Continuing Education courses cover a variety of subjects and offer alternative opportunities to individuals seeking non-traditional educational experiences. These courses are open to interested persons without regard to eligibility for admission to college-credit programs.

Continuing Education programs at Central Texas College have been designed to provide opportunities for learning new skills for employment or to upgrade present skills. CTC offers programs sanctioned by appropriate state and national associations and state licensure boards. Education programs can be tailor-made and, if desired, offered in-house to meet specific job upgrading and mobility needs of individual organizations. In addition to job-related education Central Texas College’s Continuing Education department offers courses that foster personal growth and enrichment.

Continuing Education classes may be offered in the following areas:

**Professional Development & Workforce Education**
- Basic Peace Officer Academy
- Basic Jailer Course
- Dealership Sponsored Technician Program
- Manufacturing
- Project Management Professional Certification Program
- Project Management Professional Exam Boot Camp
- Technicians of Tomorrow
- Telecommunications Course
- Truck Driving
- Veterinary Assistant

**Allied Health Care Professions**
- Clinical Medical Assistant
- Certified Nurse Aide
- Electrocardiography
- Pharmacy Technician
- Phlebotomy
- Sonography

**Customized Training**
Continuing Education can teach one of our existing classes just for your business at your location or on our campus. We can also develop training for your business. Take advantage of our customized training service by working with us to develop programs tailored to the content, schedule and location requirements of your specific business. These programs are a wonderful way to increase employee productivity and improve customer satisfaction.

**Online Continuing Education**
There are several options available for online continuing education. Visit our website for additional information.

For more information concerning Continuing Education programs, call 526-1586 or visit our website http://www.ctcd.edu/students/continuing-education/
Professional Development and Workforce Education

Basic Peace Officer Academy

The Basic Peace Officer Non-Credit Academy program objectives are to provide sufficient knowledge and skill to agency sponsored students to successfully complete the Texas Commission on Law Enforcement licensing examination. Supporting academic coursework and basic core competencies will provide an optimal opportunity for the graduate to profit from further study and practice as an educated member of the community.

CJLE 1006 Basic Peace Officer I
Basic preparation for a new peace officer. Should be taken in conjunction with Basic Peace Officer II, III, IV, and V (supplement) to satisfy the Texas Commission on Law Enforcement approved Basic Peace Officer Training Academy. **THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS LICENSED AS A POLICE ACADEMY BY Texas Commission on Law Enforcement.** (160 hours)

CJLE 1012 Basic Peace Officer II
Basic preparation for a new peace officer. Should be taken in conjunction with Basic Peace Officer I, III, IV, and V (supplement) to satisfy the Texas Commission on Law Enforcement approved Basic Peace Officer Academy. **THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS LICENSED AS A POLICE ACADEMY BY Texas Commission on Law Enforcement.** (160 hours)

CJLE 1018 Basic Peace Officer III
Basic preparation for a new peace officer. Should be taken in conjunction with Basic Peace Officer I, II, IV, and V (supplement) to satisfy the Texas Commission on Law Enforcement approved Basic Peace Officer Academy. **THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS LICENSED AS A POLICE ACADEMY BY Texas Commission on Law Enforcement.** (160 hours)

CJLE 1024 Basic Peace Officer IV
Basic preparation for a new peace officer. Should be taken in conjunction with Basic Peace Officer I, II, III, and V (supplement) to satisfy the Texas Commission on Law Enforcement approved Basic Peace Officer Training Academy. **THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS LICENSED AS A POLICE ACADEMY BY Texas Commission on Law Enforcement.** (160 hours)

CJLE 1029 Basic Peace Officer V
Supplemental course taken in conjunction with Basic Peace Officer Courses I, II, III, and IV. Satisfies or exceeds the Texas Commission on Law Enforcement approved Basic Peace Officer Academy Course #1000. **THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS LICENSED AS A POLICE ACADEMY BY Texas Commission on Law Enforcement.** (160 hours)

Basic Jail Course

Human relations; observation; evaluation of prisoners; booking procedures; classification; mug shots; fingerprinting; strip searches; meals; medical services; visitation; inmates rights and privileges; detention areas; disturbances; riots; fire procedures; release procedures; and key, knife and tool control. Includes the required Texas Commission on Law Enforcement objectives for course #1007. (108 hours)

