foreclosures and redemptions, escrow and closing, public records, and taxes. Paralegal majors must complete this course with a grade of C or better.

PLS 2000 – Paralegal CO-OP 1-6 cr
Prereq: PLS 1050 and Program Approval. Students participate in supervised work experience in a business, industrial or government environment related to paralegals. Credit awarded for successful completion of specific learning objectives that provide new learning on the job. Paralegal majors must complete this course with a grade of C or better.

PLS 2010 – Computer Essentials Paralegals 3 cr
Prereq: CIS 1020 or Challenge Exam. This class introduces students to computer programs and databases involved in litigation and case management. The latest in technology for the legal community will be explored.

PLS 2050 – Legal Research & Writing III 3 cr
Prereq: PLS 1050. This course is designed to bring the research expertise gleaned in R and W I together with the writing abilities learned in R and W II. Course provides practical opportunity and experience preparing persuasive legal memoranda. Paralegal majors must complete this course with a grade of C or better.

PLS 2070 – Mediation 3 cr
Prereq: Variable, contact department. Mediation, an alternative to litigation, is the conflict resolution process that permits parties to satisfactorily resolve the dispute. Students learn the art and techniques of mediation through the role of the mediator. Paralegal majors must complete this course with a grade of C or better.

PLS 2090 – Paralegal Practicum 3 cr
Prereq: PLS 1010, 1030, 1050, 1120, 2010. Course provides students with practical experience working on actual research assignments and projects provided through interaction in the local community. Students will experience legal work both as individuals and members of a team. Paralegal majors choosing this course must complete it with a grade of C or better.
PLS 2190 – Ethics 3 cr
Prereq: 12 hours of PLS classes. Course explores the ethical standards of attorneys and paralegals. Topics include the unauthorized practice of law, confidentiality and professionalism. The disciplinary process is also discussed. Paralegal majors must complete this course with a grade of C or better.

PLS 2200 – Legal Portfolio 3 cr
Prereq: PLS 1050. Students will refine or prepare a cover letter, resume and writing sample to assist in preparing a portfolio for a job search. Current job markets, growth areas and other non traditional job opportunities also will be examined. Paralegal majors choosing this course must complete it with a grade of C or better.

PLS 2250 – Securities 3 cr
Prereq: PLS 1010. Federal and State statutes governing the offering and sale of securities, notes, stocks, bonds and debentures will be covered. Paralegal majors must complete this course with a grade of C or better.

PLS 2260 – Hollywood and the Law 3 cr
Prereq: Variable, contact department. Course designed as an enjoyable examination of principles of law as portrayed by Hollywood. Students will study and discuss movies about issues of procedures and constitutional significance. Course designed for the short summer session. Paralegal majors must complete this course with a grade of C or better.

PLS 2990 – Special Studies 3 cr
Prereq: Variable, contact department. Course focus is on special projects and/or current topics arranged as needed. Course offers students actual paralegal experience in variety of topics available with assistance from instructors specializing in subject area presented. Paralegal majors must complete this class with a grade of C or better.

POLS 1100 – US Government & Politics (AI) 3 cr
Prereq: placement into ENGL 1010 or appropriate Accuplacer score. This course surveys the institutions and practices of the U.S. national government with emphasis placed on political behavior and social conflict.

POLS 1110 – Intro State/Local Government 3 cr
This is an overview of state and local political systems with an emphasis on the constitutional underpinnings, major institutions, practices and public policies at the state and local level.

POLS 1900 – Special Studies 1-2 cr
Prereq: Instructor approval. Under the instructors supervision, an individualized curriculum is jointly developed and followed.
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>POLS 2000</td>
<td>Internship</td>
<td>2-4 cr</td>
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<td>Prereq: Instructor approval. Students undertake a supervised hands-on experience in the public sector such as election, legislative, and administrative processes.</td>
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<tr>
<td>POLS 2020</td>
<td>Legislative Process</td>
<td>3 cr</td>
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<td>Recommended prerequisite: American Institutions course, preferably POLS 1100. This course is designed to acquaint students with the dynamics of decision making in the legislative arena. The major focus of the course will be on Congress and its interaction with the governmental and nongovernmental entities and how they influence and shape the policy process.</td>
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<tr>
<td>POLS 2070</td>
<td>Diversity &amp; US Politics (SS, DV)</td>
<td>3 cr</td>
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<td>Introductory course examines perspectives of long-silenced voices in US politics. It studies racism, sexism, discrimination, inequitable treatment, forced inclusion and exclusion, and barriers to economic and political participation.</td>
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<tr>
<td>POLS 2100</td>
<td>Intro Internat. Politics (SS)</td>
<td>3 cr</td>
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<td>This is an introduction to the basic concepts, processes and relationships in the international political arena, with particular emphasis on conflict and cooperation between and among nations.</td>
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<tr>
<td>POLS 2200</td>
<td>Intro/Comparative Politics (SS)</td>
<td>3 cr</td>
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<td>This course analyzes how historical and/or contemporary political systems differ in terms of institutions, public policies, and political practices.</td>
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<tr>
<td>POLS 2300</td>
<td>Political Ideologies (SS)</td>
<td>3 cr</td>
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<td>This course surveys significant political ideologies, documenting their present and past relevance to society. Emphasis is placed on conservatism, fascism, liberalism, and socialism.</td>
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<tr>
<td>POLS 2500</td>
<td>Peace &amp; Conflict: Domestic (SS)</td>
<td>3 cr</td>
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<td>Blended Service-Learning Course uses a political science approach to experiencing &amp; analyzing local, regional and national [U.S.] conflicts. Course requires students to experience, describe, and explain peace and conflict at the domestic level of analysis. This course will required extensive reading and writing.</td>
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<tr>
<td>POLS 2700</td>
<td>Model United Nations [MUN] (SS)</td>
<td>3 cr</td>
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<td>Examination of the purposes, roles, structure and functions of the United Nations. Prepares students to participate in a Model UN competition.</td>
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<tr>
<td>POLS 2900</td>
<td>Special Topics</td>
<td>1-3 cr</td>
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<td>Prereq: Instructor approval. This is a course designed by faculty which allows students to explore specific interest areas of political science in a classroom setting.</td>
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<tr>
<td>Course Code</td>
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<tr>
<td>POLS 2950 – Leadership</td>
<td>2 cr</td>
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<tr>
<td>PORT 1010 – Beginning Portuguese I</td>
<td>5 cr</td>
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<tr>
<td>PORT 1020 – Beginning Portuguese II (LN)</td>
<td>5 cr</td>
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<td>PORT 1300 – Beginning Conversation</td>
<td>1 cr</td>
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<tr>
<td>PORT 1900 – Special Studies in Portuguese</td>
<td>1-2 cr</td>
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<td>PORT 2010 – Intermediate Portuguese I</td>
<td>4 cr</td>
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<tr>
<td>PORT 2020 – Intermediate Portuguese II</td>
<td>4 cr</td>
<td></td>
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<tr>
<td>PORT 2300 – Conversation</td>
<td>1 cr</td>
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This multi-disciplinary course will focus on leadership and management skills, including communication, motivation, problem solving, conflict management and goal setting with an emphasis on personal growth.

The major objective of the first year is to develop functional language ability in the Portuguese culture. Lab attendance is required.

Prereq: POR 1020 or instructor approval. Second in a series of four courses which focus on listening, speaking, reading, writing and culture. Lab attendance is required.

Prereq: POR 1010 or instructor approval. Course practices currently held conversation skills to increase speaking ability and vocabulary. Includes role-plays, small group work and presentations. Lab attendance may be required.

Prereq: Instructor approval. In this course in language and culture, students plan areas of study, Service Learning or travel and work with an instructor on an individual basis. Some work may be done in groups. Lab may be required.

Prereq: POR 1020 or instructor approval. Second-year Portuguese courses increase functional language ability focusing on listening, speaking, reading, writing as well as increased focus on culture (philosophies, history, geography, literature, etc.) Lab attendance is required.

