

**CJD 1250\***  
**Interviews and Interrogations, 3 credit hours, 45 lec.**  
**(Offered as needed)**

An advanced course designed to cover the techniques, methods, principles, and issues of interviewing and interrogations. Course meets Florida Police Standards Salary Incentive Requirements.

**CJD 1468\***  
**Youthful Offenders, 3 credit hours, 45 lec. (Offered as needed)**

A course designed to provide the student with an overview and awareness of Florida youthful offender programs to include; facilities and specialized programs, staff-inmate relations, one-way/two-way communications and effective communications and effective communications skills, positive characteristics for staff working with youthful offenders; the helping relationship inventory, local treatment programs, opportunities and alternatives, treatment problem solving and other techniques relating to youthful offenders.

**CJD 1501\***  
**Criminal Justice Instructor Techniques, 5 credit hours, 60 lec., 20 lab. (Offered as needed)**

A basic course in instrumental principles designed to equip the law enforcement specialist with techniques of classroom and field training methods.

**CJD 1602\***  
**Drug Awareness, 3 credit hours, 45 lec. (Offered as needed)**

This course is a part of the Criminal Justice Standards and Training Commission approved Advanced Training Program. It is designed to familiarize students with common drug abuse terms, classes of drugs, pharmacological information relating to commonly used and abused chemicals and their effects, an overview on use patterns and characteristics of drug abusers, how to troubleshoot and deal with problems that develop among abusers and effective presentation skills.

**CJD 1604\***  
**Injury and Death Investigation, 3 credit hours, 45 lec., (Offered as needed)**

This course is designed to qualify in-service law enforcement and correctional officers and support personnel in the area of injury and death investigations, to include: medical-legal aspects, evidence from wounds, physical evidence and laboratory analysis, crime scene investigations and other technical aspects of injury and death.

**CJD 1610\***  
**Criminal Investigative Techniques, 3 credit hours, 34 lec. (Offered as needed)**

This course in Criminal Investigative Techniques for Law Enforcement Officers is an Advanced Course primarily designed for Florida law enforcement officers and has been approved by the Florida Criminal Justice standards and Training Commission. With permission of the instructor, it may be offered to other students enrolled in the CJ Program. It is designed to provide the student with instruction in Florida investigative concepts and techniques, use of evidence and related matters.

**CJD 1615\***  
**Police Radar Operator, 3 credit hours, 45 lec. (Offered as needed)**

This course is sanctioned by the Florida Police Standards and Training Commission and meets requirements of Chapter 943.14(10)(a), Florida Statutes. It is designed to equip law enforcement officers with the basic knowledge and skills needed for proper operation of radar speed measurement devices.

**CJD 1617A\***  
**Basic Laser Certification, 3 credit hours, 30 lec., 15 lab. (Offered as needed)**

This course is designed to qualify students and especially in-service law enforcement officers in the use, principles, and overviews of using a Laser Speed Measurement Device. It will include instruction on the relationships of speed offenses and motor vehicle crashes, the principles of laser based speed measurements, as well as courtroom testimony, case law, and a classroom practice. Prerequisite: Certified Law Enforcement Officer.

**CJD 1618\***  
**Radar to Laser Operations, 1 credit hour, 15 lec., 15 lab. (Offered as needed)**

This is a course for radar certified law enforcement officers in the use, principles, and overviews of a Laser Speed Measurement Device. It will include instruction on the relationship of speed offenses and motor vehicle crashes, the principles of laser based speed measurements, as well as courtroom testimony, case law, and classroom practice. Prerequisite: CJD 1615, Police Radar Operator or equivalent.

**CJD 1621\***  
**Officer Survival Techniques, 2 credit hours, 30 lec. (Offered as needed)**

This course is part of the Criminal Justice Standards and Training Commission specialized Training Program. It is designed to prepare law enforcement officers for police operations involving street survival techniques and procedures to include (but not limited to) firearms training, hostage situations, raids, individual survival techniques, special survival exercises.

**CJD 1625\***  
**Special Tactical Problems for Law Enforcement, 3 credit hours, 45 lec. (Offered as needed)**

This course is a part of the Criminal Justice Standards and Training Commission Advanced Training Program. It is designed to prepare law enforcement officers for police operations which involve special tactical situations and will include; importance of physical well-being in the Criminal Justice setting, an overview of Florida local disaster procedures, civil disorder patterns, special task force unit operations, special crime areas and practical exercises.

\* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.

**CJD 1700\*****Criminal Justice Legal I, 3 credit hours, 45 lec. (Offered as needed)**

Criminal Justice Legal I provides an introductory overview of the Criminal Justice System and a history of law. The foundation and basic components of law are studied with specific focus upon officer application. Court procedure and testimony are examined. Objectives are addressed as specified by the Criminal Justice Standards Training Commission.

**CJD 1701\*****Criminal Justice Legal II, 3 credit hours, 45 lec. (Offered as needed)**

Constitutional Law and its application to the public and officers are examined. Law – including evidence procedures, arrest laws, search and seizure, and various statutory laws that are common to Police and Correctional officers – are studied. Emphasis is given to elements of various crimes. Various civil law applications are covered. Civil and criminal liability of officers is studied. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

**CJD 1702\*****Criminal Justice Communications, 3 credit hours, 45 lec. (Offered as needed)**

The report-writing process – from the interview, statement taking, and note-taking, through the final report product – is covered with practical exercises included. The differences between interviewing and interrogation are explored. Interpersonal skills in communication are covered along with radio and telephone procedures. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

**CJD 1703\*****Criminal Justice Interpersonal Skills I, 3 credit hours, 45 lec. (Offered as needed)**

Community relations techniques and courtesy are addressed with emphasis given to crime prevention. The needs of various groups within society are addressed including: juveniles, the elderly, ethnic and cultural groups, the mentally ill and retarded, the physically handicapped, and substance abusers. Intervention techniques for various situations including: suicide, domestic violence, and other crises are studied, with practical exercises. Stress recognition and reduction are included. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

**CJD 1704\*****Criminal Justice Defensive Tactics, 4 credit hours, 45 lec., 30 lab. (Offered as needed)**

Instruction includes the techniques used for an officer's personal safety and those necessary to subdue, search, and then transport resisting individuals. The use of restraining devices, impact weapons, and pressure points are covered. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

**CJD 1705A\*****Criminal Justice Weapons, 3 credit hours, 30 lec., 30 lab. (Offered as needed)**

Criminal Justice Weapons includes instruction in the use of officer firearms including handguns and shotguns. Safety procedures and ammunition use are covered in lecture. Instruction includes the use of chemical agents, with practical exercises included. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

**CJD 1721\*****Law Enforcement Patrol, 3 credit hours, 45 lec. (Offered as needed)**

Law Enforcement Patrol addresses the skills and techniques that are needed by officers daily to do patrol tactics and respond to various types of calls. Methods of approach to various high-risk situations are explored, with practical exercises included. Unusual occurrence events, including fire-fighting and crowd control are addressed. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

**CJD 1722\*****Law Enforcement Traffic, 3 credit hours, 5 lec. (Offered as needed)**

Law Enforcement Traffic studies traffic enforcement and control, with the inclusion of DUI offenses and enforcement. Traffic accident investigation, scene management, and reporting procedures are studied. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

**CJD 1723\*****Law Enforcement Vehicle Operation, 2 credit hours, 20 lec., 40 lab. (Offered as needed)**

The components of the police driving environment are explored, and practical exercises on the driving range are conducted. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

**CJD 1724\*****Law Enforcement Investigations, 4 credit hours, 60 lec. (Offered as needed)**

Law Enforcement Investigations addresses investigation of various crimes, including property crimes, persons crimes, narcotics offenses, vice, organized crime, terrorist activity, bombing incidents, and death investigations. Techniques are developed from the initial observation methods through the processing of the crime scene and case preparation. Florida's computer network is studied as an information source. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

**CJD 1740\*****Criminal Justice Interpersonal Skills II, 3 credit hours, 45 lec. (Offered as needed)**

The interpersonal skills needed by officers to understand the incarcerated society are explored, with emphasis upon supervision methods. Inmate adjustment and the various segments of the society are studied. The course includes the study of homosexuality, female inmates, deception and manipulation by inmates, and institutional criminalities. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

\* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.

