

# COURSE DESCRIPTIONS

## INSTRUCTION

### HYBRID AND ON-LINE COURSES

Courses offered at EITC are primarily delivered in a lecture and/or lab format. Courses may also be offered by way of a hybrid or on-line model. Students should pay close attention to the published course schedule so as to understand the format of instruction for courses for which they register. Courses using a hybrid format for instruction are designated on the course schedule as HYB. Hybrid courses have fewer class meetings and utilize computer based technology as the foundation of instruction. It is recommended that students enrolling in a hybrid course have strong computer skills, high speed access to the internet, compatible computer software, and are motivated self-directed learners. Courses using an on-line format for instruction are designated on the course schedule as OLI. On-line courses may meet onetime the first week of the term. The same computer skills, internet access, software and learning style as recommended for the hybrid courses are also recommended for the on-line courses

## COURSE SCHEDULING

To assist with your program planning, courses in the Catalog are marked showing the semester they are usually offered. Unanticipated faculty vacancies and program changes may affect future course scheduling. Therefore, you should always contact your academic advisor to verify future course offerings, especially when specific courses are needed for graduation.

The following letters which appear after the course descriptions indicate the anticipated semester in which a course will be scheduled.

ALL = All Sessions	FA = Fall Only
FSP = Fall/Spring Only	SU = Summer Only
FSU = Fall/Summer Only	SP = Spring Only
SSU = Spring/Summer Only	

### ACC 110 QuickBooks for the Office

3 Credit(s)

QuickBooks is a popular accounting program utilized by many small and large businesses in today's office environment. Students in this course will learn the principal functions of QuickBooks including accounts payable, accounts receivable, bank reconciliation, payroll and basic accounting reports. Emphasis will also be placed on source documents and maintaining accounting files. SP  
*Prerequisite: CIS 101 or equivalent*

### ACC 210 Accounting I

3 Credit(s)

This course covers analyzing and recording business transactions, posting, preparing worksheets, making adjusting and closing entries, banking and cash fund activities, payroll, accounts receivable, accounts payable, depreciation, and preparing financial statements. FA  
*MAM program students: Prerequisite: MAT 105 or permission of the instructor*

### ACC 214 Computerized Payroll

2 Credit(s)

This course consists of entering company payroll files onto the computer using a popular payroll program, maintaining employee earnings records, and printing payroll reports and W-2s. SP  
*Prerequisite: ACC 210*

### ACC 220 Accounting II

3 Credit(s)

This course provides training in accounting for notes payable and notes receivable; valuation of receivables, inventories, and plant and equipment; accounting for partnerships and corporations; and cost accounting. SP  
*Prerequisite: ACC 210*

### ACC 221 Accounting Computer Applications

2 Credit(s)

Computer work reinforces Accounting II dealing with financial analysis, inventory, depreciation, bad debts, corporations, and cost accounting. A simulated business set is included. SP  
*Corequisite: ACC 220*

### ACC 222 Personal Income Tax

3 Credit(s)

This course covers various principles of taxation influencing record keeping for individuals and small businesses and deals with changes in tax laws. SP  
*Corequisite: ACC 220*

### ACC 226 Excel in Accounting

2 Credit(s)

This course allows students to explore a sophisticated software package that is being used in the Accounting Profession. Students will expand their knowledge of accounting concepts while learning a valuable software tool. FA  
*Prerequisite: ACC 220, OFP 142*

**ACC 227 Computerized Business Accounting***2 Credit(s)*

This course explores a popular computer accounting program. Simulated businesses are used to set up company books, carry out daily activities, and produce reports and statements. FA  
*Prerequisite: ACC 220*

**ACC 230 Managerial Cost Accounting***3 Credit(s)*

This course presents accounting concepts used to generate and evaluate relevant cost information important for managerial decisions. The concepts will include accounting for product costing, process costing, budgeting, control and performance evaluation, and internal controls. Effective analysis of cost information will be emphasized. FA  
*Prerequisite: ACC 220*

**ACC 231 Accounting Systems***3 Credit(s)*

This course provides an in depth analysis of specific accounting issues including: adjusting entries (through the trial balance), error corrections, depreciation (both book and tax; creating and maintaining a depreciations schedule), merchandise inventory (perpetual and periodic; basic cost methods), internal controls and fraud prevention how to prevent, or spot, employee theft, check and credit-card fraud and vendor scams and payroll). SP  
*Prerequisite: ACC 230*

**ADN 210 Nursing Transition***2 Credit(s)*

Professional skills needed in the transition of roles from LPN to RN are addressed. This course covers the RN role in the nursing process, patient education, communication and evidence-based decision-making. Nursing theorists, conceptual models, and clinical applications are discussed. The course will utilize textbooks, the writing lab, journals, DVDs, Blackboard and internet sources for content and discussion. FA

**ADN 212 Health Assessment***3 Credit(s)*

This course is designed to cover physical assessment of all age groups and provide the student with the advanced skills necessary to work effectively in the health care environment. It will cover advanced and complex verbal history, performing physical assessments in health and disease states, advanced critical thinking skills, and developing patient care based on clinical findings. This will be accomplished utilizing textbooks, blackboard, virtual clinical excursions, CD-ROM's, DVD's, internet and web-based sources, simulation labs and guest lecturers. FA

**ADN 220 Intermediate Nursing Intervention***4 Credit(s)*

This course will address the professional nursing care of individuals with advanced medical/surgical health deviations of adult and children. It also will address on the chronic illness phase of the disease process, the rehabilitative process and living with the disease. It will address the nursing care required during childbirth and deviations from normal

processes. It will address the needs of the high-risk newborn. It will address the needs of these patients and others requiring care in the community and public health settings. Nutrition, physiology, pathophysiology and pharmacology will be integrated throughout the course. This will be accomplished utilizing textbooks, blackboard, virtual clinical excursions, CD-ROM's, DVD's, internet and web-based sources, simulation labs and guest lectures. SP

**ADN 221 Intermediate Clinical Foundations***4 Credit(s)*

This course will provide clinical experiences to address the needs of patients discussed in ADN 220 utilizing the hospital and community healthcare settings for learning experiences. Nutrition, physiology, pathophysiology and pharmacology will be integrated through the learning process. This will be accomplished utilizing textbooks, blackboard, virtual clinical excursions, CD-ROMs, DVDs, internet and web-based sources, simulation labs, guest lecturers and clinical sites within the community hospitals and other medical institutions. SP

**ADN 225 Pharmacology for Nursing***1 Credit(s)*

This course will provide the concepts of pathophysiology and nursing roles in pharmacologic therapies. It will examine the principles of pharmacology within a body systems framework and emphasize alterations in health patterns throughout the life span. This will be accomplished utilizing textbooks, blackboard, virtual clinical excursions, CD-ROMs, DVDs, internet and web-based sources, the math lab and guest lecturers. FA

**ADN 230 Advanced Nursing Interventions***4 Credit(s)*

The student will learn the professional nursing care of the high-acuity adult and child patient and their family. This course is designed to introduce complex skills and knowledge in caring for the acute adult with multiple complex problems and the critically ill adult experiencing alterations in the cardiac, respiratory, circulatory, neurological, renal and gastrointestinal systems. The student will learn the professional nursing care of the patient and family experiencing a medical emergency, acute and chronic health deviation, interventions, and therapies for treatment. Nutrition, physiology, pathophysiology, and pharmacology will be integrated throughout the program course. This will be accomplished utilizing textbooks, blackboard, virtual clinical excursions, CD-ROMs, DVDs, internet and web-based sources, simulation labs and guest lecturers. FA

**ADN 231 Advanced Clinical Foundations***4 Credit(s)*

The clinical lab and clinical sites will allow the student to work with patients experiencing acute and chronic health deviations in high acuity settings. The student will explore current interventions for both immediate and long term care needs of the patient and family. Nutrition, physiology, pathophysiology and pharmacology will be integrated through the learning process. This will be accomplished utilizing

textbooks, blackboard, virtual clinical excursions, CD-ROMs, DVDs, internet and web-based sources, simulation labs, guest lecturers and clinical sites within the community hospitals and other medical institutions. FA

### **ADN 240 Dimensions of Professional Nursing**

2 Credit(s)

This course the student explores current issues facing nursing in today's increasingly complex health delivery system including; legal and ethical roles of the profession, economics of health care, nursing research, the theoretical frameworks for nursing practice, RN licensure, coping skills for the novice RN, and the specialization and diversity within the profession. This will be accomplished utilizing textbooks, blackboard, CD-ROMs, DVDs, internet and web-based sources. SU

### **ASE 102 Workplace Technical Skills**

3 Credit(s)

This course introduces students to personal and work related strategies for seeking and keeping employment. This includes an employment plan, cover letter, resume and interview. Students will study professionalism, teamwork, how to dress for an interview, how to accept a job, how to interact with employers and other employees. Students will also be introduced to warranty report writing, work orders, estimates, and how technicians are compensated. Students will be introduced to the different types of communications. Student will be able to tell the difference between technical and people skills. Students will set short and long term goals. SP  
*Prerequisite: MTD 101*

### **ASE 111 Basic Power Plant Systems**

2 Credit(s)

This course is an in-depth study of the internal combustion engine. Items to be covered include four-cycle theory, power development in the internal combustion engine, cylinder arrangement, valve train arrangement, displacement, compression ratio, engine components and their function, lubricating systems, the classification and rating of engine oils, diagnosis of engine oil leaks, compression loss, oil consumption, engine noise, and engine measurements. A four-cycle engine will be disassembled, measured, and assembled; making all necessary adjustments. The engine will run upon completion. SP

*Corequisites: ASE 112 and ASE 113*

### **ASE 112 Upper Power Plant Systems**

2 Credit(s)

Items to be covered include valve covers, gaskets, timing cover and seals, intake manifolds, cylinder heads, head surfaces, camshafts, valve guides, valve springs and retainers, timing chains and gears, rocker arms, pushrods, valves, and cam bearings. Areas of study include description, identification, failure analysis, disassembly, preparation for assembly, and assembly. SP

*Prerequisite: ASE 111 Corequisites: ASE 113*

### **ASE 113 Lower Power Plant Systems**

2 Credit(s)

Items to be covered include oil pan, motor mounts, oil and

filter changing, detection of oil leaks, engine removal and replacement, disassembly and assembly procedures, parts cleaning, cylinders, main bearings and alignment, cam bearings, block surface, crankshaft, connecting rods and bearings, pistons, piston pins, oil pumps and soft plugs. Study will include description, identification, failure analysis, disassembly, inspection, measurements, preparation for assembly, and assembly. SP

*Prerequisite: ASE 112.*

### **ASE 121 Automatic Transmissions**

3 Credit(s)

This course covers theory, operation, and principles of automatic transmissions. Items covered are fluid couplings, torque converters, planetary gear systems, hydraulic and electrical control systems, and transmission lubricating and cooling systems. Minor adjustments, transmission tune-up service, replacement, repairs, and diagnosis are included in this course. SP

### **ASE 131 Manual Drivetrain & Axles**

2 Credit(s)

The theory and principle of clutches, manual transmissions, drive lines (including U-joints), differential assemblies, and transaxles as used on cars and light trucks, both domestic and foreign, will be covered. Also included will be 4 x 4 transfer cases, both single and double reduction units. SP

### **ASE 141 Automotive Suspension & Steering Systems**

2 Credit(s)

Covered in this course are theory, adjustment, and repair of manual steering systems, front and rear suspension systems, wheel alignment, wheel balance both statically and dynamically, tires, bearings, and use of wheel aligning and tire service equipment. FA

### **ASE 151 Automotive Brake Systems**

2 Credit(s)

This course covers the theory, principles, and operation of brake systems. Items covered are hydraulics as applied to brakes, brake fluid types and characteristics, master and wheel cylinder operation, disc brake caliper operation, brake system valving, operation of drum brakes, operation of disc brakes, operation of parking brakes, and operation of vacuum and hydraulic brake boosters. Inspection of brake components, adjustments, service, and minor repairs of brake systems are included in this course. SP

### **ASE 163 Introduction to Automotive Electronics**

5 Credit(s)

This course covers theory, principles, and operation of automotive electrical systems. Items covered are electrical terms, electrical current flow, magnetism, electrical current sources, conductors, insulators, circuit test instruments, circuit protection, switches, relays, solenoids, diodes, transistors, gauges, simple motors, induction coils, resistors, and capacitors. Testing of batteries, as well as testing, rebuilding, and repair of generating systems and starting systems are included in this course. FA

**ASE 172 Basic Heating and Air Conditioning**

4 Credit(s)

This Course covers safety, basic theory, operation, maintenance, testing, and repair of water pumps, cooling fans and drive clutches, drive belts, coolant/antifreeze, radiators, radiator caps, recovery systems, heater controls, heater cores, heater hoses and clamps, A/C compressors and clutches, evaporators, condensers, receiver dryers, accumulator dryers, TXVs, orifice tubes, and various other control systems. Proper use of specialized diagnostic equipment and tools is included. FA

*Prerequisite ASE 163***ASE 184 Basic Computer Controlled Engines Systems**

2 Credit(s)

This course is an introduction to computer engine controls and a study of how and why computers have been introduced into the automotive industry. Items covered will be the microcomputer, sensors, actuators, and wiring which are necessary for the proper function of the computer. Proper identification, location, function, and testing of these components will be stressed. SP