Prereq: POR 1020 or instructor approval. Second-year Portuguese courses increase functional language ability focusing on listening, speaking, reading, writing as well as increased focus on culture (philosophies, history, geography, literature, etc.) Lab attendance is required.

Prereq: POR 1020 or instructor approval. Course practices currently held conversation skills to increase speaking ability and vocabulary. Includes role-plays, small group activities and presentations. Lab attendance required. May be repeated for credit.
POR 2700 – Introduction to Literature 3 cr
Prereq: POR 2010 or POR 2020. Second year courses focus on improvement of listening, speaking, reading, writing and culture skills. Major objective is to increase functional language ability through holistic approach to literature. Lab attendance required.

POR 2710 – Intro to Portuguese Film 3 cr
Prereq: POR 1020 or instructor approval. Course will aid students in their study of language and culture. Films will be viewed with subtitles and written work and discussions will be in Portuguese. Lab attendance required.

POR 2900 – Special Topics in Portuguese 1-3 cr
This is a course designed by faculty which allows students to explore specific interests in Portuguese language and culture. Lab attendance required. May be repeated for credit.

PSY 1010 – General Psychology (SS) 3 cr
A basic survey of psychology examining the historical and current foundations supporting the scientific study of mind and behavior.

PSY 1100 – Lifespan Human Growth and Development (SS) 3 cr
A multidimensional approach to studying human growth and development across the lifespan involving theory, research, and practical applications.

PSY 1210 – Personal Growth & Development 3 cr
Introduction to the psychology of adjustment which combines research-based theory with personal application. Explores techniques for better adjustment and understanding effects of personal behavior on others.

PSY 1900 – Special Studies 1-2 cr
Prereq: PSY 1010 or instructor approval. Under an instructors supervision, students develop and follow an individualized curriculum.

PSY 2000 – Psychology CO-OP Education 2-4 cr
Prereq: PSY 1010, Sophomore standing, 2.0 GPA and study related employment. Supervised work experience with specific learning objectives in a business, industrial or government environment to provide learning on the job and in the program major.

PSY 2010 – Psy as a Science & Profession 3 cr
Prereq: PSY 1010 and ENGL 1010. Students learn and develop skills in critical thinking and critical analysis of basic research in psychology, information gathering in psychological research, basic APA format for writing and references, and course and career options for pursuing the field of psychology.
PSY 2250 – Personality Theory  3 cr
Prereq: ENGL 1010 and PSY 1010. An introduction to the psychological study of personality which focuses on personality theory, personality assessment techniques and personality change with emphasis on developing a scientific approach to understanding self.

PSY 2300 – Abnormal Psychology  3 cr
Prereq: ENGL 1010 and PSY 1010. An introduction to the psychological science of mental disorders including problems of emotion, mood, mind, schizophrenia and personality disorders. Diagnosis and treatment will also be considered.

PSY 2400 – Eco-Psychology  3 cr
Prereq: PSY 1010. Blended class, online and field school combination. Ecopsychology is the interaction of self and the environment. Examines how the environment affects us and how we impact the environment.

PSY 2500 – Social Psychology  3 cr
Prereq: ENGL 1010 and PSY 1010 or SOC 1010. Focuses on understanding the behavior of individuals in social contexts with emphasis on how and why individuals behave, think, and feel as they do in social situations.

PSY 2600 – Psych-Race,Class,Gender(SS,DV)  3 cr
Prereq: PSY 2500. Race, class, gender, and sexual orientation are studied from a psychological perspective to examine how they are embedded in daily life; inform our lives and the lives of others; and the differences in power and privilege that exist.

PSY 2710 – Brain and Behavior  3 cr
Prereq: PSY 1010. This course examines the biology of behavior, emphasizing underlying neural mechanisms, the interaction between genes and environment, and evolutionary pressures that have shaped the mind.

PSY 2900 – Special Topics in Psychology  1-3 cr
Prereq: PSY 1010 and instructor approval. A faculty designed course which allow students to explore specific areas of psychological interest in a classroom setting.

PTA 1010 – Intro to Physical Therapy  2 cr
Students will explore the field of therapy including an overview of therapy treatments in different health care settings and pertinent legal and ethical considerations. Students will participate in clinical observation.
PTA 1500 – Practice Issues for the PTA  
2 cr  
Prereq: PTA 1010. The role of the PTA in various health care settings will be addressed as well as the organization of health care and its methods of delivery, and basic research principles.

PTA 2010 – Functional Anatomy  
3 cr  
Prereq: PTA 1500 and acceptance into technical program. Students will explore neuro-musculo-skeletal anatomy in depth and relate to functional activity. Topics include neuroanatomy structure and function of the musculo-skeletal system, and components of human motion.

PTA 2015 – Functional Anatomy Lab  
1 cr  
Prereq: PTA 1500 and admission into technical curriculum. Students will palpate musculoskeletal anatomy in depth and relate it to data collection and functional activity.

PTA 2100 – Patient Care Skills  
2 cr  
Prereq: Admission into technical portion of program. Students learn the application of patient care skills, body mechanics, principles and use of mobility devices, and medical documentation.

PTA 2110 – Patient Care Skills Lab  
1 cr  
Prereq: Admission into the core curriculum of program. Students practice patient care skills, body mechanics, transfers, use of mobility devices and medical documentation.

PTA 2200 – Therapeutic Modalities  
2 cr  
Prereq: Admission into technical portion of program. Students learn the theory of therapeutic modalities using heat, cold, radiation, and electricity.

PTA 2210 – Therapeutic Modalities Lab  
2 cr  
Prereq: Admission into technical portion of program. Students practice applications of therapeutic modalities using heat, cold, radiation, and electricity.

PTA 2300 – Principles of Therapeutic Exer  
2 cr  
Prereq: Admission into technical portion of program. Students learn the principles and techniques of therapeutic exercise including use of specialized equipment.

PTA 2310 – Therapeutic Exercise Lab  
2 cr  
Prereq: Admission into the core curriculum of the program. Students practice techniques of therapeutic exercise, including use of specialized equipment.

PTA 2350 – Data Collection for the PTA  
2 cr  
Prereq: Completion of prior semester courses per established curriculum plan. Students develop competency in data collection skills including manual muscle testing, range of motion assessment, evaluation of posture and gait, balance assessment, and selected special tests.
PTA 2360 – Data Collection for PTA Lab  
Prereq: Completion of prior semester courses per established curriculum plan. Students learn how to implement data collection skills including manual muscle testing, range of motion assessment, evaluation of posture and gait, balance assessment, and selected special tests.

PTA 2400 – Musculoskeletal Disorders  
Prereq: Completion of prior semester courses per established curriculum plan. Students are introduced to musculoskeletal pathology and the development/implementation of clinical treatment plans for these disorders.

PTA 2410 – Musculoskeletal Disorders Lab  
Prereq: Completion of prior semester courses per established curriculum plan. Students develop treatment skills for post-surgical, orthopedic, industrial and amputation clients.

PTA 2450 – Neurological Disorders  
Prereq: PTA 2010 and PTA 2300. Students will learn principles and components of physical therapy procedures for the neurological patient.

PTA 2460 – Neurological Disorders Lab  
Prereq: Completion of prior semester courses per established curriculum plan. Students implement physical therapy techniques and design treatments for selected neurological disorders.

PTA 2510 – PT for Specific Clientele  
Prereq: Completion of prior semester courses per established curriculum plan. Students learn principles and components of physical therapy interventions in the acute care and workplace settings and for womens and mens conditions, cardiovascular, pulmonary and pediatric disorders.

PTA 2520 – PT for Specific Clientele Lab  
Prereq: Completion of prior semester courses per established curriculum plan. Students implement principles and components of physical therapy interventions in the acute care and workplace settings and for womens and mens conditions, cardiovascular, pulmonary and pediatric disorders.

PTA 2530 – Gerontology  
Prereq: PTA 2300 and PTA 2360. Students will learn the sociological, psychological, and physical facets of the aging process. Selected treatment approaches unique to an aging population will be presented and discussed.