**CJD 1741\*****Correctional Emergency Preparedness, 2 credit hours, 30 lec. (Offered as needed)**

Skills needed for riot and disturbance control and fire-fighting are studied and practiced. Lecture includes methods of riot prevention, handling of unusual occurrences, what to do if taken hostage, and emergency procedures. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

**CJD 1742\*****Correctional Operations, 4 credit hours, 60 lec. (Offered as needed)**

The operation of correctional facilities is studied – including the intake of new inmates, all aspects of their daily care, institutional procedures, and techniques utilized by officers to do daily tasks. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

**CJD 1930\*****Human Diversity Workshop, 2 credit hours, 30 lec. (Offered as needed)**

This course is designed to enhance the participants awareness of their own cultural rules and predispositions and how these cultural influences come into play in common interactions with others. This awareness is used to develop the participants' understanding of issues related to human diversity: gender, race, ethnicity, etc. The program also presents basic skills and knowledge related to interacting with diverse individuals and groups.

**CJD 1956\*****Post Pursuit Tactics, 3 credit hours, 30 lec., 15 lab. (Offered as needed)**

Course is designed to instruct public safety professionals how to combat post pursuit stress syndrome and to effectively channel stress in a positive manner at the termination of a high speed pursuit. Prerequisite: Must be a certified law enforcement officer.

**CJD 1957\*****Post Pursuit Trainer Techniques, 1 credit hour, 15 lec. (Offered as needed)**

Course is designed to instruct public safety professionals how to teach methods to combat post-pursuit stress syndrome and to effective channel stress in a positive manner at the termination of a high speed pursuit. Prerequisite: Must be a certified law enforcement officer.

**CJD 2254\*****First Responder for Law Enforcement, 3 credit hours, 45 lec. (Offered as needed)**

This course is designed primarily to qualify in-service law enforcement and correctional officers in the area of first responder to medical emergencies to include: introduction to first responder training, overview of the human body, diagnostic signs of patient examination, airway care & pulmonary resuscitation, cardiopulmonary resuscitation, shock, bleeding, primary patient care and injuries. Objectives are addressed as specified by the Criminal Justice Standards & Training Commission.

**CJD 2301\*****Ethics in Criminal Justice, 3 credit hours, 45 lec. (Offered as needed)**

An overview of ethical considerations applied to the criminal justice profession.

**CJD 2310\*****Criminal Justice Supervision, 5 credit hours, 80 lec. (Offered as needed)**

A career development course for full time police officers designed to train the line supervisor.

**CJD 2320\*****Criminal Justice Management, 5 credit hours, 80 lec. (Offered as needed)**

An advanced course designed to train criminal justice supervisors in the techniques and procedures necessary for middle managers.

**CJD 2470\*****Emergency Preparedness for Correctional, 3 credit hours, 45 lec. (Offered as needed)**

This course is designed to qualify in-service correctional officers and correctional support personnel in the area of emergency preparedness, to include; emergency plans, specifics on disturbances and disorder planning, hostage plans and situations, factors affecting emergency planning and management and leadership.

**CJD 2603\*****Sex Crimes, 3 credit hours, 45 lec. (Offered as needed)**

This course is designed to provide the student with the knowledge and expertise to effectively deal with various sex offenders. It deals with the magnitude of the problem, investigation and physical evidence. It also addresses victim considerations and legal aspects through court presentation. Prerequisite: Certified Law Enforcement or Corrections Officer.

**CJD 2605\*****Traffic Homicide Investigation, 5 credit hours, 60 lec., 20 lab. (Offered as needed)**

Course content covers traffic homicide investigation skills to include reconstruction, meets Florida Justice Standards and training certification requirements for career development.

**CJD 2626\*****Hostage Negotiations for Criminal Justice, 3 credit hours, 45 lec. (Offered as needed)**

This course is designed to qualify in-service law enforcement and correctional officers and support personnel in the area of hostage negotiations, to include; introduction to the problem, types of hostage negotiations principles, communications principles, intelligence gathering, abnormal behavior and participant performance exercises.

**CJD 2630\*****Firearms Instructor, 2 credit hours, 15 lec./30 lab (Offered as needed)**

This course is designed to provide the student with knowledge and expertise to instruct untrained students in the proper use of firearms, range safety, and weapon maintenance. The student shall also be instructed in legal aspects and range management.

\* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.

**CJD 2632\*****Field Training Officer Techniques, 3 credit hours, 45 lec. (Offered as needed)**

Designed to introduce the criminal justice student (law enforcement and corrections) to all aspects of field training and evaluation programs to include adult learning and instruction, evaluation, role responsibilities and characteristics of the Field Training Officer (F.T.O.) communications techniques, counseling techniques, legal and ethical issues and human motivation. This is course number 51 in the series approved by the Florida Criminal Justice Standards and Training Commission Advanced Courses.

**CJD 2670\*****Confidential Informants, 3 credit hours, 45 lec. (Offered as needed)**

This course is designed for in-service law enforcement, correctional officers and support personnel to qualify them in the area of development of confidential informants and other sources of information, to include; definition and management of an informant program, legal aspects of dealing with informants, and the development of other sources of investigative information.

**CJD 2681\*****Court Case Preparation and Court Presentation, 3 credit hours, 45 lec. (Offered as needed)**

Fundamentals of criminal case preparation and court presentation for the law enforcement and/or correctional officer to include case files, pre-trial discovery, depositions, plea bargaining, court testimony, moot court, post adjudication responsibilities, case studies and a practical exercise. This is course number 20 in the series approved by the Florida Criminal Justice Standards and Training Commission Advanced Courses.

**CJD 2691\*****Stress Awareness and Resolution, 3 credit hours, 45 lec. (Offered as needed)**

A course designed to provide the student with an overview and awareness of stress and its resolution, to include: identification of various types of stress, the results of stress, psychological methods of controlling stress, case study analysis, and spouse awareness and involvement. This is course number 50 in the series approved by the Florida Criminal Justice Standards and Training Commission Advanced Courses.

**CJE 1300\*****Police Organization and Administration, 3 credit hours, 45 lec. (Offered as needed)**

Principles of organization and administration in law enforcement; fundamentals of police planning; budget analysis, recruitment, training, and assignments; disciplinary problems and methods of control; cooperation with other agencies; public relations; records and inspection. This course may be used in transfer to UWF and may be accepted at other upper division schools. Students should consult the department for program planning.