*Prerequisite ASE 182***ASE 185 Ignition Systems**

2 Credit(s)

Covered in this course are the purpose, theory, and fundamentals of standard and modern electronic ignition systems, tune-up procedures and analyzing, testing, diagnosing, and proper repair of ignition systems. The key fundamentals of the ignition system and its components and functions will be covered. Safe testing procedures to diagnose the ignition system to include: compression tests, starter draw tests, cylinder output/balance tests, basic scan-tool tests, and the use of the automotive oscilloscope will be stressed and practiced. FA

*Prerequisite ASE 163***ASE 214 Diesel Engine Rebuilding**

2 Credit(s)

A complete engine rebuild will be performed including removal and replacement of the engine. Complete disassembly, measurement, preparation for assembly, and assembly will be covered. SP

*Prerequisite ASE 113***ASE 216 Diesel Engine Service**

2 Credit(s)

This course is a complete study of the diesel engine, covering Cummins, Detroit, and other diesel engines. Diesel theory, troubleshooting, maintenance, and tune-up will be covered. SP

*Prerequisite ASE 214***ASE 221 Computer Controlled Automatic Transmissions**

3 Credit(s)

This course covers diagnosis and correction of major problems in automatic transmissions such as fluid leaks, transmission slipping, transmission lock-up, and shifting problems. Major diagnosis, repair, and overhaul of automatic transmissions are included in this course. FA

*Prerequisite ASE 121, ASE 264***ASE 233 Heavy Duty Drive Train/Transmissions and Clutches**

3 Credit(s)

This course describes the component needs for a truck driveline and the procedures needed for inspecting, servicing, and lubricating universal joints. The eliminating of vibrations through correct phasing and driveline alignment is discussed. The students will learn the importance of drive line angles and how to measure and calculate them. Both hydraulic and electrical driveline retarders will be introduced. The students will learn how to identify the types of axles and combinations of axles as used in medium and heavy-duty trucks. They will be able to explain the function of a power divider and trace the flow of power through a tandem drive axle combination. They will be familiar with the various types of gears used for truck axles. Students will know the lubrication requirements and service procedures required for truck axles. Basic troubleshooting and repair of differential carriers will be taught. Students will demonstrate competence by disassembling and reassembling both power dividers and differential carriers. FA

*Prerequisite ASE 133***ASE 242 Advanced Suspension & Steering Systems**

2 Credit(s)

Major repair of power steering components, pumps, gears, cylinders, individual and integral units, rack and pinion steering (both standard and power), complete suspension overhaul, four-wheel alignment, and balance is emphasized. FA

*Prerequisite ASE 141***ASE 243 Heavy Duty Suspension and Steering**

2 Credit(s)

In this course the student will study heavy-duty suspension and steering systems as applied to class 3 through class 8 trucks. Emphasis will be on the diagnosis and repair of: manual and power steering systems; front and rear axle suspension systems, tires and wheels; and wheel alignment diagnosis, adjustment and repair. Related subjects include the inspection of fifth wheel assemblies, frames and frame members, and cab suspension systems. FA

*Prerequisite ASE 141***ASE 252 Antilock & Power Brake Systems**

2 Credit(s)

This course covers diagnosis and repair of major problems in brake systems. Items included are brake system leaks, fluid contamination, and major repair of drum and disc brake systems. Diagnosis, repair, replacement, overhaul, resurfacing of brake drums, disc rotors, and skid control systems are covered. All components of the brake system are included in this course. FA

*Prerequisite ASE 264 and ASE 151***ASE 253 Air Brake Systems**

2 Credit(s)

This course covers theory, principles of operation, and related math of both light and heavy-duty trucks. This course also covers air brakes used on trucks and equipment. This course

will cover cam, wedge, power-assist brakes (hydrovac), and air brakes (air compressors, treadle valves, brake chambers, and components related to air brakes). Also an introduction to engine brakes and truck/trailer ABS is included.

Troubleshooting and repairs will be performed on mock-up units and live work projects as they are available. FA

*Prerequisite ASE 151*

### **ASE 262 Automotive Electronics**

*2 Credit(s)*

This course covers theory, operation, and principles of automotive body electrical systems. Items covered are wiring diagrams and harnesses, windshield wipers, dash components, speed controls, power seats, power windows, horns, printed circuits, seat belt interlocks, fusible links, power door locks, external and internal lighting systems, and other components of the body electrical system. Testing, replacement, and repair of body electrical systems and wiring harnesses are included in this course. FA

*Prerequisite ASE 163*

### **ASE 264 Advanced Automotive Electronic Component Testing and Safety**

*3 Credit(s)*

This course covers a review of Ohm's Law and its application to the modern-day computer systems. There will be a review of alternators, starters, and an introduction to the automotive security systems used on today's automobiles. The main emphasis of this course will be theory, operation, and testing of the electronic components which support the automotive computer. A section of electronic safety while working with today's automotive computer is included. How to repair the sensitive components without serious damage to the component or the technician will be covered in this section. FA

*Prerequisite ASE 262*

### **ASE 266 Diesel Electrical Systems**

*5 Credit(s)*

This course covers the electrical system as used on medium and heavy-duty trucks. Students registered for this class will have previously successfully completed ASE 163. This course is designed to cover the tasks required by ASE to complete test T6 Electrical and Electronic Systems. The content areas are:

\*General Electrical Systems Diagnosis and review of Ohm's Law.

\*Electrical safety necessary while working with today's automotive and truck computer electronics.

\*Battery Diagnosis and Repair.

\*Starting System Diagnosis and Repair.

\*Charging System Diagnosis and Repair.

\*Lighting System Diagnosis and Repair.

\*Gauges and Warning Devices Diagnosis and Repair.

\*Related Electrical Components. FA

*Prerequisite ASE 163*

### **ASE 272 Advanced Heating and Air Conditioning**

*2 Credit(s)*

This Course reviews safety, the basic theory, operation, maintenance, testing, and repair of heating and air conditioning components and systems. It is a comprehensive

study of different diagnostic practices and approaches for the proper repair of the modern Automotive and Diesel Industry heating and air conditioning systems. Emphasis will be on the proper use of test equipment to avoid damage to the HVAC system, the specialized tools, and the technician. FA

*Prerequisite ASE 172*

### **ASE 284 Light Truck Diesel Fuel Injection Systems**

*2 Credit(s)*

This course will include diesel theory, fuel, fuel system components, and operation. Topics include removal, replacement, and timing of fuel injection pumps. Injector nozzles of various styles are disassembled, repaired, and tested by the student. Minor fuel system problems shall be discussed. Students learn the theory of operation of distributor style injection pump. Troubleshooting and resealing procedures will be demonstrated. SP

*Prerequisite ASE 163*

### **ASE 285 Gasoline Fuel Injection Systems**

*3 Credit(s)*

This course covers components and functions, diagnosis, replacement, repair, and overhaul of major problems in the gasoline fuel injection system. Items covered are fuel pump pressure, flow and pressure regulator tests, identification of various components and types of gasoline fuel injection systems. Safe-testing, overhauling and component replacement procedures within the system is covered. Students will receive both lecture and hands-on practical applications. SP

*Prerequisite ASE 184*

### **ASE 286 Computer Controlled Engines Systems**

*3 Credit(s)*

This course covers the basic operation of a microcomputer, how binary numbers are used in the computer, the function of a microprocessor or how a microcomputer is programmed to control ignition timing, fuel air ratio, and exhaust emissions. Theory of operation, troubleshooting, tune-up procedures, diagnosis and repair of all major manufacturer's. Electronic Engine Control systems will be covered. SP

*Prerequisite ASE 184*

### **ASE 287 Emission Control Systems**

*3 Credit(s)*

A comprehensive study of service repair and installation of emission controls in the following areas: crankcase, ventilation systems, fuel evaporation emission control systems, air inlet temperature control systems, spark timing control devices, air pumps and air pulse systems, temperature sensing, vacuum valves and switches, exhaust gas recirculation systems, catalytic converters (both single and three-way), and computer controlled systems. Use of proper test equipment to meet Federal Clean Air Standards is also covered. SP

*Prerequisite ASE 285 and ASE 286*

**ASE 288 On Board Diagnostics II***1 Credit(s)*

On-Board Diagnostics II is a study of developments in the control and diagnostics of the computerized engine systems. This course is a study of the functions, the terminology and of the diagnostics self-test capabilities of the modern automobile. Students will receive both lecture and hands-on practical applications of the control built into today's automobiles. SP  
*Prerequisite ASE 286*

**ASE 289 Heavy Duty Diesel Fuel Injection Systems***2 Credit(s)*

More detailed training included is the fuel injection nozzles, including unit injectors. The study of Cummins, Detroit, and in line style injection pumps with more detailed theory to provide the student with a better understanding of fuel injection systems for tune-up and troubleshooting capability. Pump operation with more detailed theory including bury cycle will assist the student to understand the system better for enhanced troubleshooting capability is included. Governors will be discussed and demonstrated. Final requirements for this course will be live work troubleshooting. SP  
*Prerequisite ASE 284*

**ASE 291 Fluid Power Systems***2 Credit(s)*

This unit of instruction covers in greater detail theory and application of fluid power systems. Component parts and theory relationship to circuitry, diagnosis, and testing will be studied. Troubleshooting and repair of live work projects will be utilized as available. FA

**ASE 292 Computer Engine Controls for Diesel Engines***5 Credit(s)*

This course covers computer engine controls and a study of how and why computers have been introduced into the trucking industry. Items covered will be the microcomputer, sensors, actuators, and wiring necessary for the proper function of the computers which are used to control modern diesel engines. Proper identification, location, function, and testing of these components will be stressed. The theory of operation and troubleshooting procedures for the diesel engine computer systems will be covered through a detailed study of diagnostic and engine management software provided by diesel engine manufacturers. SP

**ASE 294 Automotive Trends***3 Credit(s)*

This course is designed to cover current and future automotive trends. The information in this class is designed to keep the entry level technician apprised to some of the technology they may expect to see in the automotive repair industry. Some of the topics will include Alternative Fuel Sources, Hybrids and Hybrid Technologies, and Fuel Cell and Fuel Cell technology. SP  
*Prerequisite ASE 288.*

**BIO 227 Human Anatomy and Physiology I***4 Credit(s)*

This course is the first of a two course sequence that will cover human anatomy and physiology. This course covers the body structures and how they function to maintain homeostasis in the body. The systems covered in this first course will include: Integumentary, Skeletal, Muscular, Nervous and Endocrine. The anatomy of the cell will be covered in detail and how cells working together form different tissues. Important physiology processes such as a muscle contraction and nerve impulse will be covered. FA  
*Strongly advised to complete HCT 101 prior to/or concurrently.*  
*Corequisite: BIO 227L*

**BIO 227-L Human Anatomy and Physiology I Lab***0 Credit(s)**FA Corequisite: BIO 227***BIO 228 Human Anatomy and Physiology II***4 Credit(s)*

This is the second course of a two semester sequence in human anatomy and physiology. This course will cover the structure and functions of the, circulatory, respiratory, urinary, digestive and reproductive systems. The balance of fluids and essential molecules will also be introduced. Genetics will be reviewed and new research on human development will be presented. SP  
*Prerequisite: BIO 227, Corequisite: BIO 228L*

**BIO 228-L Human Anatomy and Physiology II Lab***0 Credit(s)**SP Corequisite: BIO 228***BIO 250 General Microbiology***3 Credit(s)*

This course is an introduction to the essential principles of microbiology and medically significant microorganisms. The course includes taxonomy, microbial growth and control, clinical disease pathogenesis, and universal precautions for handling human body fluids. Microbial genetics and biotechnology will also be covered. FSP  
*Strongly advised to complete HCT 101 prior to/or concurrently.*  
*Corequisite: BIO 250L*

**BIO 250-L General Microbiology Laboratory***1 Credit(s)**FSP Corequisite: BIO 250***BOT 151 Leadership I***1 Credit(s)*

This fall course offering will allow students who are in different programs in the Business, Office and Technology Division to participate in a variety of activities and events that will be tailored to their declared specialty to enhance their education. This course will allow students to hear from a wide variety of guest speakers who are considered "experts" in their fields on a variety of timely business topics. The course will also allow students to participate in actual business meetings, organizations, and activities that will have a focus on the free enterprise system. Different speakers and activities will be presented each semester, so the material will always be

new and relevant. Students who choose to participate in the various student organizations available on our campus will be encouraged to do so, but membership in those groups is not required in this course. Various sections will be offered each semester, with each section designated for a different specialty. The course will be graded on a pass/fail basis. FA

### **BOT 152 Leadership II**

1 Credit(s)

Spring course continuation of BOT 151. This course will be graded on a pass/fail basis. SP

### **BOT 216 Supervised Work Experience**

3 Credit(s)

Supervised work experience will be conducted at an instructor-approved work site or on the campus of Eastern Idaho Technical College. SP