Basic Telecommunicator Course

This course complies with the licensure requirements of the State of Texas for a Basic Telecommunicator license through TCOLE. Upon completion of this course the student will demonstrate skills as a public safety dispatcher; radio operations; identify legal issues regarding telecommunications; process radio logs and documentation; and prioritize emergency calls for management; stress management, and crisis intervention. Fulfills requirements for licensing as a telecommunication operator under the Texas Commission on Law Enforcement Course #1013. (48 hours)

Dealership Sponsored Technician Program

Dealership program offers training to exiting military and civilians to be Dealership Certified in Electrical, Brake, Climate Control, and Steering and Suspension Automotive systems. Prerequisite: Technicians of Tomorrow program. (Total 320 Contact Hours)

AUMT 1045 Automotive Heating and Air Conditioning
Theory of automotive air conditioning and heating systems. Emphasis on the basic refrigeration cycle and diagnosis and repair of system malfunctions. Covers EPA guidelines for refrigerant handling and new refrigerant replacements. (80 Hours)

AUMT 2028 Apprenticeship - Automobile/Automotive Mechanics Technology/Technician
An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. (80 Hours)

AUMT 2030 Automotive Engine Theory
Theory and operation of automotive suspension and steering system including tie and wheel problems diagnosis, component repair, and alignment procedures. (40 Hours)

AUMT 2039 Automotive Electrical Systems
An overview of automotive electrical systems including topics in operational theory, testing, diagnosis and repair of batteries, charging and starting, and electrical accessories. Emphasis on electrical schematic diagrams and service manuals. (40 Hours)
AUMT 2042  Automotive Brake Systems
Emphasis on safe use of modern equipment. Topics include Updates of brake theory, diagnosis and repair of power, manual, anti-lock brake systems, and parking brakes. (40 Hours)

AUMT 2056  Automotive Heating and Air Conditioning
Theory of automotive air conditioning and heating systems. Emphasis on the basic refrigeration cycle and diagnosis and repair of system malfunctions. Covers EPA guidelines for refrigerant handling and new refrigerant replacements. (40 Hours)

Manufacturing
This program includes five courses with curriculum developed by Manufacturing Skills Standards Council (MSSC). This program is approved by Manufacturing Institute to instruct transition soldiers to an assessment of Certified Production Technician (CPT). (Total 352 hours)

OSHT 1001  Introduction to Safety and Health
An introduction to the basic concepts of safety and health. (48 hours)

MFGT 1002  Introduction to Automated Manufacturing
Overview of automated manufacturing principles; including manufacturing process, control systems, and measurement theory. (80 hours)

ENTC 2031  Manufacturing Materials
Identification of materials used in manufacturing including metals, plastics, composite materials, concrete, ceramics and wood. Includes application of material properties and quality standards for selection of materials to manufacture components. (64 hours)

INMT 1019  Manufacturing Process
Exploration of a variety of methods used in manufacturing. Theory and application of processes including but not limited to metal forming, welding, machining, heat treating, plating, assembly procedures, and process control considerations, casting and injection molding. (80 hours)

MFGT 1006  Mechanical Principles in Automated Manufacturing
Overview of mechanical principles used in automated manufacturing. Includes common measurement methods, engineering drawings, and mechanical methods used in automated manufacturing. (80 hours)

Project Management Professional Certification Program
The Project Management Professional (PMP®) credential is the most important industry-recognized certification for people working in project management. Our program is a five-meeting course that delivers the critical details needed for a successful, accelerated learning experience. You will learn how to initiate, plan, execute, monitor, control and close projects. Upon completion, you will be able to demonstrate you have the experience, education and competency to successfully lead and direct projects.

Project Management Professional (PMP) Exam Boot Camp
To earn your PMP® credential, you must meet the experience and education requirements plus pass the PMP® examination, a 200-question, multiple-choice test. Regardless of how advanced your project management experience or education might be you should still prepare vigorously for the exam. In this class, you will review test-relevant material, complete practice exercises and receive a four-hour take home exam that can be taken multiple times.