**CJE 1440\*****Crime Prevention, 3 credit hours, 45 lec. (Offered as needed)**

A course in crime prevention as it exists today in America. Study includes residential, personal and commercial crime prevention and it includes crime prevention resources, crime analysis and current legal implications. Designed primarily for in-service law enforcement officers but will not be limited to such personnel.

**CJE 2660\* Δ****Computer Applications in Criminal Justice, 3 credit hours, 45 lec. (Offered as needed)**

Computer Applications in Criminal Justice introduces the participant to the use of the computer in Criminal Justice applications. The participant will be introduced to prepackaged software and the process used to modify the package to criminal justice usage. This will include an electronic filing system designed to store, review and update data which can be manipulated into printed reports for daily and periodic usage.

**CJL 1100****Criminal Law, 3 credit hours, 45 lec. (Offered as needed)**

Fundamentals of Criminal Law to include historical background and development, jurisdiction, the criminal act and responsibility. Classification and analysis of Florida Statutes.

**CJL 1400****Criminal Procedure, 3 credit hours, 45 lec. (Fall, Spring, Summer)**

Fundamentals of constitutional, criminal and civil law. Principles, duties and mechanics of criminal procedures in Florida as applied to arrest, search, seizure, and court processing. A functional analysis of the rules of evidence in court procedures.

**CJL 2500****Courts and the Judicial Process, 3 credit hours, 45 lec. (Offered as needed)**

This course is designed to teach the student the major structures and basic legal concepts of the American criminal court system. The students shall learn the components, personnel, and inherent social issues in our present criminal court system.

**CJT 1120\*****Crime Scene Procedures, 3 credit hours, 45 lec. (Offered as needed)**

Course emphasizes preliminary investigation techniques, crime scene protection, recording, processing, collection and preservation of evidence, fingerprint technology and legal aspects of evidence.

**CJT 1230\*****Chemical Tests for Intoxication, 3 credit hours, 45 lec. (Offered as needed)**

Background and history of effects of alcohol on motor coordination; operation and maintenance of breathalyzer equipment; court testimony; legal aspects of laws governing DUI. Required course for state certification.

\* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.

Δ Technology-Across-the Curriculum Course

**CJT 2100\*****Criminal Investigation, 3 credit hours, 45 lec. (Offered as needed)**

Fundamentals of investigation; duties and responsibilities of the detective's interrogation techniques; search and techniques of protecting the crime scene; collection and preservation of evidence; modus operandi systems; scientific aids and other sources of information; court preparation and case followup.

**CJT 2140\*****Introduction to Criminalistics, 3 credit hours, 45 lec. (Offered as needed)**

The scientific aspects of investigation and crime scene technology, crime laboratory functions, ballistics, dactyloscopy and latent print development, scientific methods of criminal identification.

**CJT 2220\*****Law Enforcement Photography, 3 credit hours, 45 lec. (Offered as needed)**

A basic course in police photography techniques to include photographic principles, illumination, composition, identification, fingerprint, crime scene, traffic accident, courtroom technician darkroom and film processing, enlarging, printing and field application. By permission of instructor. Prerequisite: CJT 2100 or CJT 1120.

**CJT 2340\*****Police Operations, 3 credit hours, 45 lec. (Fall, Spring)**

Responsibilities, powers and duties of the uniformed patrolman; patrol techniques and procedures; field interrogation and notetaking; mechanics of arrest and search; handling of the mentally ill; transportation of prisoners; crime scene procedures; elements of property protection; fundamentals of community relations; mob and riot control; dealing with domestic violence, gangs and drug crime; civil liability of officers and departments.

**CJT 2350\*****Writing and Reviewing Reports, 3 credit hours, 45 lec. (Offered as needed)**

Designed to give students a broad understanding of writing and reviewing criminal justice reports. Specifically designed for correctional and law enforcement officers.

**CLP 1002****Personal Adjustment, 3 credit hours, 45 lec. (Fall, Spring, Summer)**

Psychology of adjustment, application of psychological theory for problem solving and better mental health. An examination of psychological defense mechanisms and adaptive behavior.

**CLP 2140****Abnormal Psychology, 3 credit hours, 45 lec. (Offered as needed)**

A study of the different problems in psychopathology, including anxiety, depression, social deviance, psychosis, schizophrenia, both child and adult, mental retardation and general brain dysfunction, with emphasis on descriptive etiology, known causes, and treatments. Prerequisite: PSY 2012.

**COA 2100\*****Consumer Education, 3 credit hours, 45 lec. (Fall, Spring, Summer)**

A study of the role of the consumer and consumer goods and services related to the home. The course will encourage wise planning and use of family resources.

**COP 1006 Δ****Introduction to Programming Concepts and Logic, 3 credit hours, 45 lec. (Fall, Spring, Summer)**

General survey of programming/problem solving techniques. Algorithm development will employ the use of a modern programming language.

**COP 2010 Δ****Visual Basic Programming, 3 credit hours, 45 lec. (Fall, Spring, Summer)**

This course introduces programming in Visual Basic. The student will learn to create innovative and dynamic data structures. Prerequisite: CIS 1000 or COP 1006 or equivalent.

**COP 2011 Δ****Advanced Applications Programming in Visual Basic, 3 credit hours, 45 lec. (Fall, Spring, Summer)**

This course introduces the advanced features of Visual Basic. The student will learn to create advanced versions of innovative and useful Windows programs. Topics to be discussed include: basic and advanced graphical user interface development; sequential file processing; advanced object-oriented programming; ActiveX components; advanced database management development including interfacing to external applications and Visual Basic's internal database manager; multimedia, networking; and advanced data structures. Prerequisite: COP 2010.

**COP 2220 Δ****Programming in C, 3 credit hours, 45 lec. (Fall, Spring, Summer)**

An introduction to C programming language using microcomputers. Prerequisite: CIS 1000 or COP 1006 or equivalent.

**COP 2224 Δ****Programming in C++, 3 credit hours, 45 lec. (Fall, Spring, Summer)**

An introduction to C++ programming using microcomputers. Prerequisite: COP 2220 or equivalent.

**COP 2800 Δ****Introduction to JAVA Programming, 3 credit hours, 45 lec. (Fall, Spring, Summer)**

An introduction to programming using the Java language. Students will develop and apply individual programs. Prerequisite: CIS 1000 or COP 1006 or equivalent.

**COP 2805 Δ****Advanced JAVA Programming, 3 credit hours, 45 lec. (Fall, Spring, Summer)**

An advanced level programming course using advanced Java techniques. Prerequisite: COP 2800 or equivalent.

\* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.

Δ Technology-Across-the Curriculum Course

**CRW 2000****Creative Writing I, 3 credit hours, 45 lec. (Offered as needed)**

Instruction and practice in writing various forms of poetry, short story, drama, and/or other modes and in submitting for publication.

**CRW 2002****Creative Writing II, 3 credit hours, 45 lec. (Offered as needed)**

Advanced work in poetry and prose modes. Student creativity in prose, poetry, and drama. Students submit creative work to publisher market. Prerequisite: CRW 2000 or equivalent or demonstrated publication at equivalent or higher level.

**CRW 2100****Introduction to Fiction Writing, 3 credit hours, 45 lec. (Offered as needed)**

This course offers extensive practice writing fiction. Students will develop a body of original creative work under the supervision of the instructor and will submit works for publication. Upon agreement with the instructor, students may elect to develop either individual short stories or novel chapters with synopsis. Prerequisites: None, but CRW 2000 and CRW 2002 recommended.