### **BOT 251 Leadership III**

1 Credit(s)

Fall course continuation of BOT 152. FA

*Prerequisites: BOT 151 OR BOT 152. Course will be graded on a pass/fail basis*

### **BOT 252 Leadership IV**

1 Credit(s)

Spring continuation of BOT 251. SP

*Prerequisites: BOT 151 OR BOT 152. Course will be graded on a pass/fail basis*

### **CHE 101 Essentials of General Chemistry**

4 Credit(s)

CHE 101 provides a survey of the basic concepts of inorganic chemistry. Included are quantitative concepts and development of problem-solving methods. CHE 101 provides satisfactory preparation for CHE 111 for students without sufficient background in chemistry. FSP

*Prerequisite: MAT 100 or COMPASS Algebra > 40. ACT > 18*  
*Corerequisite Lab: CHE 101L*

### **CHE 101L Essentials of General Chemistry Laboratory**

0 Credit(s)

FSP *Corequisite: CHE 101*

### **CHE 111 General College Chemistry I**

4 Credit(s)

This course is a study of the fundamental principles necessary to describe the interaction of atoms and molecules in the various phases of matter, including properties of matter, changes that it undergoes, and energy changes that accompany these processes. Lecture and laboratory topics include unit conversions, stoichiometry, chemical bonding and reactions, kinetic molecular theory, solution chemistry, and kinetics. FSP  
*Prerequisite: Successful completion of MAT 143*

### **CHE 112 General College Chemistry II**

4 Credit(s)

A continuation of CHE 111 to include an introduction to kinetics, acids, bases, gas, and solutions equilibrium, electrochemistry, and nuclear chemistry. Three hours of lecture and three hours of laboratory each week. FSP

*Prerequisite: Successful completion of MAT 143 and CHE 111 or permission of instructor*

### **CIS 101 Computer Information Systems**

3 Credit(s)

This course teaches students basic proficiency in the use of personal computers – knowledge essential for successful employment in the modern workplace. The following three modules are covered in this class: 1) Key business software applications (word processing, spreadsheets, and presentation software), 2) Computer fundamentals (Operating systems, software, hardware, and social issues such as ethics) and 3) Online applications (the Internet, using online research, understanding intra-networks, and e-mail). An overview of EITC's computer network is also provided. ALL

### **CIS 145 Internetworking Technologies**

4 Credit(s)

This course provides an overview of internet fundamentals in networking technology, business foundations and web site development. This course is designed to help students prepare to sit for the Certified Internetworking Webmaster Foundations exam. Material Lecture, hands on practice, and question review or key components to this course. FA

### **CIS 231 Web Page Design**

3 Credit(s)

This course introduces the student to design and construction of Internet Web Sites. It covers planning, design concepts, Internet graphics, Internet multimedia, page layout, maintenance, legal issues, and commercial use of the Internet. Students learn the current W3C standards and are exposed to the latest enhancements. FA

*Prerequisite: CIS 101*

### **CIS 234 Computer Assisted Graphics**

3 Credit(s)

This course uses Adobe Illustrator for the design of graphics and Adobe Photoshop for the manipulation of photographs for use in publications and the World Wide Web. The course presents preparing optimizing files for output and color theory. FA

*Prerequisite: CIS 101 or equivalent*

### **CIS 235 Advanced Web Site Design**

3 Credit(s)

The student will work with organizations to develop and publish web sites using a variety of advanced coding methods. This course will build on the W3C standards introduced in CIS 231 and will provide advanced web programming skills in HTML/XML, JavaScript, VBScripts and CGI programming to work with cookies, forms, input validation, database connectivity and searches. SP

*Prerequisite: CIS 231*

**CIS 236 Web Development Tools**

3 Credit(s)

This course provides the students with the skills necessary to utilize the latest industry standards in graphical applications for web development. A number of applications will be examined and used in the course to provide rapid web development skills to the student. SP

**CIS 238 Database Driven Websites**

3 Credit(s)

This course will examine the different approaches for creating dynamic web pages that interact with databases and demonstrates how web servers interact with database servers and browsers to create dynamic web pages. The students will use relational database concepts to create queries using SQL. The course will interact with databases using both client-side and server-side scripts. FA

*Prerequisites: CIS 239*

**CIS 239 Advanced Data Management**

3 Credit(s)

This course provides the advanced skills necessary to develop scalable organization databases. Organizational information needs and limitations will be examined to plan and develop databases that can later be utilized in the creation of dynamic web sites. Industry standards in database software will be utilized throughout the course. SP

*Prerequisite: OFP 227*

**CIS 240 Emerging Technologies of the Internet**

3 Credit(s)

This course will examine the latest development tools and applications including plug-ins, ecommerce solutions, browser development, web services, and cloud computing. New and developing trends within the internet industry will be studied and applied to specific requirements of website site clients. SP

*Prerequisite: CIS 239*

**CNT 101 Microcomputer Concepts/Intro to Networking**

4 Credit(s)

This course presents the underlying technology and methodology for installing, configuring, upgrading, and maintaining PC workstations, the Windows OS and small office/home office networks. This course includes hands-on components involving building, maintaining, and upgrading Intel and Intel compatible microcomputer systems. Students will utilize troubleshooting techniques and tools to effectively and efficiently resolve PC, OS, and network connectivity issues and implement security practices. FA

**CNT 103 Introduction to UNIX/Linux**

3 Credit(s)

This course is a guide designed to help the student learn the skills needed to master the UNIX/Linux environment. Practical hands-on descriptions and exercises are employed to help the student see what commands are available, how they are used and what must be done to get results. Students will be guided from the initial steps, to exploring essential features, to mastery of basic and advanced user skills. FA

**CNT 121 Wireless LAN Administration**

3 Credit(s)

The wireless LAN Administration course provides the networking professional a complete foundation of knowledge for entering into or advancing in the wireless networking industry. From basic RF theory to link budget math, including topics from troubleshooting to performing a site survey, this course delivers hands-on training that benefits the novice and the experienced network professional. FA

**CNT 122 Wireless LAN Security**

3 Credit(s)

The wireless LAN Security course consists of hands-on learning using the latest enterprise wireless LAN security and auditing equipment. This course addresses in detail the most up-to-date WLAN intrusion and DoS tools and techniques, functionality of the 802.11i amendment to the 802.11 standard, the inner-workings of each EAP type used with wireless LAN's today, and every class and type of WLAN security solution available on the market - from wireless intrusion prevention systems to wireless network management systems. Students who complete the course will acquire the necessary skills for implementing and managing wireless security in the enterprise by creating layer2 and layer3 hardware and software solutions with tools from several of the industry's leading manufacturers. SP

*Pre-requisite: CNT 121*

**CNT 150 Desktop/Client Computer Operating Systems**

4 Credit(s)

This course is for students desiring to become a Microsoft certified technology specialist for client computers. It provides students with the knowledge and skills to install and configure windows client operating systems. It focuses on four main areas: installing, securing, networking, and browsing. By the end of the course, students will have installed and configured a windows client computer that is secure, on the network, and ready for browsing. SP

*Pre-requisite: CNT 101 or equivalent experience*

**CNT 202 Advanced UNIX/Linux**

4 Credit(s)

This course focuses on practical hands-on descriptions of system administration tasks and the utilities—both command-line and graphical when available—that the administrator would use to complete daily work managing a UNIX/Linux based server. The goal of the descriptions and exercises presented is to provide the student with sufficient knowledge and skills to pass a Linux certification exam, thereby demonstrating that important theoretical and practical knowledge of the UNIX/Linux based computers has been gained. SP

*Prerequisite: CNT 103*

**CNT 210 Supervised Work Experience**

3 Credit(s)

This course provides students with the opportunity to apply the skills acquired in a controlled working environment. Students will find employment for Supervised Work Experience at an instructor-approved work site, with assistance from the instructor as necessary. SP

*Prerequisites: Successful completion of CNT semesters 1,2&3.*

**CNT 222 Wireless LAN Analysis**

3 Credit(s)

Wireless LAN Analysis is recommended training for individuals seeking to troubleshoot, increase the performance of, and secure their wireless LAN. Students who complete the course will acquire the necessary skills for analyzing and troubleshooting any wireless LAN system through a thorough education in the 802.11 frame structure, frame exchange processes specified by the 802.11 standard, and extensive hands-on training installing, configuring, and utilizing five market-leading analysis products: AirMagnet, Network Chemistry, Network Instruments, TamoSoft, & WildPackets. SP

**CNT 241 Application Infrastructure Configuration**

4 Credit(s)

This course is for students desiring to become a Microsoft Certified Technology Specialist for servers in a Microsoft based network. It provides students with knowledge and skills necessary to effectively and reliably deploy network applications to users requiring services such as terminal services, Web sites, and Web applications. FSP  
*Corequisite: CNT 243, CNT 263*

**CNT 242 Designing Security for Microsoft Networks**

2 Credit(s)

This course provides students with the knowledge and skills to design a secure network infrastructure. Topics include assembling the design team, modeling threats, and analyzing security risks in order to meet business requirements for securing computers in a networked environment. The course encourages decision-making skills through an interactive tool that simulates real-life scenarios in which students are given the task of collecting the information and sorting through the details to resolve the given security requirements. SP  
*Prerequisite: CNT 243*

**CNT 243 Network Infrastructure Configuration**

4 Credit(s)

This course is for students desiring to become a Microsoft Certified Technology Specialist for servers in a Microsoft based network. The emphasis is on the knowledge and skills necessary to successfully install, configure, manage, troubleshoot, and maintain the network services that are necessary to provide an environment that will satisfy the needs of users as relating to sharing resources such as files and printers in a secure, reliable manner. FA  
*Prerequisites: CNT 101, CNT 150, ELC 203*

**CNT 244 Biztalk Server Business Integration Solutions**

4 Credit(s)

This course provides students with the knowledge and skills to efficiently and effectively integrate systems, employees, and trading partners through orchestration in a highly flexible and highly automated manner. SP

**CNT 245 Network Solutions for Small and Medium-Sized Businesses**

3 Credit(s)

This course provides students with the skills and knowledge necessary to select, deploy, and manage a Microsoft networking solution for small and medium-sized businesses. It includes how a business may grow from peer-to-peer to Small Business Server and up to multiple Windows Server 2003 servers. SP

**CNT 246 Deploying Vista Desktop**

3 Credit(s)

This course provides students with the knowledge and skills to successfully deploy Windows Vista business desktops throughout their organization. Students are introduced to the deployment life cycle, which consists of planning for the deployment, building and customizing the deployment method, and then implementing the actual deployment. Students are introduced to the tools and guidance to be used throughout various stages of the deployment life cycle. SP

**CNT 247 Implementing Sharepoint Server**

3 Credit(s)

This course provides students with the knowledge and skills required to implement Microsoft SharePoint Server successfully in their organization. It provides the knowledge and skills necessary to ensure a successful implementation. SP

**CNT 255 Exchange Server Administration**

3 Credit(s)

This course provides an introduction to the core technologies of Microsoft Exchange Server. It prepares students to implement and administer Microsoft Exchange in a single-site or multiple-site environment. Additionally, students will install and configure the Microsoft Outlook desktop information manager client, be given an introduction to the connectors and protocols in Microsoft Exchange and install Internet Mail Service, Microsoft Mail connector, and Lotus cc: Mail connector. SP  
*Prerequisite: CNT 263*

**CNT 256 SQL Server Administration**

3 Credit(s)

This course provides students with the knowledge and skills required for configuring, administering, and troubleshooting Microsoft SQL Server client/server database management system. SP  
*Prerequisite: CNT 263*

**CNT 257 Secure Web Access Using Microsoft Proxy Services**

2 Credit(s)

This course covers installing, configuring, and troubleshooting Microsoft proxy server in an enterprise environment. It will cover the basic architecture of the proxy server, the different methods of controlling access to the Internet and intranet, configuring the cache, interoperability with other networks, methods of monitoring and improving performance as well as other features of proxy servers. SP

**CNT 261 Server Administration***4 Credit(s)*

This course is for students desiring to become a Microsoft Certified IT Professional Server Administrator. It emphasizes the knowledge and skills necessary to plan a server deployment as well as perform a successful deployment. Included are discussions and exercises in migrating to the latest server technology, identifying and deploying various server roles and applications, and incorporating high availability features. Following that, maintenance activities such as updating the system and troubleshooting activities will be studied and practiced. SP

*Prerequisite: CNT 241***CNT 262 Network Infrastructure Planning***4 Credit(s)*

This course is for students desiring to become a Microsoft Certified IT Professional Enterprise Administrator. It concentrates on elements associated with designing a secure network that incorporates an effective, efficient active directory structure, includes services such as terminal services, web services and remote access, and incorporates virtualization. SP

*Prerequisite: CNT 241***CNT 263 Active Directory Configuration***4 Credit(s)*

This course is for students desiring to become a Microsoft Certified Technology Specialist for servers in a Microsoft based network. The emphasis is active directory and through discussion and exercises, the course provides the knowledge and skills necessary to understand, implement, and administer active directory. Included are activities related to building skills in the areas of group policy, certificates and maintenance and troubleshooting. FA

*Corequisite: CNT 241 & 243***CNT 265 Implementing and Administering Security in a Microsoft Server Network Infrastructure***3 Credit(s)*

This course provides students with the knowledge and skills to implement, manage, maintain, and troubleshoot security in a Microsoft network server network infrastructure and also plan and configure a Microsoft network server Public Key Infrastructure (PKI) SP