PTA 2550 – Rehabilitation Psychology  
Prereq: PTA 2300, PTA 2400 and PTA 2600. Students will learn the psychological aspects of the rehabilitation process. Topics include health locus of control, learned helplessness, self-efficacy and the biopsychosocial model of health and illness.
PTA 2600 – Clinical Experience I 4 cr
Prereq: Acceptance into the PTA program. Students will participate in supervised clinical experience in physical therapy department affiliated with the College.

PTA 2700 – Clinical Internship I 6 cr
Prereq: Acceptance into the PTA program. Students will complete an internship including practical Performance and application of physical therapy procedures and techniques under supervision in selected physical therapy clinical settings.

PTA 2710 – Clinical Internship II 6 cr
Prereq: Acceptance into the PTA program; PTA 2700. Students will complete a culminating internship demonstrating practical performance and application of physical therapy procedures and techniques under supervision in selected physical therapy clinical settings.

PTA 2750 – Seminar for the PTA 1 cr
Prereq: Completion of prior semester courses per established curriculum plan. Students will integrate principles of academic learning with clinical practice and presentation of current trends and issues in PT, along with professional journal reviews, and development of employment skills.

PTA 2850 – Special Topics for PTAs 2 cr
Prereq: Instructor approval. This is a special studies course to prepare students for the national licensing examination.

PTA 2950 – Sports Physical Therapy 2 cr
Prereq: Acceptance into technical portion of program. Students learn principles of injury prevention and therapeutic rehabilitation applied to the practice of sport and competitive physical activity.

PTA 2960 – PT and OT in the Work Place 2 cr
Prereq: Acceptance into program. Students learn principles of work hardening, work conditioning, industrial rehabilitation as well as work place safety, injury, prevention ergonomics, and the ADA.

RADS 1010 – Intro to Radiologic Technology 2 cr
Prereq: Needed for admission into the program. Exploration into the field of radiography and its role in health care delivery. Fundamental radiography concepts covered include radiation protection, medical terminology, ethics, professional development and hospital operations.

RADS 1020 – Rad. Anatomy & Procedures I 4 cr
Prereq: Admission to the program. This course covers anatomy and radiographic procedures. The upper extremity, chest and abdomen are included. The shoulder girdle and lower extremity are also covered. Builds skill to help obtain radiographs in those units.
RADS 1030 – Radiographic Imaging I 2 cr
Prereq: Admission to the program. Topics: atomic structure, imaging equipment, grids, beam restriction, film, screens, and processing. Properties of x-rays and radiographic quality to include density, contrast, detail, and distortion.

RADS 1040 – Clinical Education I 4 cr
Prereq: Admission to the program. Students attend a clinical setting 24 hours each week. Initial skills required of a radiographer are established. Patient care, upper limb, chest and abdomen and shoulder girdle covered. Activities are guided by a competency-based system.

RADS 1050 – Patient Care 2 cr
Prereq: Admission to the program. Covers the role of a radiographer as patient care provider. Topics include; standard precautions, immobilization, lifting, emergencies, vital signs, oxygen and suction, asepsis and infection control, history taking, communication and patient education.

RADS 1110 – Radiation Protection 2 cr
Prereq: Admission to the program. Radiation protection concepts to include biological effects on living systems, radiation units, interactions with matter and radiation exposure limits. Radiation practices and standards for patients and personnel.

RADS 1120 – Rad. Anatomy & Procedures II 4 cr
Prereq: Admission to the program. This course covers anatomy and procedures of the spine, thorax, skull, sinuses and facial bones. In addition densitomery and pediatric imaging are taught.

RADS 1130 – Radiographic Imaging II 4 cr
Prereq: Admission to the program. Students will study electricity, electromagnetism, x-ray production, equipment, AEC, x-ray tube, and digital imaging. They also learn how to alter exposure factors to control density, contrast, detail and distortion.

RADS 1140 – Clinical Education II 4 cr
Prereq: Admission to the program. Students attend a clinical setting 24 hours each week. They continue to expand their patient care skills. Emphasis is on performing procedures independently. Activities are guided by a competency-based system.

RADS 1220 – Rad. Anatomy & Procedures III 2 cr
Prereq: Admission to the program. This course covers anatomy and procedures of the gastro-intestinal and genito-urinary systems.
RADS 1240 – Clinical Education III  3 cr
Prereq: Admission to the program. Students attend a clinical setting 24 hours each week. Emphasis is on increased accuracy and confidence. GI and GU exam are emphasized. Activities are guided by a competency-based system.

RADS 2010 – Image Analysis  2 cr
Prereq: Admission to the program. An advanced course that requires students to analyze all technical aspects of radiographic image production and use problem-solving skills to determine proper corrections required for unacceptable radiographs.

RADS 2020 – Rad. Anatomy & Procedures IV  2 cr
Prereq: Admission to the program. Procedures of an advanced and specialized nature covered. Includes mobile, trauma and operating room radiography. Circulatory system anatomy and procedures also covered.

RADS 2030 – Radiographic Imaging III  2 cr
Prereq: Admission to the program. The course includes lecture and discussion of imaging principles relevant to fluoroscopy. Explores the theory and practice of quality assurance to include the development of a quality assurance program and exploration of the imaging in CT, MRI, Ultrasound, Mammography, CIT, Nuc Med, PET and Radiation Therapy.

RADS 2040 – Clinical Education IV  4 cr
Prereq: Admission to the program. Students attend a clinical setting 24 hours each week. Emphasis is on increased problem-solving skills and accurate exposure factor selection. Activities are guided by a competency-based system.

RADS 2050 – Advanced Patient Care  2 cr
Prereq: Admission to the program. Covers advanced skills required while caring for a patient. Topics include ethics and law, contrast media and pharmacology. Also includes venipuncture and care for age-specific patient.

RADS 2060 – Radiobiology  2 cr
Prereq: Admission to the program. Interactions of radiation with living systems. Radiation effects on molecules and organisms. Factors affecting biological response. Initial and long-term effects of radiation exposure.

RADS 2100 – Comprehensive Radiology  3 cr
Prereq: Admission to the program. Students will review all past program courses to prepare them to take and pass the ARRT certification examination in Radiography.
RADS 2110 – Radiographic Pathology 2 cr
Prereq: Admission to the program. Students learn causes, signs and symptoms of diseases. Students will identify pathology on radiographs. Course includes how diseases impact performance of exams. Technical factors and patient care issues are discussed.

RADS 2120 – Sectional Anatomy 2 cr
Prereq: Admission to the program. Covers understanding and identification of abdomen, pelvis, head, neck, and chest anatomy as seen on sagittal, coronal, axial and other images using the modalities of CT and MRI. Basic usage and knowledge of CT instrumentation and function will also be introduced.

RADS 2140 – Clinical Education V 4 cr
Prereq: Admission to the program. Students attend a clinical setting 24 hours a week. Emphasis on performing with accuracy and efficiency. Students gain entry level skills required for workforce. Activities are guided by a competency-based system.

RDG 0900 – Developmental Reading 5 cr
Prereq: ESL 1010 AND ESL 1020, both w/C grade or better OR Accuplacer reading score between 40-57. Designed to help students develop confidence in their reading abilities. Enables students to discover basics of reading process through critical thinking, reading, writing, and speaking.

RDG 0990 – Advanced Reading 3 cr
Prereq: RDG 0900 w/C grade or better, or appropriate Accuplacer score. Whole language format that develops critical thinking and comprehension skills. Prepares students to become full participants in courses requiring college-level reading.

RFA 1250 – Refrigeration Basic Electrical 2 cr
Basic principles and applications of electricity common to HVACR service technicians including troubleshooting and repair techniques.

RFA 2300 – Electrical Controls 2 cr
This course covers equipment, tools, and codes associated with electrical components of refrigeration.

RFA 2310 – Steam Systems 2 cr
Prereq: Instructor approval. Electric pumps and steam systems and refrigeration will be covered.