**CRW 2300****Introduction to Poetry Writing, 3 credit hours, 45 lec. (Offered as needed)**

This course offers extensive practice writing poetry. Students will develop a body of original creative work under the supervision of the instructor and will submit works for publication. Prerequisites: None, but CRW 2000 and CRW 2002 recommended.

**CRW 2600****Writing Scripts for Film and Television, 3 credit hours, 45 lec., (Offered as needed)**

This course offers an introduction to the theory and practice of writing scripts for television and film. Students will develop a body of original work with a goal toward publication.

**CTS 1550\* Δ****Microsoft PowerPoint, 1 credit hour, 15 lec. (Offered as needed)**

An introduction to the use of Microsoft's PowerPoint 4.0 for the creation of graphic presentations.

**CTS 2101\* Δ****Introduction to Windows, 3 credit hours, 45 lec. (Fall, Spring, Summer)**

An introduction to operating systems in general with emphasis on Windows.

**CTS 2300\* Δ****Designing Active Directory and Network Infrastructure, 3 credit hours, 45 lec., (Offered as needed)**

This course focuses on the design process of an active directory infrastructure and a network infrastructure that supports active directory, including name resolution strategy, network connectivity design, Group Policy structure, and forest and domain infrastructure. Prerequisites: CDA 2500, CDA 2523, CDA 2525, CET 2497, and CTS 2302 or equivalent. This course prepares the student for the MCP exam, a core requirement for Windows MCSE.

**CTS 2302\* Δ****Windows Active Directory, 3 credit hours, 45 lec. (Offered as needed)**

This course focuses on a windows server directory service environment, including forest and domain structure, DNS, site topology and replication, organizational unit structure and delegation of administration, Group Policy, and user/group/computer account strategies. Prerequisites: CDA 2500, CDA 2523, CDA 2525, and CET 2497 or equivalent. This course prepares the student for the MCP exam, a core requirement for Windows MCSE.

**CTS 2310\* Δ****Designing Security for Windows Network, 3 credit hours, 45 lec. (Offered as needed)**

Build the design skills necessary to plan the security infrastructure for a Windows network. Learn to analyze business requirements, identify security risks, plan an authentication strategy, control access to resources, develop a data encryption scheme, and provide secure connections. This course prepares the student for MCP Exam, a core requirement for Windows MCSE. Prerequisites: CDA 2500, CDA 2523, CDA 2525, CET 2497, CTS 2302.

**CTS 2320\* Δ****Planning and Maintaining Windows Network Infrastructure, 3 credit hours, 45 lec. (Offered as needed)**

This course addresses the planning and maintenance of server network infrastructure. Tasks include planning the physical and logical network, planning and troubleshooting a routing strategy, planning and optimizing DHCP, DNS, and WINS strategies, and planning IPsec network access. Prerequisites: CDA 2500, CDA 2523, CDA 2525, and CET 2497 or equivalent. This course prepares the student for the MCP exam, a core requirement for Windows MCSE.

**CTS 2811\* Δ****Administering SQL Server Database, 3 credit hours, 45 lec. (Offered as needed)**

This course provides students with the skills required to install, configure, administer and troubleshoot the client-server database management system of Microsoft SQL Server. This is preparation for the MCP exam, an elective requirement for Windows MCSA/MCSE. Prerequisites: CDA 2500, CDA 2523, CDA 2525.

\* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.

Δ Technology-Across-the Curriculum Course

**DAA 1100**  
**Modern Dance, 2 credit hours, 15 lec., 30 lab.**  
**(Offered as needed)**

The beginning Modern Dance class is designed to affect an understanding of the art of the modern dance. It includes a brief history of the dance; instruction and practice in basic dance techniques, improvisation, and dance forms. This course may be taken four (4) times for credit.

**DAA 1101**  
**Intermediate Modern Dance, 2 credit hours, 15 lec., 30 lab. (Offered as needed)**

The intermediate modern dance class is designed to affect understanding the art of the modern dance at an intermediate level. It includes a continued historical analysis of modern dance; instruction and practice in intermediate dance techniques, improvisation, and dance forms. This course may be taken up to four (4) times for credit.

**DAA 1200**  
**Beginning Ballet, 2 credit hours, 15 lec., 30 lab.**  
**(Offered as needed)**

A beginning dance course designed to serve as an introduction to the tradition and discipline of the art of classical ballet. Physical development of body as an expressive instrument for ballet movement will be stressed as strength, flexibility, balance, agility, alignment, turn-out, control, elevation and sensitivity to line are studied. This course may be taken up to four (4) times for credit.

**DAA 1201**  
**Intermediate Ballet, 2 credit hours, 15 lec., 30 lab.**  
**(Offered as needed)**

Intermediate Ballet is designed to train the more advanced student in the tradition and discipline of the art of the classical ballet beyond the basics. Physical development of the body as an expressive instrument for ballet movement will continue to be stressed as strength, flexibility, balance, agility, alignment, turn-out, control, elevation, and sensitivity to line are improved. This course may be taken up to four (4) times for credit.

**DAA 1500A**  
**Beginning Jazz, 1 credit hour, 30 lab. (Offered as needed)**

This course includes a brief history of the jazz dance and instruction and practice in jazz dance techniques exploring popular dance idioms. This course may be taken up to four (4) times for credit.

**DAA 1501**  
**Intermediate Jazz Dance, 1 credit hour, 30 lab.**  
**(Offered as needed)**

A continuation of Beginning Jazz. This course may be taken up to four (4) times for credit.

**DAA 1520**  
**Beginning Tap, 1 credit hour, 30 lab. (Offered as needed)**

Instruction in beginning techniques of tap dance. This Course may be taken up to four (4) times for credit.

**DAA 1580**  
**Musical Theatre Dance I**

The study of Musical Theatre dance techniques and styles as related to a specific performance experience. Students must participate in rehearsals and performances. Prerequisite: Level of competency determined by audition. This course may be taken up to four (4) times for credit.

**DAA 1680**  
**Dance Workshop, 1 credit hour, 30 lab. (Offered as needed)**

Instruction and participation in dance as required by specific productions, i.e., Theatre/Show Choir. This course may be taken up to four (4) times for credit.

**DAA 1681**  
**Dance Ensemble, 1 credit hour, 30 lab. (Offered as needed)**

The student shall participate in the preparation and performance of original dance compositions to include dance line performances. This course may be taken up to four (4) times for credit.

**DAA 1750**  
**Dance Conditioning, 1 credit hour, 30 lab. (Offered as needed)**

To increase technical skills through conditioning skills appropriate for dancers. Dance conditioning is an excellent course to improve fundamentals for the beginning/intermediate student. This course may be taken up to four (4) times for credit.

**DAA 1905**  
**Directed Individual Study – Dance, 1 credit hour, 30 lab. (Offered as needed)**

A defined independent study in dance which is pursued under supervision of a faculty dance instructor and recorded through departmental procedures. Designed to permit a student to pursue non-scheduled dance activity work which may be of a specialized nature and not available through classes or courses available in a college schedule. Prerequisite: Departmental approval is required. This course may be taken up to two (2) times for credit.

**DAA 2202**  
**Advanced Ballet, 2 credit hour, 15 lec./30 lab. (Offered as needed)**

Advanced Ballet is a two-credit academic course. It meets for three hours per week and can be taken for credit four times. The student must have reached a high level of physical strength, mastery of skills, and technical knowledge in order to be eligible for placement in this section. Prerequisites: DAA 1201 and/or appropriate level of competency. This course may be taken up to four (4) times for credit.