*Prerequisite: CNT 262***CNT 275 Cisco Internetworking Technologies***4 Credit(s)*

This course is for students having basic computer skills and some familiarity with networking. It provides instruction in network standards, network terminology and protocols, networking, IP addressing, LANS, WANS, cabling tools, and cabling. Particular emphasis is given to the use of decision-making and problem-solving techniques in applying science, mathematics, communication, and team building concepts to solving networking problems. FA

**CNT 276 Cisco Router Setup and Operation***4 Credit(s)*

This course is for students having completed the previous coursework or having work experience in networking. This course covers routing protocols and routing, elements of routers, the router operating system, the utilities used to configure the router, and router configuration tasks. SP

*Prerequisite: CNT 275 or equivalent work experience***CNT 277 Cisco Network Segmentation and Protocol Encapsulation***4 Credit(s)*

This course covers LAN segmentation using routers, advanced router configurations, LAN switching theory, virtual LANs, advanced LAN design, and advanced routine protocols and concepts. Included are threaded case studies that help students apply the concepts that are learned. FA

*Prerequisite: CNT 276***CNT 278 Cisco WAN Technologies***4 Credit(s)*

This course covers such topics as WAN theory and design, WAN technology, PPP, Frame Relay, ISDN and network troubleshooting. Included are treaded case studies that help the student apply the concepts that are learned. SP

*Prerequisite: CNT 277***COM 101 Fundamentals of Speech***3 Credit(s)*

This is a course in oral communication that emphasizes the foundational elements of communication including: perception, self-concept, language, listening, and nonverbal. This course also encompasses a variety of communication, including interpersonal, group, and public. ALL

*Prerequisite: COMPASS reading and writing scores of 68+.***COM 101T Fundamentals of Speech (Transfer Students Only)***1 Credit(s)*

This course is designed to meet the needs of transfer students who enter EITC having previously taken a two-credit Speech or Communication class at either Idaho State University or University of Idaho. Students will attend the first seven weeks of the course, take all exams given during those seven weeks, and deliver at least one speech. ALL

*Prerequisite: Two hours of introductory Speech Communications transfer credit.***DTL 121 Orientation to Dental Assisting/Office Management***2 Credit(s)*

This course is designed to provide the student with a solid foundation to become skilled in effectively using the correct terminology when dealing with various people in various situations. The skills learned in this course can be used when building relationships with people as related to success with patients, coworkers, and employers. Also provides in-depth understanding of the dentist's and auxiliary's ethical and legal responsibilities to patients and to each other. Emphasis is placed on the auxiliary's role in risk management. An introduction to basic office procedures used on a daily basis is included. FA

**DTL 124 Basic Dental Sciences & Medical Situations**

3 Credit(s)

This course is designed to provide students with a basic understanding of the various sciences used in the dental health field. Class work also deals with preventive dentistry and patient care. The course provides the skills needed to handle any medical emergency in the dental office and provides a solid fundamental knowledge of HIV/AIDS as it pertains to patients, coworkers and employers. The student will be eligible to test for Red Cross certification in CPR, First Aid, and HIV/AIDS in the Workplace. FA

**DTL 125 Dental Operatory Procedures**

4 Credit(s)

This course is designed to provide the skills needed in the maintenance of treatment rooms, equipment, tray preparation, selection and proper sterilization of dental instruments/or equipment, and the hands-on use of four- and six-handed chair side procedures. The course covers the physical and chemical interactions, manipulations, application and storage of various restorative materials. FA

**DTL 126 Dental Radiology**

4 Credit(s)

This course is designed to provide history, principles, and biological effects on the human body. Included also, are the exposing, processing, and mounting of radiographs using proper safety techniques. The course provides supervised theory and lab techniques covering intra and extra oral radiographic production, processing, mounting, and evaluation. The student has the opportunity to become skilled in dental x-ray procedures with a heavy emphasis on safety. FA

**DTL 127 Dental Clinical**

2 Credit(s)

Theories and skills learned in the classroom are applied to actual clinical situations through low-income clinic work on campus. The experience is made possible by local dentists who volunteer their time and services. This course provides the student with the opportunity to enhance chair side and laboratory skills in the dental environment and to work with dentists in a structured environment. SP

**DTL 128 Dental Specialties**

4 Credit(s)

This course is designed to provide the student with a basic knowledge, including indications and contraindications, of the use of dental specialties. Varied skills dealing with each specialty will be introduced. SP

**DTL 129 Dental Biology**

2 Credit(s)

Microbiology/ Anatomy and Physiology is a required course for Dental Assisting students. This is an introductory course that is taught in one semester. The course is taught in a lecture format. This course will cover microbiology, pathophysiology and anatomy of the head and neck. FA

**DTL 131 Dental Lab Materials and Expanded Functions**

3 Credit(s)

The student will learn to identify properties, uses, and manipulations of various dental laboratory materials. A hands-on use of selected laboratory materials is used in

the fabrication of numerous dental products. Also learned are selected laboratory procedures including proper use, maintenance, and safety of laboratory equipment. Much of this course is hands-on lab work. The student will have the opportunity to become skilled in the clinical aspects of the Idaho Expanded Functions for Dental Assistants. The student will have the opportunity to be tested for the Idaho Expanded Functions certificate. SP

**DTL 132 Supervised Work Experience**

6 Credit(s)

This course is designed to allow students to apply theories and skills learned in the classroom and lab to actual clinical situations in area dental offices. This gives the student the opportunity to become further skilled in the Idaho Expanded Functions. The student may also receive experience in specialty offices (e.g. orthodontics or oral surgery). SU

**DTL 134 Fundamentals of Dental Assisting**

3 Credit(s)

Provides the beginning Dental Assistant with background and knowledge in the areas of dental terminology, charting, cavity classification, infection control, local anesthesia, oral surgery, and ethics and jurisprudence. FSP

*Prerequisite: Employed as a Dental Assistant for 6 months.*

**DTL 135 Expanded Duties**

3 Credit(s)

Designed to teach the following expanded functions: coronal polishing, pit & fissure sealant, temporary crowns, and nitrous oxide administration. (All of the functions are required for a State license). FSP

*Prerequisite: Must have successfully completed DTL 134 (Fundamentals of Dental Assisting) and be employed in the dental profession for at least 6 months.*

**ECO 100 Economic Issues**

3 Credit(s)

This course is an introduction to current economic issues as they affect such matters as inflation, unemployment, discrimination, war and peace, taxes, interest rates, retirement, welfare, education, profits, poverty, pollution and the environment, and our overall quality of life. SP

**ELC 203 Introduction to Computer Programming**

3 Credit(s)

This course introduces students to the fundamentals of software engineering and emphasizes that analysis of the problem is the key to successful program creation. Special emphasis is placed upon logical thinking and good programming style. The goal is to educate, motivate and excite programming students regardless of previous programming experience. SP

**ELT 141 Applied Mathematics I**

4 Credit(s)

Basic math as it applies to electrical theory. Includes algebraic and trigonometric topics as they relate to DC and AC (sine wave) circuit analysis. FA

*Corequisite: ESE 100*

**ELT 142 Applied Mathematics II**

4 credit(s)

Continuation of ELT 141. Selected algebraic and trigonometric topics as related to DC and AC (sine wave) circuit analysis with special emphasis on trigonometric solution and vector analysis. SP

*Prerequisite: ELT 141*

**ELT 153 Electronic Theory**

5 credit(s)

Fundamentals of DC and AC electronics: safety, soldering, electrical units, Ohm's law, series and parallel resistive circuits, voltage and current, meters, network theorems, magnetism, inductors, capacitors, AC-DC network analysis and power supplied. FA

*Corequisite: ELT 141, ELT 155*

**ELT 154 Electronic Control Devices Theory**

5 credit(s)

Comprehensive study of semiconductors, power supplies, transistor amplifiers, and operational amplifiers. Digital fundamentals including logic gates, Boolean algebra, combination logic circuits, digital registers, counters, and timing circuits. SP

*Prerequisite: ELT 141, ELT 153, ELT 155.*

*Corequisite: ELT 142, ELT 156*

**ELT 155 Electronic Lab**

5 credit(s)

Experiments involving subjects covered in ELT 153. Students will construct, measure, and analyze circuits. FA

*Corequisite: ELT 153.*

**ELT 156 Electronic Control Devices Lab**

5 credit(s)

Experiments involving subjects covered in ELT 154. Students will construct, measure, and analyze circuits. SP

*Prerequisite: ELT 141, ELT 153, and ELT 155. Corequisite: ELT 154*

**ENG 090 Basic Writing**

3 Credit(s)

This course prepares students for English 101 by addressing fundamentals of essay writing. Focus is on the writing and editing processes with an emphasis on correctness, fluency, organization, and revision. A passing score on the mandatory exit exam is required for successful transition to English 101. ALL

*Prerequisite: A COMPASS score between 47 and 67 in both Reading and Writing is required.*

**ENG 101 English Composition**

3 Credit(s)

Using the essay as a model for organization, students will be introduced to critical reading and writing challenges including pre-writing strategies, invention, revision, and editing. In a minimum of 20 pages of revised writing, students will produce essays and reports that show unity and coherence, develop and support a central thesis, and demonstrate organization and unification. Keyboarding skills are strongly recommended. ALL

*Prerequisite: A COMPASS score of 68 or better in Reading and Writing or an ACT score of 18-24 OR completion of ENG-090 with minimum grade of C-*

**ENG 102 Critical Reading and Writing**

3 Credit(s)

Provides instruction in critical reading and writing of expository and argumentative prose, including summaries, analysis, and research. Focus on critical reading; research methods; gathering, evaluating, analyzing, and synthesizing ideas and evidence; and documentation. The course is designed to help students understand and acquire the habits of mind central to academic inquiry and to exercise skills in reporting documented research. ALL

*Prerequisite: Successful completion of ENG 101 or a minimum COMPASS score of 95 in both Reading and Writing with a satisfactory entry essay written during the first class session. Students who do not pass the entry essay diagnostic exam may be admitted with the permission of the instructor and with the provision that they attend regular tutoring sessions in the Writing Center.*

**ENG 110 Introduction to Literature**

3 Credit(s)

This course surveys major writers and various literary genres throughout a minimum of three historical periods. Reading will include drama, poetry, short stories and novels. The emphasis is on literature as it contributes to and reflects an understanding of the human condition, ideas, and values. Both canonical and diverse contemporary writers will be covered. Students will write a variety of papers equaling 2500 – 3000 words of edited prose. FSP

*Prerequisite: ENG 101*

**ENG 202 Technical Communication**

3 Credit(s)

This class is designed for those interested in practical applications of technical writing and communication principles. It offers instruction in group dynamics, teamwork, and writing skills applicable to business and industry and includes the fundamentals of composing memos, letters, abstracts, instructions, and reports with an emphasis on clarity, conciseness, and document design. SP

*Prerequisite: Successful completion of ENG 101*

*Recommended: ENG 102*

**ESE 100 Engineering Technology Orientation**

1 Credit(s)

An introduction to the opportunities and responsibilities of an engineering technician. Exposure to the various fields of technology through field trips, movies and guest lectures. Introduction to materials, techniques, and college services, which will assist the student in completing a technology program. SP

**ESH 102 40-Hour OSHA HAZWOPER Training**

1 Credit(s)

This class is designed for hazardous waste operation workers as described by 29 CFR 1910.120. Topics of discussion include applicable regulations, chemical and physical

hazards, personal protective equipment, decontamination, and emergency response. ALL

### **HCT 100 Introduction to Health Professions**

2 Credit(s)

This course is designed for students entering programs for training in a health care profession. Information provided in this course will give students a basic knowledge regarding the preparation necessary for a large number of health care careers and current health care trends. FSP

### **HCT 101 Medical Terminology**

2 Credit(s)

Using computer assisted instruction, this course provides a body system by body system approach to spelling, pronouncing, and using terminology that is unique to the medical environment. FSP

### **HCT 103 Introduction to Anatomy and Physiology and Laboratory**

4 Credit(s)

This course provides a study of the normal structure and function of body cells, tissues, organs, and body systems, including the interrelationships of body systems and the proper terminology to describe the systems. It relates body systems to patient care. FSP

*Strongly advise to complete HCT 101 prior to/or concurrently*

### **HCT 105 Phlebotomy**

2 Credit(s)

This course provides the student with a working knowledge of specimen collection techniques and laboratory procedures routinely performed in health care facilities while observing all aseptic and safety precautions in accordance with health care standards. FSP

*Prerequisite: All students must have started their hepatitis B vaccines before the first day of class Must be 18 years old. Must have high school diploma or GED.*

### **HCT 109 Medical Ethics**

2 Credit(s)

This course provides a solid understanding of the statutes, regulations, and bioethical issues that impact medical office personnel. Students will be exposed to legal concepts such as standards of care, scope of employment, criminal and civil law, contracts, risk management, and the aspects of medical malpractice cases. FSP

### **HCT 118 Certificated Nursing Assistant Training**

4 Credit(s)

Prerequisite: Must be at least 16 years old, CPR card, and current immunizations as per Health Professions Division. This course is designed for persons needing nursing assistant training or for students preparing to enter the practical nursing program. Training is provided through lectures, practice sessions, and clinical experiences using the skills and knowledge of health care principles, policies, and procedures to give personal care to patients in a health care institution. Each student is required to take the written test and skills test. Clinical hours may be different than classroom hours. ALL  
\* See *Certificated Nursing Assistant* description under Health Professions Division for Entrance Requirements.