Technicians of Tomorrow
Technicians of Tomorrow program offers training to exiting military and civilians to be Certified Electrical and Brake systems Automotive Technician. Prerequisite for Dealership Sponsored Technician program. (Total 344 Contact Hours)

AUMT 1005  Introduction to Automotive Technology
An introduction to the automotive industry including automotive history, safety practices, shop equipment and tools, vehicle subsystems, service publications, fasteners, professional responsibilities, and automotive maintenance. (120 hours)

AUMT 1010  Automotive Brake Systems
Operations and repair of drum/disc type brake systems. Emphasis is on safe use of modern equipment. Topics include brake theory, diagnosis and repair of power, manual, anti-lock brake systems, and parking brakes. (64 hours)

AUMT 2037  Automotive Electronics
Topics address electrical principles, semiconductors and integrated circuits, digital fundamentals, microcomputer systems, and electrical test equipment as applied to automotive technology. (160 hours)

Truck Driving
A program that prepares individuals to demonstrate the safe operation and compliance with the law in various maneuvers of a commercial vehicle in different traffic situations; operate a tractor-trailer combination; and maneuver the vehicle safely frontward and backward around various obstacles. (Total 210 Contact Hours)

CVOP 1013  Professional Truck Driver I
Overview of the State of Texas Class A Commercial Drivers License written test. Includes preparation for mastery of the Commercial Drivers License written examination, general truck driving skills with hands-on component, and instruction coordinated with the Department of Transportation. (105 hours)
**CVOP 1040  Professional Truck Driver II**
A continuation of Professional Truck Driver I. General truck driving with hands-on skill development and instruction coordinated with the Department of Transportation. (105 hours)

**Veterinary Assistant**
*As a Veterinary Assistant you will help the Veterinarian or the Veterinarian Technician in their daily tasks. Students will learn to feed and give water to pets; examine them for signs of illness, disease or injury; clean and disinfect cages and work areas; as well as sterilize laboratory and surgical equipment in laboratories, animal hospitals and clinics. This program combines 35-hours of accelerated classroom training with emphasis on skills mastery through hands on practice and supervision and 35-hours of volunteer experience to be completed independently. (Total 70 Contact Hours)*

**VTHT 1005 Veterinary Medical Terminology**
Introduction to word parts, directional terminology, and analysis of veterinary terms. (32 hours)

**VTHT 1011 Veterinary Clinical Skills**
Survey of basic veterinary and nursing care skills. Includes aseptic techniques and operating room procedures, and the roles and responsibilities of the veterinary team in a clinical setting. (40 hours)

**VTHT 1012 Veterinary Assistant**
Survey of basic patient observation, record keeping, care and comfort, animal husbandry, sanitation, safety procedures, and the roles and responsibilities of the veterinary team. (35 hours)

**VTHT 1017 Veterinary Office Management**
Practical experience in management of the veterinary practice. Emphasis on client relations, record keeping, inventory, employment skills, and computer skills in the veterinary environment. (48 hours)

**Allied Health Care Professions**

**Clinical Medical Assistant Training Program**
*As a Clinical Medical Assistant, the student will be trained to help the physician carry out procedures, care for patients, perform basic lab tests and administer medications. The Clinical Medical Assistant works in a physician’s office or a clinic setting. This course consists of 280-hours of accelerated classroom training with emphasis on skills mastery through hands-on practice and supervision and a 40-hour clinical. (Total 340 Contact Hours)*

**MDCA 1009 Anatomy and Physiology for Medical Assistants**
The course emphasizes the structure and function of human cells, tissues, organs, and systems with an overview of common pathophysiology. (58 hours)

**MDCA 1010 Medical Assistant Interpersonal and Communication Skills**
The course emphasizes the application of basic psychological principles and the study of behavior as they apply to special populations. Topics include procedures for self-understanding and social adaptability in interpersonal communication with patients and co-workers in an ambulatory care setting. (48 hours)

**MDCA 1017 Procedures in a Clinical Setting**
The course emphasizes patient assessment, examination, and treatment as directed by physician. Course includes vital signs, collection and documentation of patient information, asepsis, office clinical procedures, and other treatments as appropriate for ambulatory care settings. (90 hours)

**MDCA 1052 Medical Assistant Lab. Procedures**
Students will learn to abide by governmental healthcare guidelines. The course includes specimen collection and handling, quality assurance and quality control in performance of laboratory testing. (64 hours)