**DAA 2220**  
**Pointe, 1 credit hour, 30 lab. (Offered as needed)**

Pointe is a one-credit academic course. It meets two hours per week and can be taken for credit four times. The student must already have mastered advanced terminology and movement vocabulary for ballet in order to be prepared for the physical demands of dancing on Pointe. Prerequisite: DAA 2202 and/or appropriate competency level. This course may be taken up to four (4) times for credit.

**DAA 2581**

**Musical Theatre Dance II, 1 credit hour, 30 lab. (Offered as needed)**

The continued study of Musical Theatre dance techniques and styles as related to a specific performance experience. Students must participate in rehearsals and performances. Prerequisite: Level of competency determined by audition. This course may be taken up to four (4) times for credit.

**DAA 2610**

**Dance Composition, 2 credit hours, 15 lec./30 lab. (Offered as needed)**

This course encourages the student to explore and compose dance by improving technical skills, developing improvisation and choreographic skills, and enhancing performance skills. Prerequisites: At least one semester of Modern Dance (DAA 1100) or department audition. This course may be taken up to four (4) times for credit.

**DAA 2682**

**Dance Workshop II, 1 credit hour, 30 lab. (Offered as needed)**

Continued instruction and participation in dance as required by specific Music Theatre productions. This course may be taken up to four (4) times for credit. Prerequisite: A demonstration of competence required. This course may be taken up to four (4) times for credit.

**DAA 2683**

**Performance Dance, 1 credit hour, 30 lab.. (Repertory and/or Original Choreography)**

DAA2683 involves the continuation of study and practice of selected works of dance repertory and/or original choreography culminating in public performance. May be taken four (4) times for credit. Prerequisite: Demonstration of competence required.

**DAA 2930**

**Dance – Special Topics, 3 credit hours, 45 lec. (Fall, Spring Summer)**

A defined special topics course which is pursued under supervision of a faculty member and recorded through usual departmental procedures. Designed to permit a student to pursue non-scheduled academic and laboratory work which may be of a specialized nature and not available through the college schedule.

**DEP 2004**

**Human Growth and Development, 3 credit hours, 45 lec. (Fall, Spring, Summer)**

A research oriented course in human development, covering the life span of the human being from conception to death. Special emphasis placed upon the interrelationships of the stages of development of the normal person.

**DEP 2100**

**Child Growth and Development I, 3 credit hours, 45 lec. (Fall, Spring, Summer)**

Growth and development of the child from conception through age five, including the physical, social, emotional and mental development of the young child, influence of environment, principles and theories of development.

**ECO 2013**

**Economics I, 3 credit hours, 45 lec. (Fall, or as needed)**

Macroeconomics. Basic concepts and principles, national income accounting; fiscal and monetary policy and application, growth economics. Basic math skills required.

**ECO 2023**

**Economics II, 3 credit hours, 45 lec. (Spring, or as needed)**

Microeconomics. Economic structures, price theory, factor markets, and general equilibrium. Current national and international problems. World trade and balance of payments. Comparative economics. Prerequisite: ECO 2013 or equivalent.

**EDF 1005**

**Introduction to Education, 3 credit hours, 45 lec. (Fall, Spring)**

A study of the history, philosophy and social context of education. The course will help the student think critically about the process of education and his/her role as an educator. Student will observe and participate in the educational settings of local schools. (Plus 30 hours field experience.)

**EDG 2701 ❖**

**Teaching Diverse Populations, 3 credit hours, 45 lec. (Fall, Spring)**

This course will provide the student with the opportunity to explore personal values and attitudes toward cultural diversity. Designed for the prospective educator, the theoretical component will examine the issues of teaching in culturally diverse classrooms. Field experience and examination of educational materials will enhance the student's understanding of multiculturalism. (Plus 30 hours field experience) Prerequisite: EDF 1005.

**EDP 2002**

**Educational Psychology, 3 credit hours, 45 lec. (Fall, Spring, Summer)**

Significant aspects of the growth and development of children and youth, including physical, social, and intellectual developments as they affect behavior patterns. Psychology as applied in improving the learning process.

**EET 1003C\***

**Electronics for Drafters, 3 credit hours, 30 lec., 30 lab. (Offered as needed)**

An introductory course in electronics for drafter designers and beginning electronics technicians; designed to provide a basic understanding of electronic principles, theories and concepts.

\* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.

❖ This college credit course qualifies as having an international and/or diversity focus for Teacher Education Programs common prerequisites.

**EEX 2010** ❖

**Introduction to Exceptional Children, 3 credit hours, 45 lec. (Offered as needed)**

Study of incidence, nature, etiology and services available in connection with exceptional children including: hearing and speech problems; learning disabilities, mental retardation, blind, physically handicapped, gifted, emotional conflicts, also parents of exceptional children.

**EGS 1110C**

**Engineering Graphics, 3 credit hours, 30 lec., 30 lab. (Offered as needed)**

Use of instruments, lettering practice; geometric construction; multiview projection and conventions, auxiliary views, section views, axonometric and oblique projections, rotation, patterns and development, and methods of reproduction. Prerequisite: ETD 1100 or equivalent: prerequisite only applies to Architectural Drafting and Design students.

**EGS 1130C**

**Descriptive Geometry, 3 credit hours, 30 lec., 30 lab. (Offered as needed)**

Basic principles of orthographic projection, auxiliary views and rotation as they apply to points, lines and planes in space; addition of coplanar and non-coplanar vectors; intersections and developments; and selected abstract, axonometric and oblique projection, and practical problems. Prerequisite: EGS 1110C or equivalent.

**EME 2040** Δ

**Introduction to Educational Technology, 3 credit hours, 45 lec. (Fall, Spring Summer)**

This course will develop competencies necessary to integrate technology into classroom instruction. Students will survey a variety of instructional technology materials, software, and systems, as well as learn to use these in the classroom environment.

**ENC 1101** Δ

**English Composition I, 3 credit hours, 45 lec. (Fall, Spring, Summer)**

Instruction and intensive practice in expository and argumentative writing including a documented paper. The student will practice all CLAST essay and language skills as part of the essay process. Writing-Across-the-Curriculum course requiring a minimum of 6,000 words of writing. If used to meet AA Gordon Rule requirements for general education, a minimum grade of "C" is also required. Prerequisite: A passing score on a standardized placement test measuring communications/verbal achievement or successful completion of ENC 0080 and/or LIN 1670 with a grade of "C" or better.

**ENC 1102**

**English Composition II, 3 credit hours, 45 lec. (Fall, Spring, Summer)**

Interpretative and critical reading of fiction (novel, novella, short story), drama, and poetry. Practice in the writing of analytic discourse. Practice in writing the research paper. The student will practice all CLAST essay and language skills as part of the essay process. Writing-Across-the-Curriculum course requiring a minimum of 6,000 words of writing. If used to meet AA Gordon Rule requirements for general education, a minimum grade of "C" is also required. Prerequisite: Completion ENC 1101 or an equivalent course with a grade of "C" or better.

**ENC 1104**

**CLAST Review: Essay Skills, 1 credit hour, 15 lec. (Offered as needed)**

A short course specifically designed to prepare students to write fifty-minute timed essays that conform to CLAST standards. The course is conducted as a self-study under the supervision of the CLAST Coordinator.