RFA 2350 – Refrigeration I 2 cr
History of pipe trades, care and use of tools, basic instruction in steam fitter/pipefitter, math rigging, signaling, blueprint reading and interpretation will be covered.

RFA 2400 – Air Conditioning I 2 cr
This course introduces refrigerant principles and the basics of air-conditioning.
RFA 2410 – Troubleshooting 2 cr
Prereq: Instructor approval. Students will learn pipe drafting, hydronic systems two and air-conditioning.

RFA 2450 – Chillers 2 cr
Theory and practical application of chillers including components, pumps, safety, and inspection.

RFA 2500 – Shop Projects 2 cr
This course allows students to complete hands-on projects in a supervised shop environment.

RFA 2510 – Evaporators, Compressors, Cond 2 cr
Prereq: Approval Electric controls, introduction to industrial pipe fitting and power piping and introduction to start, test and balance will be taught.

RFA 2520 – Refrigerant Controls 2 cr
Prereq: Instructor approval. Start, test and balance, instrumentation and process controls, builders level and transit study will be examined.

RFA 2530 – Start, Test and Balance I 2 cr
The study of procedures for new or repaired equipment start-up, testing of all equipment phases, and balancing a system for proper performance.

RFA 2540 – Start, Test and Balance II 2 cr
Instruction in the physical preparation and start up of a new system including testing and balancing of all phases of the equipment performance.

RFA 2560 – Instrumentation, Process Cntrl 2 cr
Theory and hands on application of control and measurement instruments and process control including computer oriented control systems.

RFA 2570 – Pneumatic Controls 2 cr
Theory and hands on application study of pneumatic controls, materials for installation, troubleshooting, and repair.

RFA 2580 – Air Conditioning II 2 cr
Advanced theory and hands on application of air conditioning principles, air handling equipment, installation, repair, and trouble-shooting.

RFA 2590 – Refrigeration II 2 cr
Advanced theory and hands on application of refrigeration principles, equipment, installation, repair, troubleshooting and advanced specialty equipment needs and requirements.
RFA 2600 – Adv. Electricity/Electronics  2 cr
Advanced study of electrical principles and applications to refrigeration systems and electronic controls including installation, repair, and trouble-shooting.

RFA 2610 – Test Prep-Refrigeration  2 cr
This course is to assist the Apprentice in preparation for Journeyman exam. It is a hands-on practical application course of materials and equipment used in the trade.

RUS 1010 – Beginning Russian I  5 cr
First in a series of four courses which focus on listening, speaking, reading, writing and culture. Major objective of the first year is to develop functional language ability in the Russian culture. Lab attendance is required.

RUS 1020 – Beginning Russian II (LN)  5 cr
Prereq: RUS 1010 or instructor approval. Second in a series of four courses which focus on listening, speaking, reading, writing and culture. Major objective of the first year is to develop functional language ability in the Russian culture. Lab attendance is required.

RUS 1300 – Beginning Conversation  1 cr
Prereq: RUS 1010 or instructor approval. Course practices currently held conversation skills to increase speaking ability and vocabulary. Includes role-plays, small group work and presentations. Lab attendance may be required. May be repeated for credit.

RUS 1900 – Special Studies in Russian  1-3 cr
Prereq: Instructor approval. In this course in language and culture, students plan areas of study, Service Learning or travel and work with an instructor on an individual basis. Some work may be done in groups. Lab may be required. May be repeated for credit.

RUS 2010 – Intermediate Russian I  4 cr
Prereq: RUS 1020 or instructor approval. Second-year Russian courses increase functional language ability focusing on listening, speaking, reading, writing as well as increased focus on culture (philosophies, history, geography, literature, etc.) Lab attendance is required.

RUS 2020 – Intermediate Russian II  4 cr
Prereq: RUS 2010 or instructor approval. Second-year Russian courses increase functional language ability focusing on listening, speaking, reading, writing as well as increased focus on culture (philosophies, history, geography, literature, etc.) Lab attendance is required.
RUS 2300 – Conversation 1 cr
Prereq: RUS 1020 or instructor approval. Course practices currently held conversation skills to increase speaking ability and vocabulary. Includes role-plays, small group activities and presentations. Lab attendance required. May be repeated for credit.

RUS 2700 – Introduction to Literature 3 cr
Prereq: RUS 2010 or RUS 2020. Second year courses focus on improvement of listening, speaking, reading, writing and culture skills. Major objective is to increase functional language ability through holistic approach to literature. Lab attendance required.

RUS 2710 – Intro to Russian Film 3 cr
Prereq: RUS 1020 or instructor approval. Course will aid students in their study of language and culture. Films will be viewed with subtitles and written work and discussions will be in Russian. Lab attendance required.

RUS 2900 – Special Topics in Russian 1-3 cr
This is a course designed by faculty which allows students to explore specific interests in Russian language and culture. Lab attendance required. May be repeated for credit.

SAM 1010 – Beginning Samoan I 5 cr
First in a series of four courses which focus on listening, speaking, reading, writing and culture. Major objective of the first year is to develop functional language ability in the Samoan culture. Lab attendance is required.

SAM 1020 – Beginning Samoan II (LN) 5 cr
Prereq: SAM 1010 or instructor approval. Second in a series of four courses which focus on listening, speaking, reading, writing and culture. Major objective of the first year is to develop functional language ability in the Samoan culture. Lab attendance is required.

SAM 1300 – Beginning Conversation 1 cr
Prereq: SAM 1010 or instructor approval. Beginning Samoan Conversation is intended to practice previously-acquired conversation skills to increase speaking ability and vocabulary. Attendance in lab is required. Course may be repeated for credit.

SAM 1900 – Special Studies in Samoan 1-2 cr
Prereq: Instructor approval. Students plan areas of study, Service Learning or travel and work with the instructor on an individual basis. Topics may be in language or culture. Lab may be required. May be repeated for credit.
### SLCC COURSE DESCRIPTIONS

**SAM 2300 – Intermediate Conversation**  
1 cr  
Prereq: SAM 1020 or instructor approval. Intermediate Samoan Conversation is intended to practice previously-acquired conversation skills to increase speaking ability and vocabulary. Attendance in lab is required. Course may be repeated for credit.

**SHA 1110 – Stagehands 1 A**  
5 cr  
This course provides the basic foundation for stagecraft with the basics of stage and scenic carpentry, electrical theory and stage electrics, properties, and on-the-job protocols.

**SHA 1120 – Stagehands 1 B**  
5 cr  
Theatre history, stagecraft responsibilities and proper handling and storage of set pieces, and wardrobe.

**SHA 1210 – Stagehands II A**  
5 cr  
Theory and practical application including lamps and cables, Trade Shows set-up and maintenance. Also costume dressing and management.

**SHA 1220 – Stagehands II B**  
5 cr  
Theory and hands-on application for sound, lighting boards, forklift operation and certification, and construction and repair of stock scenery pieces.

**SHA 2000 – Stagehands CO-OP**  
2-4 cr  
College credit for experience on the job site. Arranged in advance. Requirements are determined by the employer.

**SHA 2310 – Stagehands III A**  
5 cr  
Theory and practical hands-on application of stage carpentry and electrical, and instruction in Trade Show Electrical.

**SHA 2320 – Stagehands III B**  
5 cr  
High lift and trade show rigging, audio-visual equipment and software, and an introduction to work within the film and movie industry.

**SOC 1010 – Intro to Sociology (SS)**  
3 cr  
The nature and scope of sociology, including systematic treatment of group life, social institutions, social problems, social change and social control.

**SOC 1020 – Social Problems (ID)**  
3 cr  
Social, political and economic aspects of specific problems in modern societies including famine, population, ecological disasters, war and terrorism, poverty, race/ethnic and gender inequality, family, crime, health and illness.
SOC 1900 – Independent Studies 1-3 cr
Prereq: SOC 1010. Under the instructors supervision, students develop and follow an individualized curriculum.