### **HCT-121 Professionalism for Health Careers**

1 Credit(s)

This class is designed for students enrolled in the nursing and health sciences educational programs. The information provided is essential to the success of today's health care workers. Hands-on technical skills remain a high priority, but good character, a strong work ethic, and personal and professional traits and behaviors are becoming more important than ever before. Regardless of job title or discipline, every health care student and worker must understand the importance of professionalism and the need to perform in a professional, ethical, legal, and competent manner. FSP

### **LGL 101 Introduction to Legal Assisting**

3 Credit(s)

Instruction in this course presents an overview of the professional role of a legal assistant, reviews, ethics, regulation, professional trends and issues, legal analysis, and the legal system. FA

### **LGL 102 Law Office Procedure and Technology**

3 Credit(s)

This comprehensive simulation is comprised of various activities most often performed by the legal assistant, such as billing, calendaring, time keeping, document & file control, event tracking, and records management. The student will also be introduced to various legal-specific software, telecommunication, and office equipment generally found in a law office. SP

*Prerequisite: CIS 101*

### **LGL 103 Legal Terminology**

3 Credit(s)

Students will learn the definitions, synonyms, and pronunciation of legal terms and understand how these terms are used in legal documents, instruments, and correspondence. FA

### **LGL 104 Legal Document Drafting**

3 Credit(s)

The focus of this course will be on introducing key legal documents to acquaint students with legal format, parlance, and vernacular. Specific focus will be given to studying the unique components of different documents, as well as provide students with hands-on training in drafting a variety of legal correspondences, memos, and legal documents. Students will also be introduced to state and federal courts and rules and learn how procedural rules relate to document drafting. FA

### **LGL 110 Civil Litigation I**

3 Credit(s)

This course provides the learner with principles of civil litigation in federal and state courts with a focus on the initial phases of a lawsuit, including client interviews, pre-litigation investigation, jurisdiction and venue considerations, service of process, and discovery. Discovery topics include interrogatories, depositions, document production, and requests for admission. The principles learned will be applied to practical litigation exercises. SP

*Prerequisite: LGL 104 or instructor approval*

**LGL 207 Procedures of Bankruptcy Law**

3 Credit(s)

This course provides the learner with a comprehensive understanding of debtor/creditor law and how it relates to bankruptcy. Students will examine related laws using realistic case-studies that explore how debt is created and collected preparatory to filing bankruptcy. The course evolves from understanding the formation of debt, to exploring different bankruptcy options available to debtors, to learning how bankruptcy cases are adjudicated and closed upon order of discharge. SP

**LGL 208 Family Law**

3 Credit(s)

The purpose of the family law course is to give legal assistants an understanding of domestic relations law and to show students how those laws govern family situations. The content of the course covers such areas as formation of a marital relationship, dissolution of marriage, child custody and support, adoption, paternity, domestic violence and child neglect. SP

**LGL 210 Internship**

3 Credit(s)

This course provides the student with an opportunity to gain practical work experience under the supervision of an attorney or experienced legal assistant in day-to-day, on site office work. The student must prepare the necessary job search documents and conduct interviews to obtain a legal assistant internship position and complete 150 hours of work at the internship site, which may be a private or public law office, corporate or government legal department, or other appropriate law-related setting. In addition to on-site work, the student will prepare a daily journal of his/her activities and observations while on site, and a portfolio of five (5) legal documents prepared on the job site. FSP

**LGL 211 Civil Litigation II**

3 Credit(s)

This course continues the study of the litigation process. Topics include discovery techniques, settlement negotiations, organization of case files, document control, an overview of alternative dispute resolution, trial preparations, and post-trial proceedings. Basic research skills will be used to locate applicable state and federal laws as they relate to civil litigation. In addition, students will be introduced to post-judgment supplemental proceedings utilized in the civil litigation practices. This course implements a cumulative assessment simulation utilizing mock litigation exercises. FA  
*Prerequisite: LGL 110*

**LGL 212 Criminal Law**

3 Credit(s)

This course explores the basic concepts of criminal law, criminal procedure, and the development of the American criminal justice system. Students will learn how the criminal justice system works, including how cases proceed from the filing of criminal charges, to arrest, to arraignment, to pre-trial, to trial, to sentencing, and to appeal. Lecture and assignments are designed to familiarize students with the application of criminal laws, statutes, and procedural processes. SP

**LGL 216 Legal Assistant Practices**

2 Credit(s)

This course will provide students with the opportunity to practice the skills learned in subsequent classes. Students will perform various legal practices as performed by legal assistants in a traditional law office setting. FA  
*Prerequisite: LGL 102 or Instructor Approval*

**LGL 218 Basic Legal Research**

3 Credit(s)

Covers the basic tools of legal research, including Westlaw and Internet based research. Emphasis is placed on how to use reference tools fully, finding and updating law, correct citation format, and legal writing. FA

*Prerequisite: LGL 101***MAS 101 Pharmacology for Health Professions**

2 Credit(s)

This course introduces legislation relating to drugs, drug references, drug classification and actions. Various areas will be touched on, such as patient education, effects of specific drug actions on body systems, side effects, precautions to be used, contraindications, etc. Vitamin and mineral functions are covered as well as the subject of substance abuse. Time will be given to learn how to use a PDR as a reference for information. SP

*Prerequisite: MAT 123.***MAS 106 Externship I**

3 Credit(s)

Upon successful completion of the classroom and laboratory instruction required for a certificate, each student will complete an externship that provides an opportunity in a medical facility to incorporate principles, activities, and skills previously learned while under the supervision of qualified personnel. This externship does not meet the requirements for the associate degree. SU

**MAS 120 Diseases of the Human Body**

2 Credit(s)

Introduction to diseases of the Human Body. Includes infectious and congenital diseases, neoplasm's, as well as diseases of each specific body system. FA

**MAS 121 Beginning Admin Skills for Medical Assistants**

4 Credit(s)

This course includes the components of an administrative career in a physician's office, medical clinic, and other health care facilities. Group collaboration and the aspects of health care team, oral and written communication skills, and operational tasks such as scheduling patient appointments, managing patient records, and patient accounts will be included. FA

**MAS 122 Beginning Clinical Skills for Medical Assistant**

4 Credit(s)

This course introduces students to the clinical aspect of working in a physician's office, medical clinic or other health care facility. Clinical and lab procedures included in this course are: medical record creation and maintenance, vital signs, medical asepsis and OSHA standards, introduction to laboratory procedures and testing and necessary documentation, laboratory quality control and quality assurance, and physical agents that promote healing. Ear and

Eye exams and procedures and all necessary documentation.  
FA

*Prerequisite: HCT 100 and HCT 103*

### **MAS 205 Administration of Medications**

2 Credit(s)

This course covers the routes of administration and the proper method of delivery of medications by those routes. Various types of medication are discussed as well as the absolute rules concerning medication administration, including dosage calculations. SP

### **MAS 210 Externship II**

6 Credit(s)

Upon successful completion of the classroom and laboratory instruction required for an Associate of Applied Science Degree, each student will complete an externship that provides an opportunity in a medical facility to incorporate principles, activities, and skills previously learned while under the supervision of qualified personnel. SU

### **MAS 221 Advanced Admin Skills for Medical Assistants**

4 Credit(s)

Using extensive computer applications, students will learn document composition, banking and bookkeeping skills, advanced medical office procedures, and transcription skills required for medical office management. SP

*Prerequisite: MAS 121 or approval of course instructor.*

### **MAS 222 Advanced Clinical Skills for Medical Assistants**

4 Credit(s)

Upon completion of the course the student will have demonstrated the ability to perform numerous clinical skills necessary and common in a variety of health care environments: assist with specialty examinations, knowledge of skills and equipment needed to perform EKG and spirometry testing and the documentation needed, assist with colon exam and lab testing. Prepare and set-up for minor surgical procedures and sterile technique. Introduction to radiology and diagnostic procedure will also be included. SP

*Prerequisite: MAS-122 or permission of instructor*

### **MAT 100 Introduction to Algebra**

4 Credit(s)

This course prepares students to enter technical programs at EITC or other postsecondary institutions. This course will focus on equations, signed numbers, quadratic equations, formulas, inequalities, graphs, and radicals. ALL

*Prerequisite: Minimum COMPASS score of 45 in Pre-Algebra or between 15 and 39 in Algebra or a minimum mathematics ACT score of 12*

### **MAT 104 Welding Mathematics**

3 Credit(s)

This course is designed for students in their first year of Welding Technology. The U.S. Customary and Metric systems of measurement are used. Whole number arithmetic, fractions, percentages, and decimals are used with emphasis on converting units within and between the two systems. Formula solving and setting up of proportion equations are used to solve practical problems in geometry. The course concludes

with right triangle trigonometry as applied to typical shop welding problems. FA

*Prerequisite: A COMPASS Pre-Algebra score of 30 or higher*

### **MAT 105 Business Mathematics**

3 Credit(s)

This is a comprehensive mathematics course with an emphasis placed on its usage in the business environment. This course takes an in-depth view of various business concepts including: mark ups, mark downs, financial statement analysis, bank reconciliations, business margins, ratios, simple interest, amortization, and time value of money. ALL

*A COMPASS score greater than 44 in pre-algebra AND an algebra score greater than 15 is required to enter this course.*

### **MAT 108 Intermediate Algebra**

3 Credit(s)

This intermediate course is a review of algebra with an emphasis on solving equations and inequalities, including nonlinear equations and systems. Additional topics covered include factoring, rational expressions, exponents, radical, and quadratic equations. ALL

*Prerequisites: Successful completion of MAT 100 with a C grade or higher; a COMPASS Algebra score of 41 or higher; or a minimum mathematics ACT score of 18*

### **MAT 110 Technical Mathematics**

3 Credit(s)

This course is designed as a basic mathematics course for students in auto and diesel programs. Students will evaluate electrical and hydraulic systems, calculate power transfer and explore personal finance. ALL

*Prerequisite: A COMPASS Pre-Algebra score of 31 or higher*

### **MAT 112 Mathematics for Health Professions**

3 Credit(s)

This course is a basic mathematics course for students in Health professions. Appropriate application in Health Care will be stressed throughout the course. Course content review fractions/decimals; percentages, ratios and proportions; and covers formula evaluation, dosage measurement, drug orders and labels; the metric system and conversions; methods of dosage calculations; and specialized calculations. FSP

*Prerequisite: COMPASS Pre-algebra score greater than 45*

### **MAT 123 Mathematics in Modern Society**

4 Credit(s)

This course will be a survey of mathematics and focus on effective thinking skills. Many exciting and beautiful mathematical ideas are covered including logic, number theory, probability, statistics, non-Euclidian geometry, and various other higher-level mathematical concepts.

The historical, biographical and philosophical nature of mathematics will be explored. ALL

*Prerequisites: Math 100, a minimum mathematics ACT score of 19, or a COMPASS score of 46 or higher in Algebra and a 68 in Reading. Corequisite: MAT 123 -L*

### **MAT 123L Mathematics in Modern Society Lab**

0 Credit(s)

ALL *Corequisite: MAT 123*

**MAT 143 College Algebra***4 Credit(s)*

This course introduces the concepts of and notations used for generalized mathematical functions. These include polynomial functions, radical functions, exponential functions, logarithmic functions and functions of complex numbers. Matrices and conic sections are introduced. Sequences, series, and the binomial theorem may also be covered as preparation for calculus courses. SP

*Prerequisites: Successful completion of MAT 108 with a grade of C or higher, a minimum mathematics ACT score of 23, or a COMPASS Algebra score of 61 or higher*

**MGT 115 Leadership Workshops***1 Credit(s)*

Participants will learn to view management and leadership as two different but essential skill sets for the efficient, effective executive. Organizations in the 21st Century are facing major changes in the demands of their customers and, at the same time, the needs for their employees. This seminar is designed with state of the art ideas to meet those demands and go beyond. It will help each participant explore what they know, what they don't know, and what they need to know. The skills needed to become the "best leader" not just better are an integral part of these workshops. ALL

**MGT 121 Principles of Management***3 Credit(s)*

This course provides an introductory framework for many of the courses taught in the Business Technology Program. Organized around the traditional management functions of planning, leading, organizing, and controlling, a managerial foundation is laid for later instruction in human resource management, small business management, financial management, and entrepreneurship. Students will complete a research paper on a successful major corporation or an influential business leader. A fun computer simulation game is used the final two weeks of the semester to provide teams of students the opportunity to apply the concepts learned throughout the semester. Learners are presented a behavioral orientation to management where they are required to solve problems, make decisions, respond to situations, and work in group activities which simulate many of the day-to-day challenges and opportunities faced by real managers. FA

**MGT 201 Special Topics I***1 Credit(s)*

This course will address special topics relative to business and industry normally not covered in other courses offered in the Business Technology program. Information and subject matter will be germane to business and business-related occupations and industries. Students who complete a Special Topics course may receive a Certificate of Completion showing specific competencies and subject matter contained in the course.