**ENC 1105**

**CLAST Review: English Language Skills, 1 credit hour, 15 lec. (Offered as needed)**

A short course designed to prepare students to take or retake the CLAST English Language Skills sub-test. The course is conducted as a self-study utilizing the tutorial services in the Academic Success Center.

**ENC 2210**

**Technical Report Writing, 3 credit hours, 45 lec. (Offered as needed)**

This course covers the fundamentals of technical report writing, mechanics, and style. Various types of reports are prepared, and criteria for evaluating the adequacy of the various components of these reports are utilized. The course also includes reading and analysis of technical literature as well as oral reporting. Prerequisite: passing score on placement test.

**ENG 1001**

**Research Papers, 1 credit hour, 16 lab. (Fall, Spring, Summer)**

A learn-by-doing course in the methods of conducting library research and writing a documented paper. Students will work in the library on self-selected subjects under the supervision and guidance of the instructor in a tutorial relationship. For successful completion, each student will write a documented paper in accordance with a standard system.

**NOTE:** If this course is used to satisfy Writing-Across-the-Curriculum requirements for transfer course to OWC, a 6,000 word paper with a minimum grade of "C" is required. Student may use this course to satisfy deficiency in 6,000 word Gordon Rule writing requirement, but it may not be used in lieu of traditional Gordon Rule courses, such as ENC 1101.

Δ Technology-Across-the Curriculum Course

❖ This college credit writing course qualifies as having an international and/or diversity focus for Teacher Education Programs common prerequisites.

**ENL 2012A****English Literature I, 3 credit hours, 45 lec. (Offered as needed)**

A study of English literature from the Old English period, Beowulf, through the late Eighteenth century, the Age of Enlightenment, focusing on major works and their authors with an emphasis upon the literature as a significant reflection of and contribution to the political, cultural, social, religious, and economic milieu of each age. This course may be used as a Humanities credit. Writing-Across-the-Curriculum course requiring a minimum of 4,000 words of writing. If used to meet AA Gordon Rule requirements for general education, a minimum grade of "C" is also required. Prerequisite: ENC 1101.

**ENL 2022****English Literature II, 3 credit hours, 45 lec. (Offered as needed)**

A study of English literature from the Romantics through the Twentieth century focusing on major works and their authors with an emphasis upon the literature as a significant reflection of and contribution to the political, cultural, social, religious, and economic milieu of each age. This course may be used as a Humanities credit. Writing-Across-the-Curriculum course requiring a minimum of 4,000 words of writing. If used to meet AA Gordon Rule requirements for general education, a minimum grade of "C" is also required. Prerequisite: ENC 1101.

**ESC 1000****Earth Science, 4 credit hours, 60 lec. (Fall, Spring, Summer)**

Survey of processes, materials and structure of the solid earth, oceanography, meteorology, and the relation of the earth to other planets. Intended for physical science general education requirement. Practical exercises in mineral and rock identification.

**ESC 1000L****Earth Science Lab, 1 credit hour, 30 lab. (Fall, Spring, Summer)**

Laboratory experiences pertaining to the physical environment: observation, measurement, data analysis, mapping, map interpretation, properties of earth materials. This is an optional course serving students who transfer to universities which require a laboratory course to satisfy the General Education requirement in Physical Science.

**ETD 1100\*****Introduction to Technical Drawing, 3 credit hours, 30 lec., 30 lab. (Offered as needed)**

A course in the fundamental principles of the graphic language (the language of industry) and is developed for students without previous mechanical drawing experience. Topics include: use and care of instruments, lettering, geometric construction, multiview projection, sketching techniques, inking, and methods of reproduction.

**ETD 1111\*****Drafting I, 6 credit hours, 15 lec., 150 lab. (Offered as needed)**

The first of a sequence of courses in drafting which includes basic use of instruments, freehand lettering, geometric construction, orthographic projection, sections and conventions, conventional revolutions, dimensioning, inking, mechanical lettering, and methods of reproduction. Prerequisite: ETD 1100 and ETD 1710 or equivalent.

**ETD 1221\*****Drafting II, 6 credit hours, 15 lec., 150 lab. (Offered as needed)**

A course that continues and completes the student's study of the fundamentals intrinsic to all types of drafting. Topics covered include isometric, dimetric, trimetric, oblique, and perspective projection, auxiliary views, related mathematics, precision dimensioning and inking practices. Prerequisite: ETD 1111 or equivalent.

**ETD 1310C\* Δ****AutoCAD I, 3 credit hours, 30 lec, 30 lab. (Offered as needed)**

A basic course on the use of AutoCAD Software to include; Introduction to AutoCAD, drawing commands, display and inquiry commands, modify commands, dimensioning and annotation, data exchange and output files. Prerequisite: ETD 1100 or equivalent.

**ETD 1311C\* Δ****AutoCAD II, 3 credit hours, 30 lec., 30 lab. (Offered as needed)**

The second course in a series designed to develop skill and proficiency in the use of AutoCAD software to include: additional drawing commands, editing commands, modify commands, advanced display and inquiry commands, advanced dimensioning and annotation, advanced layering, block, attributes and X-Ref, paper space, UCS, data exchange and output files. Prerequisite: ETD 1310C\* or equivalent.

**ETD 1312C\* Δ****AutoCAD LT I, 3 credit hours, 30 lec., 30 lab. (Offered as needed)**

A basic course on the use of AutoCAD LT Software to include; Introduction to AutoCAD LT, drawing commands, display and inquiry commands, modify commands, dimensioning and annotation, data exchange and output files. Prerequisite: ETD 1100 or equivalent.

**ETD 1313C\* Δ****AutoCAD LT II, 3 credit hours, 30 lec., 30 lab. (Offered as needed)**

The second course in a series designed to develop skill and proficiency in the use of AutoCAD LT software to include: additional drawing commands, editing commands, modify commands, advanced display and inquiry commands, advanced dimensioning and annotation, advanced layering, block, attributes and X-Ref, paper space, UCS, data exchange and output files. Prerequisite: ETD 1312C or equivalent.

\* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.

Δ Technology-Across-the Curriculum Course

**ETD 1350C\* Δ****AutoCAD 3-D Modeling I, 3 credit hours, 30 lec., 30 lab. (Offered as needed)**

A basic course in mechanical design using basic computer geometry techniques. Topics will include: orthographic projections, space relationships of points, lines, planes and revolution of objects. Additional coverage will include principles of surface generation, intersections, wire modeling, and solid modeling techniques. Prerequisite: ETD 1311C or equivalent.

**EDT 1510C\*Δ****Introduction to Pro/ENGINEER, 3 credit hours, 30 lec., 30 Lab. (Offered as needed.)**

A basic course on the use of Pro/ENGINEER software to include: Introduction to Pro/ENGINEER, basic drawing components/parts, Pro/DETAIL functionality, 3D virtual models, conceptual layout, extrusions, sweeps, pick-n-place, creating manufacturing features on assemblies which will include drilling, cutting, and facing operations and creating basic drawings of assemblies which will include exploded views and intelligent BOM callouts.

**ETD 1614\*****Electromechanical Drafting, 3 credit hours, 30 lec., 30 lab. (Offered as needed)**

A course in the fundamentals of electronics drafting covering such topics as: using electronic symbols, schematic diagrams, connection diagrams, block and logic diagrams, WW board drawings, chassis drawings, and pictorial drawings. Prerequisite: ETD 1111 or equivalent.