SOC 2370 – Gender & U.S. Society (SS,DV) 3 cr
Prereq: ENGL 1010 or placement into ENGL 2010 or higher. Social construction of gender; social institutions and gender inequalities; connections and disconnects between biological sex and gender; theories of gender socialization; impact of gender on problems in relationships and communication.

SOC 2400 – IntermountainWest & People(ID) 3 cr
A basic study of the region known as the Intermountain West, its land and its people. It is a holistic approach including its geography, history, culture, and social institutions.

SOC 2600 – Marriage and Family 3 cr
This class examines the nature of marriage and family as an institution in society. Emphasis placed on the effects of modern social structures and cultural values on interpersonal relationships and family life.

SOC 2630 – Race and Ethnicity (SS,DV) 3 cr
Role of ethnic and racial minorities in the United States and the processes which arise when groups of people who differ come into contact with each other will be studied.

SOC 2680 – Sociology of Aging 3 cr
Prereq: SOC 1010. This class introduces problems concerning the social role of the aged in industrial societies and the general field of aging. Biological, psychological, and sociological aspects of aging will be emphasized.

SOC 2900 – Special Topics 1-3 cr
Prereq: SOC 1010. This is a course designed by faculty which allows students to explore specific interests in areas of sociology in a classroom setting.

SPN 1010 – Beginning Spanish I 5 cr
First in a series of four courses which focus on listening, speaking, reading, writing and culture. Major objective of the first year is to develop functional language ability in the Spanish culture. Lab attendance is required.

SPN 1020 – Beginning Spanish II (LN) 5 cr
Prereq: SPN 1010 or instructor approval. Second in a series of four courses which focus on listening, speaking, reading, writing and culture. Major objective of the first year is to develop functional language ability in the Hispanic culture. Lab attendance is required.
**SPN 1300 – Beginning Conversation** 1 cr
Prereq: SPN 1010 or instructor approval. Course practices currently held conversation skills to increase speaking ability and vocabulary. Includes role-plays, small group work and presentations. Lab attendance may be required. May be repeated for credit.

**SPN 1900 – Special Studies in Spanish** 1-2 cr
Prereq: Instructor approval. In this course in language and culture, students plan areas of study, Service Learning or travel and work with an instructor on an individual basis. Some work may be done in groups. Lab may be required. May be repeated for credit.

**SPN 2010 – Intermediate Spanish I** 4 cr
Prereq: SPN 1020 or instructor approval. Second-year Spanish courses increase functional language ability focusing on listening, speaking, reading, writing as well as increased focus on culture (philosophies, history, geography, literature, etc.) Lab attendance is required.

**SPN 2020 – Intermediate Spanish II** 4 cr
Prereq: SPN 2010 or instructor approval. Second-year Spanish courses increase functional language ability focusing on listening, speaking, reading, writing as well as increased focus on culture (philosophies, history, geography, literature, etc.) Lab attendance is required.

**SPN 2040 – Intermediate Heritage Spanish** 4 cr
Prereq: For Spanish heritage speakers; raised in a home where Spanish is spoken; must be bilingual to some degree. Instructor approval. Students increase knowledge of Hispanic cultures; listening, speaking, reading, writing and exploring a global understanding of Hispanic issues and challenges. Lab attendance is required.

**SPN 2050 – Intermediate Heritage Spanish** 4 cr
Prereq: For Spanish heritage speakers; raised in a home where Spanish is spoken; must be bilingual to some degree; Instructor approval. Students increase knowledge of Hispanic cultures; listening, speaking, reading, writing and exploring a global understanding of Hispanic issues and challenges. Lab attendance is required.

**SPN 2300 – Conversation** 1 cr
Prereq: SPN 1020 or instructor approval. Course practices currently held conversation skills to increase speaking ability and vocabulary. Includes role-plays, small group activities and presentations. Lab attendance required. May be repeated for credit.

**SPN 2700 – Introduction to Literature** 3 cr
Prereq: SPN 1020 or SPN 2020. Second year courses focus on improvement of listening, speaking, reading, writing and culture skills. Major objective is to increase functional language ability through holistic approach to literature. Lab attendance required.
### SPN 2710 – Intro to Spanish Film
3 cr
Prereq: SPN 1020 or instructor approval. Course will aid students in their study of language and culture. Films will be viewed with subtitles and written work and discussions will be in Spanish. Lab attendance required.

### SPN 2900 – Special Topics in Spanish
1-3 cr
This is a course designed by faculty which allows students to explore specific interests in Spanish language and culture. Lab attendance required. May be repeated for credit.

### SUBE 1110 – Substation Apprentice 1A
5 cr
This course is for substation apprentices. Students will learn about basic electricity, electrical safety, tool use, Ohms Law and series circuits. The course also covers parallel, combination and DC fundamentals.

### SUBE 1120 – Substation Apprentice 1B
5 cr
Prereq: SUBE 1110 or Departmental Approval. Substation apprentices will learn about reading electrical symbol diagrams; substations and switchyards; safety in transmission and distribution maintenance; trigonometry for AC electricity; induction and transformers; and TandD systems.

### SUBE 1210 – Substation Apprentice 2A
5 cr
Prereq: SUBE 1120 or Departmental Approval. Substation apprentices will learn about safety in substations and switchyards; electromagnetic induction; high voltage AC power; transformers; reading electrical system diagrams; and use of electrical test and line test equipment.

### SUBE 1220 – Substation Apprentice 2B
5 cr
Prereq: SUBE 1210 or Departmental Approval. Substation apprentices will learn about distribution line safety; material handling bucket trucks; power transformer insulation resistor testing, turns ration testing, oil tests pressure relay testing and new inspection tests.

### SUBE 2310 – Substation Apprentice 3A
5 cr
Prereq: SUBE 1220 or Departmental Approval. Substation apprentices will learn about safety in substations and switchyards; circuit breakers; contact resistance testing; circuit breaker inspections, time travel and analysis; hydraulic derricks; digging equipment; rigging.

### SUBE 2320 – Substation Apprentice 3B
5 cr
Prereq: SUBE 2310 or Departmental Approval. Substation apprentices will learn about bucket truck safety; capacitors and reactors; voltage regulators; relays 1 and 2; control equipment; high voltage terminations; and substation battery, chargers, replacement and testing.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>SUBE 2410</td>
<td>Substation Apprentice 4A</td>
<td>5 cr</td>
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<tr>
<td></td>
<td>Prereq: SUBE 2320 or Departmental Approval. Substation apprentices will learn about SF6 gas properties and handling; current transformer testing; vacuum bottle hi-pot testing; inferred conditioning monitoring; corona discharge testing; and multi-meter operation and use.</td>
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<tr>
<td>SUBE 2420</td>
<td>Substation Apprentice 4B</td>
<td>5 cr</td>
</tr>
<tr>
<td></td>
<td>Prereq: SUBE 2410 or Departmental Approval. Substation apprentices will learn about safety in transmission and distribution maintenance; use of electrical test equipment; distribution line safety; power transformer turns ratio testing and temperature indicating testing.</td>
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<tr>
<td>SURG 1200</td>
<td>Intro to Surgical Technology</td>
<td>10 cr</td>
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<td></td>
<td>Prereq: Admission into program. Fundamentals course in Surgical Technology.</td>
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<tr>
<td>SURG 1250</td>
<td>Advanced Surgical Theory</td>
<td>10 cr</td>
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<td></td>
<td>Prereq: Admission into program. SURG 1200. Course introduces students to more advanced surgical practices including surgical anatomy and procedures in the core surgical areas.</td>
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<tr>
<td>SURG 1500</td>
<td>Surgical Procedures 1</td>
<td>1 cr</td>
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<td>Prereq: Admission into program. Coreq: SURG 1510. Course introduces student to more advanced surgical practices and surgical procedures.</td>
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<tr>
<td>SURG 1510</td>
<td>Surgical Practicum 1</td>
<td>5 cr</td>
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<td></td>
<td>Prereq: Admission into program. Coreq: SURG 1500. A cooperative education work experience in a clinical health facility under the direct supervision of the personnel in the facility. Student expected to meet objectives.</td>
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<tr>
<td>SURG 1600</td>
<td>Comprehensive Surg. Technology</td>
<td>1 cr</td>
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<tr>
<td></td>
<td>Prereq: Admission into program. Coreq: SURG 1610. A review of Surgical Technology knowledge learned throughout the program to prepare students to pass the NBSTSA exam.</td>
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<tr>
<td>SURG 1610</td>
<td>Surgical Practicum 2</td>
<td>5 cr</td>
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<td>Prereq: Admission into program. Coreq: SURG 1600. A cooperative education work experience in a clinical health facility under direct supervision of personnel in facility. Student is expected to meet certain objectives.</td>
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<tr>
<td>SVT 1010</td>
<td>Introduction to Surveying</td>
<td>1 cr</td>
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<tr>
<td></td>
<td>Covers a historical tour of surveying from its beginnings to the present. The course will emphasize mathematical and technological progress as well as the role of surveyors in the beginning of America.</td>
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</tbody>
</table>
SVT 1030 – Surveying Field Techniques I 3 cr
Recommended Prereqs: SVT 1110 or MATH 1060. This course provides hands-on experience with survey equipment. Horizontal traverses, levels, distance measuring techniques and devices, including how to take field notes are explored.