**MGT 202 Special Topics II***1 Credit(s)*

This course will address special topics relative to business and industry normally not covered in other courses offered in the Business Technology program. Information and subject matter will be germane to business and business-related occupations and industries. Student who complete a Special Topics course may receive a Certificate of Completion showing specific competencies and subject matter contained in the course.

**MGT 203 Special Topics III***2 Credit(s)*

This course will address special topics relative to business and industry normally not covered in other courses offered in the Business Technology program. Information and subject matter will be germane to business and business-related occupations and industries. Students who complete a Special Topics course may receive a Certificate of Completion showing specific competencies and subject matter contained in the course.

**MGT 204 Special Topics IV***2 Credit(s)*

This course will address special topics relative to business and industry normally not covered in other courses offered in the Business Technology program. Information and subject matter will be germane to business and business-related occupations and industries. Students who complete a Special Topics course may receive a Certificate of Completion showing specific competencies and subject matter contained in the course.

**MGT 206 Small Business Management***3 Credit(s)*

This course covers all aspects of what it takes to turn dreams into reality -- the dream of owning and operating your own small business. These dreams can lead to new or better products and/or services, create jobs, and resulting in a stronger community. Running a small business is difficult in today's rapidly changing world. Emphasis is placed on creating and maintaining a sustainable competitive advantage that will help the small business not only survive but succeed. Students will develop a business plan -- including a product and services plan, a marketing plan, a management plan, an operating plan, and a financial plan -- for a new business venture of their choice. SP

*Prerequisite: MGT 121, ACC 210*

**MGT 207 Financial Management***3 Credit(s)*

An understanding of Finance is central to the successful operation of any business entity. The principles and practices of financial management apply to every business unit—from the largest multi-national corporation to the smallest sole proprietorship. Every business student must have a clear understanding of the basic tools of financial management. Concepts such as financial ratios, financial statement analysis, time value of money, net present value, risk and return, stocks and bonds, capital budgeting decision methods, and forecasting will be covered. Regular readings from business publications will assist the student in understanding the application of finance to real-world issues. SP

*Pre-requisites: MAT 105, MGT 121 and ACC 210*

*Recommended: MAT 123 or MAT 143*

### **MGT 215 Business Law**

*3 Credit(s)*

This introductory course in business law covers the foundations of law, the types of law, the court systems, and the basis of law. The two main focus areas of this course are Contracts and the Law of Sales with information on agency and employment law. This course is presented as a HYBRID course with most materials being presented online through the Blackboard learning systems. Students will meet on campus only a few times during the semester. Students must have access to a computer and the internet in order to take this course. SP

### **MGT 216 Human Resource Management**

*3 Credit(s)*

People are an organization's most valuable resource. Effective use of human resources can create a strategic advantage for any corporation wise enough to value and develop the potential of their people. This course examines the human resource processes of job analysis and design, recruitment, selection, and hiring, as well as compensation, benefits, and downsizing. Review of significant human resources laws, such as labor relations and unions, the Fair Labor Standards Act, sexual harassment, discrimination, ADA, FMLA, and termination is also included. Regular readings in business periodicals keep this subject firmly anchored in current, contemporary examples of these topics. FA

### **MKT 103 Sales and Customer Service**

*3 Credit(s)*

Selling is the engine that drives all business. It is its lifeblood and without sales, companies will go out of business. Students in this course will learn how to sell, the psychology of selling, and what induces the buying motive in customers. Students in this course will participate in actual sales competitions in order to effectively understand the selling process. This class is presented as a HYBRID model with the lessons and lectures being presented online via the Blackboard learning system. In class sessions will be utilized for roll-plays and video presentations of sales material. Students must have access to a computer and the internet in order to take this course. SP

### **MKT 112 Introduction to Marketing**

*3 Credit(s)*

This introductory course is designed to present an overview of the concepts of marketing principles and practices used in business. Models, concepts, and techniques that are effective in the design and implementation of a marketing application are discussed. This class is presented as a HYBRID model with the lessons and lectures being presented online via the Blackboard learning system. Students must have access to a computer and the internet in order to take this course. This course will continue on in MKT-125-*Introduction to Marketing Strategies*. FA

### **MKT 115 Applied Economics**

*3 Credit(s)*

This course presents an introduction to economics using the applied approach. Various system, theories, and methods will be used to acquaint the student in such areas as supply and demand, inflation, unemployment, GNP, and other key economic issues. (transfer course only)

### **MKT 120 Marketing on the Internet**

*3 Credit(s)*

Internet participation is essential for successful business today. This course examines how businesses can market themselves, provide customer service, and connect with customers using the internet. Online marketing strategies used in this course include search engine optimization, pay per click, affiliate programs, mobile marketing, site analytics, and social media. FA

*Prerequisite: CIS 101 or demonstrated knowledge of computer operations.*

*Prerequisite MKT 112 or permission of the instructor*

### **MKT 123 Practicum I**

*1 Credit(s)*

This course is a one-semester Cooperative Education component which allows the student to work in an approved position in the community in order to apply the skills learned in the classroom in the real business world. This very important course lets the student, instructor, and employer work together in furthering the educational processes. FA

### **MKT 124 Practicum II**

*1 Credit(s)*

This course is a one-semester continuation of MKT 123, Practicum I. SP

### **MKT 125 Introduction to Marketing Strategies**

*3 Credit(s)*

This is a second semester continuation of the Introduction to Marketing MKT 112 course. It expands on the principles of marketing with greater depth in the marketing mix: product, price, distribution, and promotion. SP

*Prerequisite: MKT 112 or with permission of the instructor.*

**MKT 202 Entrepreneurship**

3 Credit(s)

This capstone course in the Marketing and Management degree option utilizes a sophisticated computer online simulation software package. This challenging simulation is based on a real-life management scenario where each student manages his or her own multi-million dollar company. Students plan and introduce up to five new products and compete against other teams worldwide using realistic market measures such as stock price, EPS, ROE, ROS, and so on. This cross-functional simulation integrates all major elements of business decision making including Research & Development, Production, Marketing, Finance, Human Resources, and Total Quality Management.. This class is presented as a HYBRID model with the lessons and lectures being presented online via the Blackboard learning system. Students must have access to a computer and the internet in order to take this course. FA

*Prerequisite: Successful completion of all first, second, and third semester program courses. Students must be enrolled in all fourth semester program courses in order to enroll, or have special permission from the instructor.*

**MKT 214 Business Advertising**

3 Credit(s)

Fundamentals of business advertising and promotion are the focus of this course. Print, electronic, digital, and out-of-home media advertising formats are covered. Course videos include award winning commercials shown as examples of great advertising. Students produce a portfolio of advertisements employing multiple forms of media which they have collected throughout the semester. This class is presented as a HYBRID model with the lessons and lectures being presented online via the Blackboard learning system. Students must have access to a computer and the internet in order to take this course. FA

*Prerequisite: MKT 112 and MKT 125 or permission of the instructor*

**MKT 221 Practicum III**

1 Credit(s)

This course is a one-semester component which allows the student to apply hands-on techniques to material presented in the classroom/lab. This component will be either through an approved work station or approved real-life experience. FA

**MKT 222 Practicum IV**

1 Credit(s)

This course is a one-semester continuation of MKT 221, Practicum III. SP

**MTD 101 Industrial Safety and Report Writing**

3 Credit(s)

This course is offered as an introduction to the Mechanical Trades programs. All new students are required to take this course prior to working in the live work labs. Included in this course are hand and power tools, both welding and mechanical; their identification and proper use; and safety. Drill bit sharpening, tube flaring, use of hacksaws, chisels, punches, taps and dies, easy-outs, and other related tools are covered. Red Cross First Aid and CPR will be provided, hazardous communication, and "Right to know" CFR

10:10.1200 is covered. Work order preparation and industrial report writing covers the 3 C's of warranty report writing: complaint, cause, and correction. FSP

**NRS 107 Introduction to Pharmacology**

3 Credit(s)

This course is designed to introduce pharmacology and presents common drugs used in each drug classification module, including drug actions, uses, adverse reactions, drug interactions, nursing implications and patient teaching. It will also include a math review and dosage calculations. FSP

**NRS 115 Fundamentals of Nursing I**

4 Credit(s)

This course provides didactic and laboratory practice of basic nursing concepts and skills that are required for licensure as a practical nurse and employment in a variety of healthcare settings. Communication, critical thinking, and nursing process are emphasized. Students demonstrate a variety of skill sets in preparation for clinical application. Students will display competence via written tests, simulated skills demonstrations as well as clinical practice. Opportunities for practice are provided in the skills laboratory, including guided simulation exercises with required skills return demonstration. Independent skills module completion and laboratory practice time are required each week. FSP

*Corequisite: NRS 107*

**NRS 116 Fundamentals of Nursing II**

4 Credit(s)

This course is a continuation of NRS 115 Fundamentals of Nursing I, and includes intravenous therapy instruction which follows the developed state curriculum for IV therapy. This course provides didactic and laboratory practice of more advanced nursing concepts and skills that are required for licensure as a practical nurse and employment in a variety of health care settings. The student will display competence via written tests, simulated skills demonstration and clinical practice. Opportunities for practice are provided in the laboratory situation with required skills return demonstration. Independent skills module completion and laboratory practice time are required each week. FSP

*Prerequisite: NRS 115*

**NRS 143 Foundations of Medical Surgical Nursing I**

5 Credit(s)

Medical and/or surgical conditions and the related nursing care are presented in the following areas: fluid and electrolytes, acid base balance, infections, shock, pain, cancer, surgery, diabetes mellitus, immune disorders, respiratory disorders, gastrointestinal disorders, integumentary disorders, blood and lymph disorders, introduction to cardiovascular disorders and emergent conditions. Students participate in clinical lab simulation. Clinical experience occurs in a variety of health care settings throughout the community. Students provide care to patients of all age groups. FSP

*Corequisite: NRS 115*

**NRS 144 Foundations of Mental Health Nursing**

3 Credit(s)

This course will stress basic psychiatric diagnoses, history of mental health, coping mechanisms, treatment modalities, defense mechanisms, psychiatric medications and their side effects. This course will also teach therapeutic communication and building therapeutic relationships. Clinical experience occurs primarily in an inpatient psychiatric care facility. FSU

**NRS 207 Introduction to Maternal/Child Nursing**

4 Credit(s)

This course considers the special needs and nursing care of the maternity patient, fetus, and the newborn. Medical and /or surgical conditions of the pediatric patient and the accompanying family dynamics are also presented with emphasis on preventive medicine. Principles of growth and development of the child are incorporated. Clinical experience occurs in the maternal/newborn nursing setting. SSU

*Corequisite: NRS 115 and NRS 143*

**NRS 208 Leadership**

3 Credit(s)

This course is the developed state curriculum for LPN Management. The student will display mastery via paper and pencil test, simulated skills demonstration, and clinical practice knowledge of nursing care delivery systems particularly long-term care. The student will describe and demonstrate principles of professionalism, primary functions of supervision/management, effective communication skills, and principles of self-awareness. FSU

*Prerequisite NRS 143*

**NRS 243 Foundations of Medical Surgical Nursing II**

5 Credit(s)

Medical and surgical conditions and the related nursing care are presented in the following areas: cardiac, urinary, endocrine, reproductive, musculoskeletal, neurological, sensory, and sensory systems. Review of other systems taught as needed. Clinical experience occurs in a variety of health care settings throughout the community. Students provide care to patients of all age groups. FSP

*Prerequisite NRS 143; Corequisite NRS 116*

**OCR 105 Occupational Relations**

3 Credit(s)

This course introduces students to personal and work-related strategies for seeking and keeping employment. Students will study typical employee behavior and organizational culture with an emphasis on seeking solutions to real-life problems. Motivation, leadership, problem-solving, teamwork, and communication will be examined as they apply to successfully achieving personal and corporate goals within organizations. Students will practice interviewing techniques and resume writing. This course prepares students to enter the job market and develop the behavioral skills necessary for job retention and success. FSP

**OFP 110 Keyboarding**

3 Credit(s)

This course focuses on building speed and accuracy on the keyboard. Emphasis is placed on improving the student's touch typing technique and ergonomics when using computers. FA

*Prerequisite: Keyboarding speed of 25 WPM for at least one minute with 5 or fewer errors. (Students may arrange for keyboarding test through Student Services)*

**OFP 118 Word Processing**

3 Credit(s)

This course provides students with the opportunity to learn word processing for employment purposes or home use.