**ETD 1653\*****PCB Drafting, 3 credit hours, 15 lec., 60 lab. (Offered as needed)**

A course to teach students principles of printed circuit board design, layout, and tape-on. Topics covered include: schematics logic, single side boards, multi-layer boards, art-masters, fabrication drawings, and silkscreen masters. Prerequisite: ETD 1310C or equivalent.

**ETD 1654\*****Intermediate Printed Circuit Board Drafting, 3 credit hours, 15 lec., 60 lab. (Offered as needed)**

A course to teach students principles of printed design and documentation through the use of a computer. Prerequisite: ETD 1653 or equivalent.

**ETD 1700\*****Drafting III, 6 credit hours, 15 lec., 150 lab. (Offered as needed)**

A course in the fundamentals of Mechanical and Machine Drafting. Topics covered include: Geometric dimensioning and true positional tolerancing; threads, nuts, bolts, screws, gears, cams and springs, drafting standards, and preparation of working drawings. Prerequisite: ETD 1311C, and ETD 2218 or equivalent.

**ETD 1710\*****Fundamentals of Dimensioning & Tolerancing, 4 credit hours, 60 lec. (Offered as needed)**

A course designed to help students develop the basic fundamentals of dimensioning and tolerancing. Topics include: dimensioning systems such as; metric, decimal, fractional-inch, foot and inch, tolerancing methods, limits and tolerances, tolerancing accumulation, dimensioning practices, and standards fits. Prerequisite: for Drafting and Design student course should be taken with ETD 1100.

**ETD 1801C\*****Technical Illustration, 3 credit hours, 15 lec., 45 lab. (Offered as needed)**

The purpose of this course is to help students develop the skills, knowledge, and attitudes necessary to be job entry-level qualified as technical illustrators. Prerequisites: ETD 1221 or EGS 1130C, and ETD 1311C.

**ETD 1811C Δ****Corel Draw I, 3 credit hours, 30 lec., 30 lab. (Offered as needed)**

Class will focus on organization of two-dimensional space in regard to the plane. Study and hands-on projects both in artistic media and on computer will include the following: Comprehensive usage of this vector-based drawing program to create professional artwork – from single logos to intricate technical illustrations. Topics such as perspective and the creation of depth on the two dimensional surface will be included as well. Students will investigate the use of computer graphics disciplines emphasizing illustration and the principles of color and design. Students will also be expected to complete five individual projects related to the coursework. The presentation of these projects to the class will include both written and visual materials. Students will generate a portfolio of computer art and are encouraged to broaden perspectives and to think creatively. Class will serve as introduction to use of Corel Draw.

**ETD 1842C\*****Computer Rendering I, 3 credit hours, 30 lec. 30 lab. (Offered as needed)**

A basic course in rendering techniques using accurender software. Topics include: The walkabout window, AutoCAD views, move in the Ray Trace View, viewing the model, Rendering the model, assigning materials, lighting your model and printing. Prerequisite: ETD 1350C.

**ETD 2011\*****Industrial Print Reading, 1 3 credit hours, 45 lec. (Offered as needed)**

The beginning level aspects of reading industrial prints such as drawing notes, title blocks, revision blocks, legends, schedules, multiviews, and parts list.

\* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.

Δ Technology-Across-the Curriculum Course

**ETD 2218\*****Geometric Dimensioning & Tolerancing, 4 credit hours, 60 lec. (Offered as needed)**

An introductory course in geometric dimensioning and tolerancing using the geometric method nationally accepted according to ASMEY14.5M. Topics covered include: definition and terms, symbols, datum referencing, locational tolerancing, form tolerancing, profile tolerancing, orientation and runout tolerancing, and math for positional tolerancing. Prerequisites: ETD 1710 and ETD 1221 or equivalent.

**ETD 2219\*****Advanced Geometric Dimensioning & Tolerancing, 4 credit hours, 60 lec. (Offered as needed)**

An advanced course in geometric dimensioning and tolerancing using the geometric method nationally accepted according to ASMEY14.5M. Topics covered include: definitions and terms, symbols, datum referencing, locational tolerancing, form tolerancing, profile tolerancing, orientation and runout tolerancing, math for positional tolerancing, quality assurance methods and techniques, and manufacturing methods and techniques. Prerequisite: ETD 2218 or equivalent.

**ETD 2250\*****Tolerance Stacks I, 4 credit hours, 60 lec. (Offered as needed)**

A course for engineers, designers, inspectors and other engineering personnel. This course consists of learning how to perform tolerance accumulation studies within a part or assembly to include: Coordinate dimension stacks and stacks involving geometric tolerancing. Prerequisite: ETD 2218 or equivalent.

**ETD 2251\*****Tolerance Stacks II, 4 credit hours, 60 lec. (offered as needed)**

A second course for engineers, designers, inspectors and other engineering personnel. The course continues the learning and add more advanced concepts relative to performing tolerance accumulation studies within a part or assembly to include: coordinate dimension stacks and stacks involving geometric tolerancing. Prerequisite: ETD 2219 and ETD 2250 or equivalent.

**ETD 2328C\* Δ****Introduction to MicroStation, 3 credit hours, 30 lec., 30 lab. (Offered as needed)**

A basic course in mechanical design using basic computer geometry techniques. Topics will include orthographic projections, space relationships of points, lines, planes and revolution of objects. Additional coverage will include principles of surface generation, intersections, wire modeling, and solid modeling techniques. Prerequisite: ETD 1100 or EGS 1110C or equivalent.

**ETD 2352C\* Δ****AutoCAD III, 3 credit hours, 30 lec., 30 lab. (Offered as needed)**

An advanced course designed to help students develop proficiency in the area of computer aided drafting and systems drafting. Topics covered include: transfer drawings, digitized drawings, explanatory drawings, multiview projections, exploded assemblies, pictorial drawings, auxiliary views, sections, details, geometric

dimensioning and tolerancing, and CADD concepts. Prerequisites: ETD 1311 and ETD 1221 or EGS 1130C.

**ETD 2355C\* Δ****AutoCAD 3-D Modeling II, 3 credit hours, 30 lec., 30 lab. (Fall, Spring)**

An advanced course in mechanical design using advanced computer techniques. Contents will include: 3D concepts, wire modeling, surface generation techniques, and solid modeling techniques. Prerequisite: ETD 1350C or equivalent.

**ETD 2356C\*****MicroStation II, 3 credit hours, 30 lec., 30 lab. (Offered as needed)**

A second course in mechanical design using basic and intermediate computer geometry techniques. Topics will include: Orthographic projections, space relationships of points, lines, planes and revolution of objects. Additional coverage will include principles of surface generation, intersections, wire modeling, and solid modeling techniques. Prerequisites: ETD 2328C or equivalent.

**ETD 2357C\* Δ****Inventor I, 3 credit hours, 30 lec., 30 lab. (Offered as needed)**

A basic course in Parametric Solid Design using AutoDesk Inventor Software. Topics include: Basic concepts of parametric part sketching 3D part creation, Revolve, Sweep and Lofted features, shell and coil, surface creation, sheet metal and orthographic drawing production.

**ETD 2365C\*****Mechanical Desktop I, 3 credit hours, 30 lec., 30 lab., (Offered as needed)**

A basic course in Parametric Solid Design, using AutoCAD Mechanical Desktop Software. Topics include: Basic concepts of Parametric Sketching, Part Creation, Surface Creation and Editing, Basic Concepts of Combining Parts. Prerequisite: ETD1350C or equivalent.