SVT 1110 – Surveying Math I (QS) 4 cr
Prereq: MATH 1060 or appropriate Accuplacer score. Considers survey applications of algebra, trigonometry and analytic geometry. Includes bearing systems, elevations, traverse, adjustments and measurements corrections, horizontal/vertical curves, areas and volumes, partitioning of land.

SVT 1120 – Surveying Math II 4 cr
Prereq: SVT 1110. Encompasses survey applications of astronomical observations, state plane coordinate systems, error analysis, restoration of lost corners, least square adjustment, horizontal control networks.

SVT 2020 – Public Land Surveying 3 cr
Prereqs: SVT 1030 and SVT 1120. Covers a detailed study of land systems, including general and special instructions, lost and obliterated corners, single and double proportion, monumentation, riparian boundaries laps, hiatuses mineral surveys and official survey documents.

SVT 2030 – Surveying Field Techniques II 3 cr
Recommended Prereq: SVT 1030. Field experience in construction surveying and staking, encompassing GPS fundamentals, radial surveying, robotics, total stations, data collection methods, coordinate creation/adjustment, public lands/state plane coordinate systems, etc.

SVT 2040 – Control Surveys 3 cr
Prereq: SVT 1120. Accuracy levels and field procedures used to obtain them are explored. Calculation techniques for control networks, triangulations, trilateration and traverse use are dealt with at length. GPS will be emphasized.

SVT 2050 – Legal Descriptions 3 cr
Recommended Prereq: SVT 2020. This course is about writing and understanding survey legal descriptions. Latent and patent ambiguities, basis of bearing and interpretation of terms are integrated into the course.

SVT 2060 – Ethics and Liability 2 cr
This is a course study of professional practice(s) with emphasis on survey liability cases.
SVT 2100 – Land Development  
Prereq: SVT 1110. Land planning techniques used in residential and commercial developments are discussed. Subdivision, condominiums, cluster housing, industrial parks and commercial complexes are studied and approval procedures are explained.

SVT 2110 – Photogrammetry  
Recommended Prereq: SVT 1110. This course is an in-depth study of photo identification, stereographic interpretation, geometry and measurements from aerial photography.

SVT 2160 – Land Boundary Law I  
The study of responsibilities of the land boundary surveyor, in protecting rights and interest of the land. Ownership and transfer of real property, systems for land descriptions, statute law, common law and presumptions are discussed.

SVT 2170 – Land Boundary Law II  
Recommended Prereq: SVT 2160. Course studies researching of common law, location of sequential conveyances, location of simultaneous conveyances and unwritten transfers.

SVT 2200 – Public Records  
Prereqs: SVT 2160, SVT 2170 and SVT 2050 or all concurrently. Students will study public records relating to land and its governing laws. This course requires tours of local record systems and law libraries. Extensive research and how to access and use the various systems will be explored.

SVT 2290 – Applied Surveying Drafting  
Prereqs: EDDT 2190 and SVT 1030. This course is to develop a working knowledge of CAD as it relates to the profession of land surveying. Designing and drafting plats, utility master plans, digital terrain models, plan and profile sheets, and layouts from legal descriptions will be covered.

SVT 2990 – Special Topics  
Prereq: Instructor approval. This course is designed so the students can work on special individualized projects under the supervision of the instructor.

SW 1010 – Introduction to Social Work  
This is an introduction to the multi-skilled, multidisciplinary role of the social worker within the community.

SW 1900 – Independent Studies  
Prereq: SW 1010. Under the instructors supervision, students will develop and follow an individualized curriculum.
SW 2100 – Human Behavior in Soc Env 3 cr
This course will introduce students to the dynamics of human behavior in the social environment focusing on the interrelatedness of the biological, psychological and social dimensions of human behavior.

SW 2230 – Intro Group Therapy Process 2 cr
Prereq: SW 2720. This is an applied workshop-styled experience where students will experience group dynamics through the classroom process.

SW 2280 – Drugs and Alcohol Abuse 2 cr
Prereq: SW 1010 and 2100. Drugs and alcohol abuse and its effect on individuals, as well as intervention variables from a social work perspective will be studied.

SW 2650 – Social Welfare Policy 3 cr
Students will examine the development of social welfare policies and programs in the United States as well as legislation that sanctions social services programs.

SW 2720 – Mental Health 2 cr
Prereq: SW 1010 and 2100. This course examines society's attempts in understanding and treating mental illness.

SW 2750 – Ethics/Soc Wk Professionals 2 cr
Prereq: SW 2720. Course examination of complex ethical aspects faced by social workers in professional practice. Useful techniques and tools will be introduced to develop ethically appropriate professional behavior.

SW 2900 – Special Topics 1-3 cr
This is a course designed by faculty which allows students to explore specific interests in social work in a classroom setting.

SW 2940 – Social Work Internship 5 cr
Prereq: SW 2750. This course is offered to social work students at the culmination of their course work in social work. It is a once a week course and a supervised work experience in a social work setting in a community agency.

TECH 1010 – Technology and the Future (ID) 3 cr
Course looks at the past, present and future of technology and its impact on society and the individual. Through discussions, videos, demonstrations, and opportunities to create or evaluate new inventions, you will explore the future of your life and work.
TECH 1030 – Complex Devices Simp. (IN) 3 cr
Focuses on exploring and learning about common systems that may be encountered in today's world, particularly in high-tech devices, and how to apply this knowledge to understanding / troubleshooting complex devices.

THEA 1013 – Introduction to Theatre (FA) 3 cr
Introduction to theatre, starting with its ancient origins and continuing to contemporary theatre. Students explore the various aspects and collaborative processes of putting together a play. Brief introduction to all aspects of live theater production, including directing, designing, acting, producing, costuming, play writing and set building.

THEA 1023 – Introduction to Film (FA) 4 cr
Introduces students with no previous film training to historical, technical, and aesthetic developments of film within its cultural context. Film genres examined. Some materials presented are R-rated. Also listed as FLM 1023.

THEA 1030 – Voice and Movement for the Actor 3 cr
A practical application of the use of the actor's body, how it influences the voice, and how the two affect one's ability to effectively perform for the stage, film and other media. Aspects of the Lessac, Alexander, and Hawkin's techniques are explored.

THEA 1033 – Acting I - Basic Acting for Stage and Screen 3 cr
This course provides an introduction to the basic aspects of the acting process for stage, film, other media, and aspects of every day life. Emphasis is placed on techniques of acting with exercises in self-awareness, relaxation, improvisation, monologues and duo scenes.

THEA 1070 – Film and Culture (FA,DV) 4 cr
Course intended to raise diversity awareness through aesthetic, critical, and interdisciplinary examination of our American Cultural Identity through film. Presents film as an art form, as an industry, and ultimately a system of cultural representation and communication.