This course instructs students in the theories and practical applications of one of the most popular word processing software programs currently used by industry. SP

*Prerequisite: CIS 101 or equivalent*

**OFP 123 Business Machines**

1 Credit(s)

This course provides instruction on electronic calculators for entry-level competency using the touch method to develop ten-key calculating ability. Minimal instruction is included for hand-held calculators. FA

**OFP 140 Electronic Office Concepts**

3 Credit(s)

This course is for students anticipating employment at any level of a business organization. It emphasizes concepts and terminology necessary to function effectively in the electronic office. It introduces office automation as it relates to the electronic scheduling of appointments and tasks. The course will present the creation and management of notes and telephone messages, and the effective and ethical utilization of electronic distribution of mail and files. Activities will include theory, instruction, demonstration, and hands-on experience. FA

**OFP 141 Business Presentations**

3 Credit(s)

This course prepares students to develop and deliver effective presentations to groups in a business environment. Attention is given to helping students overcome fear of public speaking by providing a supportive, encouraging, professional atmosphere. Instruction in Microsoft PowerPoint presentation software is provided as a tool for assisting students in designing and creating engaging and informative presentations using text charts, data charts, graphics, and other business-oriented information, including sound clips and even film images. The course includes instruction, demonstration, and hands-on experience in a computer lab setting employing state-of-the-art equipment. SP

*Prerequisite: CIS 101 or equivalent, or permission of the instructor*

**OFP 142 Business Spreadsheets**

3 Credit(s)

This course uses a spreadsheet software package to produce and utilize spreadsheets, a powerful tool in today's business world. SP

*Prerequisite: CIS 101 or equivalent*

**OFP 204 Advanced Word Processing**

2 Credit(s)

This course instructs students in the advanced theories and technical applications of one of the most popular word processing software programs currently used by industry. FA  
*Prerequisite: OFP 118 or equivalent*

**OFP 227 Database Management**

3 Credit(s)

This course examines the principles of database development and management. Topics include normalizing data for use in a relational database, designing database tables and relationships, creating forms, utilizing queries and designing reports. The course includes theory, instruction, demonstration, and hands-on experience. FA  
*Prerequisite: CIS 101 or equivalent; Recommended: OFP 142*

**OFP 230 Desktop Publishing**

3 Credit(s)

This course introduces desktop publishing. It emphasizes electronic typesetting, design, and paste-up on a personal computer workstation and utilizes specialized word processing software on computers for the design of brochures, newsletters, flyers, packaging, etc. Students produce their own portfolio of work accomplished. The course includes theory, instruction, demonstration, and hands-on experience. SP  
*Prerequisite: CIS 101; Recommended: OFP 118*

**OFP 244 SpeedBuilding**

1 Credit(s)

This course gives the students an opportunity to improve skills in keyboarding. The class emphasizes speed and accuracy through improved techniques using timed writings. This is an independent study course. SP  
*Prerequisite: OFP 110*

**OFP 250 Office Procedures**

4 Credit(s)

This capstone class provides the opportunity for students to practice the skills learned throughout the program in a simulated office environment. Students will practice routine office tasks as well as manage larger projects. A variety of software applications will be utilized as well as soft skills and critical thinking skills. SP  
*Prerequisite: OFP 140, ACC 110, OFP 204, OFP 227, or permission of the instructor*

**PHL 150 Applied Ethics**

3 Credit(s)

This course examines moral principles and moral issues and focuses upon the nature and the ground of moral obligation. It introduces major ethical perspectives and compares those against selected contemporary moral problems. The course is designed to help the student to begin answering some fundamental questions about life and what makes it worth living -- Questions like what makes an action "right," or what makes us happy, what kinds of qualities a person should have or avoid having, how we should treat other people (and ourselves), and what "work ethic" we want to follow. A variety of ethical issues will be explored, providing students with the opportunity to further examine and develop their own personal

moral principles.

*Prerequisite: Successful completion of ENG 101***PHY 101 Introduction to Physics**

3 Credit(s)

A survey of basic physics principles; motion, gravitation, electricity and magnetism, light, atoms and nuclei. Includes lecture, demonstrations, elementary problem solving. SP  
*Prerequisite: ELT 141; Corequisite: PHYS 101L*

**PHY 101L Introduction to Physics Laboratory**

1 Credit(s)

Laboratory-based application of PHY 101, to demonstrate basic physics principles; motion, gravitation, electricity and magnetism, light, atoms and nuclei. SP  
*Corequisite: PHYS 101*

**POL 101 Introduction to American Government**

3 Credit(s)

This introductory course provides a study of the foundation of the United States government and political processes. Special attention is given to the foundations of national government, federal institutions and processes, and the political environment including: political parties; interest groups; campaigns and elections; voting; the media; and state and local government. A primary objective of the course is to deepen student understanding of our unique American political system. Such knowledge will enable the student to make more informed political choices and inspire greater participation in the political process. FA  
*Prerequisite: A COMPASS score of 68 or higher in Reading and Writing*

**PSY 101 Introduction to Psychology**

3 Credit(s)

This course is designed to provide students with a general overview of the science that seeks to understand and explain behavior and mental processing. Students will be introduced to many of the major contemporary theories and concepts in psychology including perception, thinking, learning, motivation, personality, human development, and fundamental principles of abnormal and social psychology. ALL  
*Prerequisite: A COMPASS score of 68 or higher in reading and writing*

**PSY 150 Human Life Span and Development**

3 Credit(s)

This course is designed to examine factors that enhance or inhibit the development of individuals from prenatal stages through death. The primary focus of the course is on factors affecting cognitive, physical, and social development across the life span. SSU  
*Prerequisite: Successful completion of ENG 101.  
 Recommended: PSY 101*

**PTD 101 Professional Truck Driving Fundamentals**

5 Credit(s)

The purpose of this course is to provide classroom instruction on industry regulations, vehicle control systems, inspection, basic controls, introduction to shifting, backing, coupling and uncoupling, special rigs, visual search, communications, speed and space management, night driving, extreme driving

conditions, emergency maneuvers, preventive maintenance, cargo handling and documentation, hazardous materials, trip planning, accident procedures, and public and employer relations. ALL

### **PTD 102 Basic Driving Skills Development**

*1 Credit(s)*

Students will receive behind-the-wheel instruction on a driving range and become competent in shifting skills, basic backing, pre-trip preparation, docking, coupling/uncoupling, tire chaining, and tractor-trailer safety. ALL

*Corequisite: PTD 101*

### **PTD 103 Advanced Driving Skills Development**

*4 Credit(s)*

Students will receive behind-the-wheel instruction in basic over-the-road driving skills, additional shifting skills instruction, city driving, mountain driving, and freeway driving. Students will continue behind-the-wheel driving instruction completing more extensive city, freeway, and mountain combination trips. ALL

*Corequisite: PTD 101 & PTD 102*

### **RDS 101 Basic Radiation Protection Principles**

*5 Credit(s)*

A course in the physical and scientific principles fundamental to radiation protection. This course provides the theoretical background necessary to make informed decisions on the job as a radiation

safety technician. The class focuses on applied physics, radiation production mechanisms, radioactivity and its properties, radiation interactions with matter, radiation quantities, units and measures, sources of radiation, exposure evaluation and shielding concepts, and biological effects of ionizing radiation. FA

### **RDS 102 Intermediate Radiation Protection Principles**

*5 Credit(s)*

A continuation of material covered in RDS 101. This course covers radiation detection theory and operation, external exposure control, external dosimetry, and survey instrumentation; ALARA principles and shielding, internal dosimetry techniques, contamination control and monitoring, airborne sampling methods and programs, respiratory protection, radiological source control/radiography, particle accelerators, and X-ray equipment. FA

*Corequisite: RDS 101 and RDS 103*

### **RDS 103 Intermediate Radiation Protection Principles Laboratory**

*1 Credit(s)*

This course runs concurrently, supplements, and is required with RDS 101/102. This laboratory takes the theory, principles, and knowledge covered in RDS 101 and RDS 102 and applies it to practical exercises, skills and abilities used by a radiation safety technician on the job. The student will learn source accountability, performance testing of portable and count room instrumentation, performance and documentation of radiation and contamination surveys, posting of areas to reflect current conditions, issuing electronic dosimetry, conducting respirator fit testing, and conducting radiological ALARA briefings. FA

*Corequisite: RDS 102*

### **RDS 104 Advanced Radiation Protection Principles**

*5 Credit(s)*

A continuation of material covered in RDS 102. Students will learn advanced principles including respiratory protection, environmental monitoring, radioactive shipments, radiological incidences and emergencies, radiological considerations for first aid, air sampling, responding to radiological incidents and contaminated individuals.

SP

*Corequisite: RDS 104L*

### **RDS 104L Advanced Radiation Protection Principles Laboratory**

*1 Credit(s)*

This course runs concurrently, supplements, and is required with RDS 104. Students will learn how to survey a radioactive shipment, perform air samples, calculate air sample results, respond to radiological spills and other radiological emergencies, and use decontamination techniques on personnel. SP

*Corequisite: RDS 104L*

### **RDS 106 Basic Radiological Chemistry**

*1 Credit(s)*

Students will become acquainted with the Periodic Table, elements and molecular structure, basic chemical bonding and chemical reactions, chemistry changes precipitated by radiation, basic reactive plant chemistry, chemical balance of water, and chemical changes brought about by heat, water quality control and sources of impurities, plant corrosion, and radioactive waste handling of liquids and gasses. SP

*Corequisite: RDS 104L*

### **RDS 109 Nuclear Regulatory Practices**

*1 Credit(s)*

Students will become acquainted with regulations implemented by the U.S. Nuclear Regulatory Commission (NRC). The NRC establishes the regulations for the use and storage of radioactive materials for nuclear power plants, research reactors, and other medical, industrial, and academic licensees. This course will cover NRC radiation protection regulation guides, the NRC licensing process, and a review of the Environmental Protection Agency (EPA) regulatory guidance to federal agencies and its involvement with radioactive materials. Emphasis will be placed on the RP Fundamentals exam required for technicians at commercial nuclear facilities. SP

### **RDS 111 Supervised Work Experience**

*6 Credit(s)*

A supervised work experience will be conducted at an instructor-approved work site or on the campus of Eastern Idaho Technical College. SU

## **REGISTERED NURSING PROGRAM (Please refer to ADN courses.)**

### **REL 104 Communications in Radiological Safety**

*2 Credit(s)*

Students will learn to write radiological work permits, participate in ALARA reviews, post-job interviews, pre-job briefings, effectively communicate with workers, understand plant and area communication systems, and verbal and non-verbal communications. SP

**REL 107 Nuclear Components and Plant Systems***1 Credit(s)*

This course provides the students with the knowledge necessary to understand nuclear power plant systems and components and apply that information to the job of a radiation safety technician. An overview of the systems of boiling water and pressurized water reactors will be discussed. Students will learn how a reactor produces usable electrical energy, the fission process, the major components of each system, how the systems interrelate, and radiological hazards associated with the system. The basic principles of operation for the major components and equipment and the radiological precautions associated with maintenance tasks for each system. SP

**SOC 101 Introduction to Sociology***3 Credit(s)*

This introductory course presents the fundamental principles affecting human social systems. Emphasis is placed on the cultural and social forces governing groups and the conditions that transform social life, such as family, social change, social inequality, deviance, population, religion, culture, and the socialization process. ALL

*Prerequisite: A COMPASS score of 68 or better in reading and writing*

**SRT 101 Operating Room Techniques I***4 Credit(s)*

This course includes the study of safety and economy in the operating room; duties of the scrub and circulating technologist; surgical asepsis, gown and gloving procedures, draping techniques; sutures and needles; sponges, dressings, drains, care of specimens; and instruments and special equipment. FA

**SRT 102 Surgical Procedures I***4 Credit(s)*

This course includes the study of surgical procedures for each defined body system. Each of the units of instruction includes a brief history, procedures, special considerations, and the drugs used. Operative procedures, types of incisions, special equipment, instruments, and supplies for each specialty are also integrated as part of the course. FA

**SRT 103 Preparation of the Surgical Patient***3 Credit(s)*

This course is designed to enable the student to become skilled in assisting with the preparation, transportation, positioning, and anesthesia of the surgical patient. FA

**SRT 104 Clinical Practicum***5 Credit(s)*

Upon completion of the program requirements, the student will participate in a clinical practicum as an integral part of the course. Clinical experience in surgery, scrubbing, and orientation to circulating is included. FA

**SRT 105 Pharmacology for Surgical Technologists***2 Credit(s)*

This course is designed to provide skills and information about how drugs are measured, what kinds of drugs there are, what laws pertain to them, and how they're administered. Surgical pharmacology and anesthesia are stressed with emphasis on side effects and drug reactions as well as emergency measures used to counteract these reactions. FA

**SRT 201 Operating Room Techniques II***4 Credit(s)*

This course is a continuation of SRT 101 Operating Room Techniques I where the study of safety in the operating room, duties or scrubbing or circulating, surgical asepsis, gown and gloving procedures, draping techniques, are learned. This course will also include different types of incisions, specialized equipment, instruments, and supplies for each specialty. SP

**SRT 202 Surgical Procedures II***4 Credit(s)*

This course is a continuation of SRT 102 Surgical Procedures I. Included in this course is information for more advanced operative procedures such as neurosurgery, microsurgery procedures, cardiovascular and thoracic surgeries. SP

**SRT 204 Advanced Clinical Practicum***8 Credit(s)*

This course is a cooperative education work experience in a clinical health facility under direct supervision of facility personnel. Students complete specific and predetermined learning objectives and surgical procedures. SP

**WFM 101 Basic Fire School (S-110, S-130, S-190, I-100)***2.5 Credit(s)*

The purpose of this entry-level course is to train new firefighters in basic firefighting skills in order to have a successful first assignment on a wildland fire. Students will learn the basics of fire behavior, fire line safety, the ability to recognize hazardous situations and the Incident Command structure. Students who complete this course will be qualified to suppress wildfires while under close supervision.