**MDCA 1060 Clinical-Medical Clinical/Assistant**
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. (80 hours)

**Certified Nurse Aide Training Program**
*This 116-hour course includes 76 hours of classroom instruction (including skills lab) and 40 hours of clinical practice in a long term care facility. Training will provide students with the knowledge, skills and abilities essential for providing basic care to long term care residents. (Total 116 Contact Hours)*

**NURA 1001 Nurse Aide for Health Care**
The course teaches the knowledge, skills, and abilities essential to providing basic care to residents of long-term care facilities. Topics include resident’s rights, communication, safety, observation, reporting and assisting residents in maintaining basic comfort and safety. Emphasis is on effective interaction with members of the health care team, restorative services, mental health and social service needs. (68 hours)
NURA 1060  Clinical Nursing Assistant/Aide
Students will receive a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. (48 hours)

Electrocardiography

ECRD 1011  Electrocardiography
Learn Fundamentals of cardiovascular anatomy and physiology. Includes basic electrocardiography procedures, interpretation of basic dysrhythmias, and appropriate treatment modalities. (60 hours)

ECRD 1091  Clinical Institutional EKG Practice
Course includes an-depth hands on training that will introduce the students to the function and proper use of the EKG machine, 12-lead placement and interpretation, Holter Monitoring, stress testing and clinical practices. (48 hours)

Pharmacy Technician

As a Pharmacy Technician you will help the pharmacist package or mix prescriptions, maintain client records, refer clients to the pharmacist for counseling, assist with inventory control and purchasing, as well as collect payment and coordinate billing. This course consists of 200 hours of accelerated classroom training with emphasis on skills mastery through hands-on practice and supervision. (Total 200 Contact Hours)

PHRA 1001  Introduction to Pharmacy
An overview of the qualifications, operational guidelines, and job duties of a pharmacy technician. Topics include definitions of a pharmacy environment, the profile of a pharmacy technician, legal and ethical guidelines, job skills and duties, verbal and written communication skills, professional resources, safety techniques, and supply and inventory techniques. (46 hours)

PHRA 1002  Pharmacy Law
Survey of federal and state laws governing the practice of pharmacy. Describes the legal and ethical constraints governing technician responsibilities and pharmacist responsibilities in various settings. (30 hours)

PHRA 1009  Pharmaceutical Math
Pharmaceutical mathematics including reading, interpreting, and solving calculation problems encountered in the preparation and distribution of drugs. Conversion of measurements within the apothecary, avoirdupois, and metric systems with emphasis on the metric system of weight and volume. Topics include ration and proportion, percentage, dilution and concentration, mill equivalents, units, intravenous flow rates, and solving dosage problems. (46 hours)

PHRA 1013  Community Pharmacy Practice
Introduction to the skills necessary to process, prepare, label, and maintain records of physicians’ medication orders and prescriptions in a community pharmacy. Designed to train individuals in supply, inventory, and data entry. Includes customer service, count and pour techniques, prescription calculations, drug selection and preparation, over-the-counter drugs, record keeping, stock level adjustment, data input, editing, and legal parameters. (78 hours)

PHRA 1045  Sterile Compounding and Aseptic Technique (SCAT)
The process of compounding sterile preparations and aseptic technique within legal and regulatory guidelines specified by USP standards. This “IV certification” course covers the process of compounding sterile preparations and aseptic technique within legal and regulatory guidelines. Pharmacists and pharmacy technicians train in sterile compounding and aseptic technique (SCAT) which is preceded by vigorous pre-course reading and learning course work. Requirement: students must complete all the Pharmacy Technician courses before registering for the class or already have their Pharmacy Technician Certification. (64 hours)

PHRA 1060  Clinical-Pharmacy Technician/Assistant
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Explore the fundamentals of the diverse roles and practice of pharmacy technicians in an institutional pharmacy setting. Course includes an-depth coverage of hospital pharmacy organization, work flow and personnel, safety techniques, data entry, packaging and labeling operations, inpatient drug distribution systems including investigational drugs, continuous quality improvement, and inventory control. (50 hours)

Phlebotomy

PLAB 1023  Phlebotomy
Skill development in the performance of a variety of blood collection methods using proper techniques and standard precautions. Includes vacuum collection devices, syringes, capillary skin puncture, butterfly needles and blood culture, and specimen collection on adults, children, and infants. Emphasis on infection prevention, patient identification, specimen labeling, quality assurance, specimen handling, processing, accessioning, professionalism, ethics, and medical terminology. (60 hours)