THEA 1090 – Bridging the Arts (FA) 3 cr
Course examines the interconnectedness of arts, dance, music and theatre by investigating the artistic elements and common threads within the creative process to develop an informed appreciation for ones own artistic values.

THEA 1113 – Voice I: Speech for Stage and Screen 3 cr
A comprehensive study of the human voice and its physiology as it relates to the production and quality of sound. A comprehensive study of phonetic sound using the International Phonetic Alphabet, and the skills involved in developing flexibility and range related to the craft of acting.
THEA 1160 – Technical Theatre I-Lab 3 cr
Coreq: THEA 1513. Course provides practical backstage experience with emphasis on stagecraft.

THEA 1170 – Technical Theatre II-Lab 3 cr
Coreq: THEA 1560. Course provides practical backstage experience with emphasis on lighting and sound.

THEA 1171 – Technical Theatre III-Lab 3 cr
Coreq: THEA 2513. Course provides practical backstage experience with emphasis on design.

THEA 1190 – Production 1 cr
Course is designed to involve students as a company in production of one-act plays, readers theatre and/or a full-length play. Can be repeated for credit.

THEA 1223 – Stage Make-up 3 cr
The basics of stage makeup including two and three dimensional work with a focus on corrective, aging and period makeup. Includes an introduction to prosthetics and hair.

THEA 1400 – Copyrights for Creative Professionals 1 cr
This introductory short course focuses on U.S. copyrights given to creative individuals who produce visual, musical, literary works of art or performing arts. The course also covers licensing and trademarking.

THEA 1420 – Salesmanship And Promotion For Creative Professionals 2 cr
This introductory short course will introduce basic sales and self-promotional principles and techniques specifically tailored for creative artists.

THEA 1440 – Building A Creative Business 2 cr
This introductory short course will introduce basic business structures and examine the process of setting up a business for creative professionals working in the areas of music, the many forms of visual design, fine art, animation, film and video, and the literary arts.

THEA 1513 – Technical Theatre I-Stagecraft 3 cr
Coreq: THEA 1160 (required). Introduction to technical theatre, the stage house and theatrical production. Design, construction, painting, lighting, and sound are introduced. No prerequisites.

THEA 1515 – Basic Audio Production 3 cr
A broad overview of sound, sound systems, recording, and live sound reinforcement providing basic training in the physics of sound and the hardware and systems used to control and record it. No prerequisites.
THEA 1560 – Tech Theatre II-Lighting/Sound 3 cr
Prereq: THEA 1160 and THEA 1513. Coreq: THEA 1170. This class teaches lighting and sound through design, instrument placement, and operation of control boards.

THEA 1713 – Script Analysis 3 cr
Prereq: THEA 1013. Development of methods and ideologies of script analysis with focus on the identification of major components of the text of the script. Emphasis is placed on dramatic structure, characterization, given circumstances, exposition and the dramaturgical intrinsic meaning of the text.

THEA 1900 – Special Projects in Theatre 1-3 cr
Prereq: Instructor approval. Students will plan their areas of study, performance and/or technical work with full-time instructor on an individual basis.

THEA 2033 – Acting II - Scene Study for Stage and Screen 3 cr
Prereq: THEA 1033. This course is a continuation of Acting I. It takes the basic skills learned in Acting I, and applies them to scene work for stage, film, and other media. Emphasis is placed on techniques of acting with exercises in self-awareness, relaxation, improvisation, and duo scenes.

THEA 2113 – Voice II: Dialects for the Actor 3 cr
Prereq: THEA 1113. This course is a continuation of THEA 1113: Voice I, using phonetic sound and the International Phonetic Alphabet to produce regional dialects and accents in speech. Students will explore the ways in which the use of different regional dialects and accents affect and change a character.

THEA 2150 – Acting III-Audition 3 cr
Prereq: THEA 1033 or instructor approval. Introduction to audition techniques for students who have taken basic acting or have a strong performance background. Students prepare three contrasting monologues and a resume, work with cold readings and meet with local talent agencies.

THEA 2200 – Introduction to Film Criticism 4 cr
Prereq: ENGL 1010 and THEA 1023 or FLM 1050 or THEA/FLM 1070. Film or theatre majors explore in-depth critical aspects of film including aesthetic and technical developments that have influenced film from its inception to present day. Students will view key films. Some R-rated films presented.

THEA 2413 – Voice III: Voice Over 3 cr
Prereq: THEA 1113 or instructor approval. A practical application course that examines the expressive possibilities of the human voice. Students will explore range, pitch, tempo, color, rhythm, and other qualities related to voice acting and broadcasting for use in stage, film and other media.
THEA 2443 – Musical Theatre Performance 3 cr
Prereq: THEA 1033 or instructor approval. This course explores artistic elements of musical theatre through performance of its form and style.

THEA 2513 – Technical Theatre III-Design 3 cr
Prereq: THEA 1160 and THEA 1513. Coreq: THEA 1171. Students will learn advanced design, construction and rigging techniques, drafting elevation and modeling for construction and backstage management.

THEA 2520 – Creative Dramatics 2 cr
Intro to theories, concepts and methodology of creative drama as an aid to teaching all subjects. Students develop lesson plans and carry them out in a laboratory experience with children. Course may be taught with a Service Learning component.

THEA 2900 – Special Topics 1-3 cr
This is a course designed by faculty which allows students to explore specific areas of interest in theatre in a classroom setting.

THEA 2990 – Performing Arts Connections 2 cr
Prereq: Departments approval. This is a collaboration of dance, music, theatre and/or art students to create individual works to be performed in the Performing Arts Showcase.

TNG 1010 – Beginning Tongan I 5 cr
First in a series of four courses which focus on listening, speaking, reading, writing and culture. Major objective of the first year is to develop functional language ability in the Tongan culture. Lab attendance is required.

TNG 1020 – Beginning Tongan II (LN) 5 cr
Prereq: TNG 1010 or instructor approval. Second in a series of four courses which focus on listening, speaking, reading, writing and culture. Major objective of the first year is to develop functional language ability in the Tongan culture. Lab attendance is required.

TNG 1300 – Beginning Conversation 1 cr
Prereq: TNG 1010 or instructor approval. Beginning Tongan Conversation is intended to practice previously acquired conversation skills to increase speaking ability and vocabulary. Attendance in lab is required. Course may be repeated for credit.

TNG 1900 – Special Studies in Tongan 1-2 cr
Prereq: Instructor approval. Students plan areas of study, Service Learning or travel and work with the instructor on an individual basis. Topics may be in language or culture. Lab may be required. May be repeated for credit.
TNG 2300 – Intermediate Conversation 1 cr
Prereq: TNG 1020 or instructor approval. Intermediate Tongan Conversation is intended to practice previously-acquired conversation skills to increase speaking ability and vocabulary. Attendance in lab is required. Course may be repeated for credit.

TRVL 1010 – Intro to Hospitality & Travel 2 cr
This course investigates the travel and hospitality industry, addressing theories, planning, and environmental issues. Students will gain a general knowledge of how and why public and private tourism businesses exist.

TRVL 1020 – Travel Destinations 2 cr
This course overviews the relevancy of geography to tourism and hospitality. Exploration of destinations around the world will expose their individuality and fascination.

TRVL 1030 – Travel Reservations 2 cr
Students will gain knowledge and skills needed to research, plan and book air travel. Terminology, policies and procedures of airline travel and airline reservations will be discussed.

TRVL 1040 – Automated Air Reservations 2 cr
Students will practice booking, maintaining, changing and canceling air reservations using RTS, hands-on Computer Reservation System, simulation of Sabre, in conjunction with the online tutorial.

TRVL 1050 – Travel Sales and Trends 2 cr
Students will study sales techniques including telephone business manners, listening skills and tools for targeting the traveler. Web trends in the industry will also be discussed.

TRVL 1060 – Air Fares U.S. Domestic 2 cr
This course presents the basics of air fares including terms, codes, fare construction principles and fare application rules necessary to find, interpret and apply the lowest applicable fares for clients.