**WFM 104 Portable Pumps & Water Use (S-211)***0.5 Credit(s)*

This 12-16 hour course is designed to give students practical knowledge and application skills of portable pump operations.

**WFM 105 Wildfire Power Saws (S-212)***0.7 Credit(s)*

This course will train students in the use of power saws and techniques in order to prepare for their functional role as a power saw operator on an incident.

**WFM 108 Supervising Concepts and Technique (S-201)***1 Credit(s)*

Through classroom instruction, exercises, and discussion, the student will apply the principles of communication and supervision required of a single resource boss to perform on a wild land fire incident. Students will learn the supervisor's responsibilities, ethics, and concepts such as workforce diversity, mutual respect, leadership, and team building.

**WFM 109 Dozer Boss - Single Resource (S 232)***1 Credit(s)*

This course is designed to meet the training recommended for the dozer boss (single resource) on a wildland fire incident.

**WFM 110 Interagency Incident Business Management (S-260)***1 Credit(s)*

This course is targeted for entry-level logistics and finance/administration positions, helicopter managers, and single resource positions in the Incident Command System. Instruction will include rules of conduct for incident assignments, recruitment of casualties, pay provisions, property management, cooperative agreements, and other incident business management practices.

**WFM 111 Basic Air Operations (S-270)***1 Credit(s)*

This course affords the training a survey of uses of air craft and fire suppression and provides the student on how to conduct themselves in and around air craft.

**WFM 112 Intermediate Wildland Fire Behavior (S-290)***2 Credit(s)*

This is a skill course that is designed to instruct prospective fireline supervisors in wild land fire behavior or effective and safe fire management operations. Upon completion of this course students will be able to determine basic import data of terrain, fuels, and weather require for understanding wildland fire behavior for various times of the day and night. Students will be able to describe the causes of extreme fire behavior, assess fireline data, describe fire conditions, and environmental factors.

**WFM 115 Crew Boss (Single Resource) (S-230)***1.5 Credit(s)*

This course is designed to meet the training needs of a crew boss on a wildland fire incident. Students will learn preparation, mobilization, tactics and safety, off line duties, demobilization and post incident responsibilities.

**WFM 121 Incident Commander Extended Attack (S-300)***1 Credit(s)*

This course is designed to prepare the incident commander to gather information, establish priorities, and coordinate resources at the incident scene.

**WFM 123 Applied Interagency Incident Business Management (S-261)***1 Credit(s)*

This course is targeted for entry-level logistics and finance/administration positions, helicopter managers, and single resources positions in the incident command system.

**WFM 125 Advanced Firefighting Training (S-131)***0.5 Credit(s)*

This interactive course was added to the wild fire suppression curriculum to provide additional instruction in tactics and safety for the Advanced Firefighter/Squad Boss.

**WFM 126 Interagency Helicopter Training Guide (S-217)***2 Credit(s)*

This course provides basic knowledge and skills required by individuals who will be working with helicopters. The skills taught relate to fire and non-fire project assignments.

**WFM 131 Basic Incident Command System (I-200)***0.7 Credit(s)*

This course is designed to introduce students to the principles associated with the Incident Command System.

**WFM 135 Fitness Training for the Work Capacity Test***3 Credit(s)*

Studies of wildland firefighting clearly show the link between fitness and work performance. The purpose of this self-study course is to prepare students for the Work Capacity Test that is required for anyone working in wildland or prescribed fire positions. The Work Capacity Test involves carrying a 45 pound pack a distance of three miles in 45 minutes. Credit will be awarded upon certification of successful completion of the Work Capacity Test.

**WFM 136 Position Task Book (FFT1)***2 Credit(s)*

Students will complete the advanced firefighter task book as documentation of competencies learned.

**WFM 138 Position Task Book (FFT2)***2 Credit(s)*

Students will maintain the basic firefighter task book as documentation of competencies learned.

**WFM 141 Engine Operator (PMS 419)***2 Credit(s)*

Engine Operator addresses the standards, procedures and techniques to be an engine operator on a wildland or prescribed fire.

**WFM 203 Intro to Wildland Fire Behavior Calculations (S-390)***2 Credit(s)*

This is a skill course designed to instruct prospective fireline supervisors in wildland fire behavior for effective and safe fire management operations.

**WFM 206 Fire Operations in the Urban Interface (S-215)***2 Credit(s)*

This course is designed to meet the training needs for initial attack incident commanders and company officers confronting wildland fire that threatens life, property, and improvements.

**WFM 208 Engine Boss (S-231)***0.5 Credit(s)*

Instructional topics cover tactical use and safety precautions required to establish an effective engine operation on the large incident.

**WFM 210 Task Force/Strike Team Leader (S-330)***1.5 Credit(s)*

This course is designed to meet the training requirements for the positions of Task Force Leader and Strike Team Leader.

**WFM 212 Initial Attack Incident Commander Type 4 (S-200)***1 Credit(s)*

This course is designed to prepare the individual in charge of the initial attack of small, non-complex fires, the training needed for readiness and mobilization, size-up of the fire, and the administrative requirements that must be completed by the incident commander.

**WFM 220 Intermediate Incident Command System (I-300)***1.75 Credit(s)*

This course provides additional description and detail of the organization and operation of the ICS, management of resources, describes the duties of all positions including the Air Operations organization, and provides examples of how the essential principles are used in incident and event planning.

**WFM 221 Leadership & Organizational Development (S-301)***2 Credit(s)*

This course is designed to provide the students with communication and supervision skills necessary to perform as a unit leader on a wildland fire incident.

**WFM 222 Position Task Book for the Strike Team Leader Engine***2 Credit(s)*

Students will maintain the Position Task Book for the Strike Team Leader Engine as documentation of competencies learned.

**WFM 223 Position Task Book for the Strike Team Leader Crew***2 Credit(s)*

Students will maintain the Position Task Book for the Strike Team Leader Crew as documentation of competencies learned.

**WFM 224 Position Task Book for the Strike Team Leader Dozer***2 Credit(s)*

Students will maintain the Position Task Book for the Strike Team Leader Dozer as documentation of competencies learned.

**WFM 225 Position Task Book for the Task Force Leader***2 Credit(s)*

Students will maintain the Position Task Book for the Task Team Leader as documentation of competencies learned.

**WFM 226 Position Task Book for the Incident Commander Type 4***2 Credit(s)*

Students will maintain the Position Task Book for the Incident Commander Type 4 as documentation of competencies learned.

**WFM 228 Ignition Operations (S-234)***2 Credit(s)*

This course is designed to provide students with the knowledge/skills necessary to perform the tasks described in the Position Task Books for Ignition Specialist Type II and Single Resource Boss-Firing.

**WFM 229 Position Task Book for the Crew Boss***2 Credit(s)*

Students will maintain the Position Task Book for the Crew Boss as documentation of competencies learned.

**WFM 230 Position Task Book for the Dozer Boss***2 Credit(s)*

Students will maintain the Position Task Book for the Dozer Boss as documentation of competencies learned.

**WFM 231 Position Task Book for the Engine Boss***2 Credit(s)*

Students will maintain the Position Task Book for the Engine Boss as documentation of competencies learned.

**WLD 104 Oxy-Acetylene Cutting and Welding***2 Credit(s)*

Identification and use of all parts of oxy-acetylene equipment will be covered. Instruction is given on welding ferrous and non-ferrous metals and the proper techniques in cutting metals. FSP

**WLD 107 Blueprint Reading, Layout, and Field Drawing***4 Credit(s)*

Basic fundamentals of drawings in the welding trade are covered. This course includes AWS weld symbols, the making of blueprints, drawings with the basic lines views, sketching, notes, specs, and dimensions. It enables the student to build or fabricate projects from blueprints. SP

**WLD 108 Low Hydrogen Welding***4 Credit(s)*

Instruction is given on the use of low hydrogen electrodes and their advantages. Students will join two plates forming "Tee", lap, corner and butt joints, and weld in four positions. Instruction is given in welding single "V"-grove joints with 7018 electrodes to ASME and AWS welding procedures in four positions. FSP

**WLD 112 Carbon Air and Plasma Arc Cutting***1 Credit(s)*

Instruction is given on the safety and set-up of carbon air arc gouging and plasma arc cutting equipment. Students will learn to gouge mild steel plates and cut mild steel, stainless steel and aluminum plates and pipe. FSP

**WLD 117 Welding Theory and Metallurgy***4 Credit(s)*

This course introduces the student to the changes in welding technology and a basic overview of current welding processes. Students will learn about ferrous and nonferrous metals and their use in modern fabrication processes. FA

**WLD 118 Arc Welding***4 Credit(s)*

The student will be able to identify types of welding machines, properties, and electrodes. This course enables the student to weld thicknesses from 1/2 inch to 1/8 inch sheet metal according to the AWS and ASME specifications in all positions with 60 series electrodes. FA  
*Equivalent: WLD 120 AND WLD 121*

**WLD 119 Gas Metal Arc Welding & Flux****Cored Arc Welding***5 Credit(s)*

Instruction is given on the operation and application of the application of GMAW and FCAW welding process. Instruction is given to weld two carbon steel plates forming a “Tee”, lap corner and butt joints, in four positions. Instruction is given i in welding open root “V-grove” joints to ASME or AWS welding procedure in four positions. Instruction is also given in welding stainless steel and aluminum plates with the GMAW welding process. SP

*Equivalent: WLD 123, WLD 124 and WLD-125***WLD 120 Basic Arc Welding I***2 Credit(s)*

The student will be able to identify types of welding machines, properties, and electrodes. This course enables a student to weld thicknesses from 1/2 inch to 1/8 inch sheet metal according to AWS and ASME specifications in a flat position. SP

*WLD 120 AND WLD 121 equivalent to WLD 118***WLD 121 Basic Arc Welding II***2 Credit(s)*

This course is a continuation of WLD 120. Instruction is given on the use of 60 series electrodes and their advantages. Students will join two plates forming a “Tee”, lap, corner and butt joints welding in a vertical and horizontal position according to AWS and ASME specifications for these positions. FSP

*WLD 120 AND WLD 121 equivalent to WLD 118***WLD 123 Metallic Inert Gas Welding I***2 Credit(s)*

Instruction is given on the operation of the MIG, Inner shield, and Dual Shield Welding Process in theory. Instruction is given in the hands on application in forming “Tee”, lap, butt, and corner welds in the flat position, according to AWS and ASME standards. FSP

*WLD 123, WLD 124 and WLD-125 equivalent to WLD 119***WLD 124 Metallic Inert Gas Welding II***2 Credit(s)*

This course is a continuation of WLD 123 with instruction given on “Tee”, lap, corner, and butt welds in flat, vertical, and overhead positions according to AWS and ASME standards. FSP

*WLD 123, WLD 124 and WLD-125 equivalent to WLD 119***WLD 125 Flux Cored Arc Welding***1 Credit(s)*

This course is a continuation of WLD 120 and WLD 121. Students will continue welding in vertical and horizontal welding and finish by accomplishing overhead welds with 60 series electrodes according to ASW and ASME specifications. FSP

*WLD 120, and WLD 121. Equivalent to WLD 119***WLD 201 Tungsten Inert Gas Welding***4 Credit(s)*

The student will be enabled to properly adjust the TIG welders for welding carbon, stainless and aluminum plates, to fabricate Tee, Lap, Butt, and Corner joints in all four positions. Student will also learn to weld open root single-V groove joints to ASW Specifications. FA

*Equivalent: WLD 220 AND WLD 221***WLD 202 Pipe Welding***4 Credit(s)*

The student will weld on stainless and black pipe from 2 ½” schedule 40 to 6” schedule 80 using GMAW, GTAW and SMAW welding processes. Pipe will be welded in the 5G and 6G AWS test positions to AWS standards. FA

**WLD 204 Testing and Qualifications***4 Credit(s)*

Course will emphasize ASME and AWS welding test procedures on SMAW, GMAW, and GTAW. Testing will be done in all four positions and will include reading blueprints, welding symbols, and shop math. SP

**WLD 205 Applied Work Experience***4 Credit(s)*

This course provides students the opportunity to put into practice, in “real life” situations, skills that have been learned in the classroom and laboratory. Ideally, the applied work experience will be conducted in cooperation with a local employer; however, arrangements for an on campus experience can be made pending instructor approval. SP

**WLD 206 Non Destructive Evaluation***1 credit(s)*

This is an introductory course that will focus on nondestructive and destructive techniques for assessing different welds. Methods covered include Dye Penetrant Testing, Magnetic Particle Testing, Ultrasonic Testing, and an introduction to Radiography. FA

**WLD 220 Tungsten Inert Gas Welding I***2 Credit(s)*

Students will be given instruction on proper uses and adjustments of TIG machines. Students will be given instruction on theory and hands-on procedures for welding aluminum, stainless steel, and carbon steel in flat position using “Tee”, lap, butt, and corner joints according to AWS and ASME standards. FSP

*WLD 220 AND WLD 221 equivalent to WLD 201***WLD 221 Tungsten Inert Gas Welding II***2 Credit(s)*

This is a continuation of WLD 220. Students get instruction in aluminum, stainless steel, and carbon steel in flat, vertical, and overhead positions using “Tee”, lap, butt, and corner joints according to AWS and ASME standards. FSP

*WLD 220 AND WLD 221 equivalent to WLD 201*