PLAB 1062  Phlebotomy Clinical
A health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. Direct supervision is provided by the clinical professional. Clinical will start midway through program. Students will be able to participate based on instructor approval. (48 hours)
Sonography

DMSO 1010  Introduction to Sonography
This course is an introduction to the profession of sonography and the role of the sonographer. Emphasis is on medical terminology, ethical/legal aspects, written and verbal communication and professional issues relating to registry, accreditation, professional organizations and history of the profession. (16 hours)

DMSO 1001  Techniques of Medical Care
CAREER DEVELOPMENT Sonography Course description: scanning techniques including scan protocols and procedures within the laboratory setting utilizing live scanning and/or simulated experience. (32 hours)

DMSO 1042  Intermediate Ultrasound Physics
Continuation of Basic Ultrasound Physics - includes interaction of ultrasound with tissues, mechanics of ultrasound production and display, various transducer designs and construction, quality assurance, bio effects and image artifacts. May introduce methods of Doppler flow analysis. (32 hours)

DMSO 2043  Advanced Ultrasound Physics
Theory and application of ultrasound principles - includes advances in ultrasound technology. (32 hours)

DMSO 2045  Advanced Sonography Practices/Clinical
Exploration of advanced sonographic procedures and emerging ultrasound applications. (50 hours)

Fort Hood Transition Programs

SAP - Winterprise Systems Business Analysis
Courses must be taken in the order listed to ensure prerequisite requirements.

BMGT 1091  Introduction to Enterprise Systems
This course is an introduction to enterprise systems with a particular emphasis on SAP software. This includes the fundamentals of enterprise resource planning (ERP) systems concepts and the importance of how they are used within an organization. Students will have an applied curriculum that takes them through the following business processes: financial and cost accounting (FICO), production, sales, material planning, and inventory & warehouse management. Students will learn the front-end user perspective of each of these areas on the most current SAP system, and become comfortable with creating standard business documents such as general ledger postings, purchase orders, production orders, sales orders, and goods movements’ postings in and out of the warehouse.

ITSC 1091  ERP Configuration
This is an advance level course that will focus on the implementation phase of enterprise (ERP) systems. Emphasis is on based on three key areas of: defining and assigning user organizational levels (company code, plant, storage location, etc.), defining master data requirements (chart of accounts, cost centers, customer master data, vendor master data, material master data), and implementation of business rules for each module of an enterprise system. Students will have a back end look of enterprise system and complete hands on exercises using the SAP IMG implementation tool where they will create the required organizational elements and master data, and then test out the configuration for each business process (FICO, production, sales, MRP, and IWM). Prerequisite: BMGT 1091.

ITSC 1092  Enterprise Systems, Tools, Concepts, and Careers
This seminar course provides an overview discussion of ERP emerging trends and projects. This can include a look at new ERP software tools, reviewing case studies on ERP implementation issues, discussion of “big data” generated by enterprise systems and data analytics tools, and a preview of career opportunities for those with an ERP skillset.

BMGT 1097  ERP Business Process Integration with Simulation
This seminar course emphasizes the integration of enterprise systems within an organization using a sequence of ERP simulation games. Students will compete as corporate teams to make common business decisions such as product lines, sales pricing, advertising, production levels, and distribution markets using one or more ERP simulation games (Distribution game, Manufacturing game, etc.) with the ultimate goal to see who will be the most profitable. The objective of these exercises is to show how a common ERP system is used by managers to carry out business decisions.

BMGT 1095  ERP Program CAPSTONE
This capstone course in ERP systems leads students through the official SAP TERP10 (training in ERP for 10 days) certification course culminating in the SAP professional certification exam. Students will complete a rigorous curriculum that includes the integration of the complete supply chain and business process to include FICO, Purchasing, Manufacturing, Sales, MRP, Inventory & Warehouse Management, Enterprise Asset Management, Project Systems, and Business Intelligence. The knowledge base will include the integration of organizational levels, master data, business process, and reporting. After completion of this final course and exam students will be awarded an SAP Certification and will be ready for a career as an SAP implementation consultant. Prerequisite: BMGT 1091 and ITSC 1091.