TRVL 1070 – ARC Documents 1 cr
Recommended Coreq: TRVL 1040. This is an introductory course to ticketing. Various ticketing types, forms, policies/procedures per Airline Reporting Corporation (ARC), forms of payment, refunds and exchanges will be discussed.

TRVL 1080 – Automated Air Fares & Tickets 2 cr
Recommended Coreq: TRVL 1040. This course will introduce students to finding the lowest fares for clients utilizing the RTS hands-on Computer Reservation System, simulation of Sabre, in conjunction with the online tutorial.
TRVL 1090 – Ground Transportation 2 cr
This course will introduce students to the basics of car rental policies/procedures, codes, pricing/distribution, and rail travel including Amtrak, VIA Rail, BritRail/Eurail and train accommodations, services and fare structure.

TRVL 2010 – Hotels and Lodging 1 cr
This course will cover the fundamentals of the hotel product, rate structure, property and room classifications, codes, published/automated resources and non-automated reservation procedures and the variables that affect prices.

TRVL 2015 – Automated Trvl Accommodations 1 cr
Prereq: TRVL 1040 and TRVL 1080. Students will practice selecting, booking, maintaining, changing and canceling car rental and hotel room reservations using the RTS hands-on Computer Reservation System (CRS), simulation of Sabre in conjunction w/ the online tutorial.

TRVL 2020 – The Cruise Market 2 cr
This course overviews the basics of cruises including classifications, destinations, types of cruises, and nonautomated reservation procedures. Students will gain knowledge of how to book the right cruise for any client.

TRVL 2030 – Selling Vacation Pkgs & Tours 2 cr
This course overviews the basics of tour including; components of tours, tour destinations, types of vacation packages, print and electronic resources, non-automated tour booking procedures and function of tour operator/wholesaler.

TRVL 2040 – Fares & Tickets International 1 cr
This course introduces students to international air travelers including two basic intl faring systems, mileage/routing and currency procedures, international fare basis codes, base fares, taxes and surcharges.

VOC 2000 – Cooperative Education 1-3 cr
Work experience for credit. Can be applied toward vocational/technical elective credits in the General Studies Program. Students may earn 1 to 3 credits per semester, and 6 credits total.

WLD 1005 – Related Welding 3 cr
Students will learn basic principles of the arc and acetylene welding including flat and horizontal welds; brazing and cutting techniques.

WLD 1110 – Fundamentals of Welding 3 cr
Coreq: WLD 1111. Course covers the theory of shielded metal arc welding, oxy-acetylene welding and cutting. Study of electrode classification and Mastery of Safety procedure.
WLD 1111 – Fundamentals of Welding Lab 7 cr
Coreq: WLD 1110. Practical lab applications of shield metal arc welding, oxy-acetylene welding and cutting. Study of electrode classification, mastery of safety, rolling bend test.

WLD 1120 – Welding Processes and Quality 3 cr
Prereq: WLD 1110 and WLD 1111. Coreq: WLD 1121. Study of welding joint design, defects and the properties of metals. Destructive testing, code procedures, plasma arc and air cabin arc cutting, brazing and braze welding. Emphasis on welder qualifications for A. W. S. Certification.

WLD 1121 – Welding Processes/Quality Lab 7 cr

WLD 1199 – Specialty Training in Welding 1-8 cr
Varied credit and contact hours to train students in industry specific specialty areas as requested by industry.

WLD 1230 – Gas Shield Weld Inspection 3 cr
Prereq: WLD 1120 and WLD 1121 or equiv. Coreq: WLD 1231. Theory of wire feed weld on ferrous and nonferrous base metals. Theory of welding metallurgy and shielding gas and filler metal. MIG and TIG welding including emphasis on qualification for A. W. S. Certification.

WLD 1231 – Gas Shield Weld/Inspection Lab 7 cr
Prereq: WLD 1120 and WLD 1121 or equiv. Coreq: WLD 1230. Practical hands on lab application of GMAW to include short arc (MIG) and spray arc transfer, GTAW (TIG) on ferrous and nonferrous base metals. Practical maintenance and repair welding application. Emphasis on A. W. S. Certification prep.

WLD 1240 – Flux Core, Pipe Fabrication 3 cr
Prereq: WLD 1230 and WLD 1231, or equivalent. Coreq: WLD 1241. Theory of FCAW (inner shield and dual shield), SAW (submerged arc welding), pipe welding and fitting, layout, and fabrication including blueprint reading and interpretation. Emphasis on A. W. S. prep for Certification.

WLD 1241 – Flux Core, Pipe Fab Lab 7 cr
Prereq: WLD 1230 and WLD 1231 or equiv. Coreq: WLD 1240. Practical Lab application of flux core arc welding (FCAW), submerged arc welding (SAW), pipe welding and layout, fabrication, and pipe welding techniques. Emphasis on A. W. S. Certification prep.

WLD 1260 – Blueprint for Welding 3 cr
Study of welding, blueprint reading and drawing. Special study of pipe symbols, welding symbols and layout work.
WLD 1299 – Specialty Training - Welding
Prereq: Instructor approval. Designed to assist students to obtain specialized training specific to industry needs. Is taught on an as needed basis when requested by industry with variable contact and credit hours.

WLDA 1005 – Related Welding
Students will learn basic principles of the arc and acetylene welding including flat and horizontal welds, brazing and cutting techniques.

WLDA 1110 – Fundamentals of Welding

WLDA 1111 – Fundamentals of Welding Lab
Coreq: WLDA 1110. Practical lab applications of shielded metal arc welding, oxy-acetylene welding and cutting. Study of electrode classification, mastery of safety, guided bend test.

WLDA 1120 – Welding Processes and Quality

WLDA 1121 – Welding Processes/Quality Lab
Prereq: WLDA 1110 and WLDA 1111. Coreq: WLDA 1120. Advanced welding, thermal cutting, braze welding, and fabrication. Numerically controlled cutting and an emphasis on Certification preparation with the A. W. S.

WLDA 1199 – Specialty Training in Welding
Varied credit and contract hours to train students in industry specific specialty areas as requested by industry.

WLDA 1230 – Gas Shield Wldg/Inspection Gas

WLDA 1231 – Gas Shield Weld/Inspection Lab
Prereq: WLDA 1120 and WLDA 1121. Coreq: WLDA 1230. Practical hands on lab application of GMAW to include short arc (MIG) and spray arc transfer, GTAW (TIG) on ferrous and nonferrous base metals. Practical maintenance and repair welding application. Emphasis on A. W. S. Certification prep.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>WLDA 1240</td>
<td>Flux Core, Pipe Fabrication</td>
<td>4 cr</td>
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<tr>
<td>WLDA 1241</td>
<td>Flux Core, Pipe Fabrica. Lab</td>
<td>2 cr</td>
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<td>WLDA 1260</td>
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<td>Study of welding blueprint reading and drawing. Special study of pipe symbols, welding symbols, and layout work.</td>
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<td>WLDA 1299</td>
<td>Specialty Training - Welding</td>
<td>1-7 cr</td>
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<tr>
<td>WLDA 2000</td>
<td>Welding CO-OP</td>
<td>2-4 cr</td>
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<td>College credit for experience on the job site. Arranged in advance. Requirements are determined by the employer.</td>
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<tr>
<td>WRTG 0900</td>
<td>Basic Writing</td>
<td>5 cr</td>
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<td>Prereq: ESL 1010 and ESL 1020, both w/C grade or better, OR appropriate Accuplacer score. Designed for students with little writing experience. Introduces them to the writing process while building confidence and fluency. Students learn writing as a social act intended for different audiences and purposes.</td>
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<tr>
<td>WRTG 0990</td>
<td>College Preparatory Writing</td>
<td>3 cr</td>
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<tr>
<td>Prereq: WRTG 0900 w/C grade or better, or appropriate Accuplacer score. Prepares students for college-level writing. Uses discussion, critical thinking, reading and writing to discover ideas and meaning for writer and reader alike.</td>
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