**ETD 2366C\*****Mechanical Desktop II, 3 credit hours, 30 lec., 30 lab., (Offered as needed)**

The second course in a series designed to develop skill and proficiency in Parametric Solid Design, using AutoCAD Mechanical Desktop Software. Topics include: Creating Drawing Views, Creating Table Driver Parts, Creating Shells; and assembling parts. Prerequisite: ETD 2365C or equivalent.

**ETD 2377C\*****3D Studio Max I, 3 credit hours, 30 lec., 30 lab, (Offered as needed)**

Course is designed to use 3D Studio in rendering, and animation as a dynamic visualization tool for AutoCAD design images. Upon completion of this course, the user will be able to navigate through the modules of the program, model simple projects, set up scenes for rendering and animation, assign materials to objects, and define simple motion paths, input and output techniques. Prerequisite: ETD 1350C or equivalent.

\* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.

Δ Technology-Across-the Curriculum Course

**ETD 2534\*****Construction Drafting, 6 credit hours, 30 lec., 120 lab. (Offered as needed)**

A course to prepare students to develop shop drawings for large construction projects. Topics covered include: steel, precast concrete, prestressed concrete, poured-in-place concrete, and heavy timber construction projects. Prerequisites: EGS 1110C or ETD 1111 or equivalent.

**ETD 2542\*****Structural Drafting, 3 credit hours, 15 lec., 60 lab. (Offered as needed)**

A course in the fundamentals of structural drafting including: an overview of structural drafting, prestressed concrete drafting, structural steel drafting, and poured on-site concrete drafting. Prerequisite: TAR 2121C or equivalent.

**ETD 2543C\*****Structural Drafting II, 3 credit hours, 15 lec., 60 lab. (Offered as needed)**

An advanced course in structural drafting covering prestressed concrete drafting, structural steel drafting, and poured-on-site concrete drafting for large commercial and industrial buildings as well as bridges, parking decks, towers, and stadiums. Prerequisite: ETD 2542 or equivalent.

**ETD 2655\*****Advanced Printed Circuit Board Drafting, 3 credit hours, 15 lec., 60 lab. (Offered as needed)**

A course to teach students advanced principles of printed design and documentation through the use of a computer. Prerequisites: ETD 1654 or equivalent.

**ETD 2705\*****Advanced Mechanical Drafting, 3 credit hours, 30 lec., 30 lab hours. (Offered as needed)**

An advanced course covering mechanical drafting, machine design, advanced dimensioning and tolerancing, and working drawings according to MIC and ASME standards. Prerequisites: ETD 1700, ETD 2218, or equivalent.

**ETD 2802C\*****Technical Illustration II, 3 credit hours, 30 lec., 30 lab. (Offered as needed)**

The purpose of this course is to help students develop advanced skills, knowledge, and attitudes necessary as technical illustrators, to include oblique, and axiometric projections, perspective and exploded pictorial drawings, and related techniques. Prerequisites: ETD 1801C and ETD 1311C or equivalent.

**ETD 2843C\* Δ****3D Computer Rendering II, 3 credit hours, 30 lec., 30 lab., (Offered as needed)**

An advanced course in rendering techniques using accurender software. Topics include: Radiosity, landscape for realism, decals, backgrounds, environments, panoramas and animation. Prerequisite: ETD 1842C.

**ETD 2905\*****Independent Study – Drafting, 1 credit hour (Fall, Spring, Summer)**

Practical treatment of special geometry, graphics, and design. Emphasis on individual work projects utilizing such graphical techniques as orthographic projection, perspective drawing, auxiliary views, topographic drawing, and graphing. Prerequisites: EGS 1110C and ETD 1111 or permission of instructor. This course may be taken up to four (4) times for credit.

**ETD 2930\*****Special Topics – A survey of Geometric Dimensioning and Tolerancing, 1 credit hour (Offered as needed)**

This is a review course in Geometric Dimensioning and Tolerancing using the Geo-Metric Method nationally accepted according to ASME Y14.5M. This course is intended for students who have prior training in Geometric Dimensioning and Tolerancing, but require a review covering new and updated information on the subject. Topics covered include: definition and terms, symbols, datum referencing, locational tolerancing, form tolerancing, profile tolerancing, orientation and runout tolerancing, and math for positional tolerancing.

**ETG 1110\*****Electronics Computations, 4 credit hours, 60 lec. (Offered as needed)**

This course is designed to provide practical application of computations relating directly to electronics. It provides active, intensive application of basic mathematical theories and formulas to the analysis and solution of real world electronics problems. Prerequisite: MAT 1033A or equivalent.

**ETG 1941\*****Internship , 3 credit hours, 90 lab hours (Offered as needed)**

On-the-job training in the Applied Associate of Science Degree program in which the student is actively enrolled. The student works under a qualified supervision on a job related to his/her degree program. The supervisor will rate the student's performance, knowledge, comprehension, dependability, initiative, cooperativeness, and total performance. A project paper or approved project will be submitted by the student two weeks prior to the end of the semester.

**ETI 1411\*****Advanced Manufacturing Processes, 3 credit hours, 45 lec. (Offered as needed)**

This course presents the numeric and computer numeric control of various machining processes and the use of computer programming in the machine shop. Included are shop safety, program preparation, milling, drilling, subroutines, coordinate systems and other related topics.

**ETI 1412C\*****Introduction to CNC Machines and CNC Machining Practices, 3 credit hours, 30 lec., 30 lab. (Offered as needed)**

This course is designed to provide the student with an introduction to CNC machines and CNC machining to include: Theory, Operation, Setup, Safety and Practices.

\* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.

**ETI 1420\*****Properties of Materials and Cutting Tools, 3 credit hours, 45 lec. (Offered as needed)**

This course is designed to provide the student with an introduction to the basic properties of materials, principles and processes in the metal working and plastics field and tools and machinery involved in manufacture of metals of plastics. This course covers non-chip producing and chip producing manufacturing processes.

**ETI 1710\*****Occupational Safety, 3 credit hours, 45 lec. (Offered as needed)**

A basic course in occupational safety and health covering such topics as: theories of accident causation; workplace hazards; hazard analysis and prevention; accident reporting; OSHA, ergonomics; product safety; workers' compensation; and stress on the job.

**ETI 1713\*****Implementing Total Safety, 3 credit hours, 45 lec. (Offered as needed)**

A course on implementing the total Safety Management (TSM) approach to workplace safety and health. Major topics include the TSM Steering Committee, TSM Facilitator, and improvement project teams (IPTs).

**ETI 1715\*****Environmental Safety, 3 credit hours, 45 lec. (Offered as needed)**

A course on protecting the environment from hazardous processes, products, and by-products of business and industry. The primary focus of the course is the ISO 14000 standard.

**ETI 2110\*****Quality Tools I, 3 credit hours, 45 lec. (Offered as needed)**

This is a comprehensive course designed to increase the students' knowledge and skill in all aspects of quality control. The course provides a variety of the basic skills that contribute to the outgoing quality in the mechanical trades. Included are quality functions, quality personnel, shop mathematics, understanding blueprints, measuring tools, their use and other related topics.

**ETI 2111\*****Quality Tools II, 3 credit hours, 45 lec. (Offered as needed)**

This course is a continuation of Quality Tools I with an emphasis on inspection methods and layout techniques. Included also are quality costs, planning, probability, statistical control and other related topics.

**ETI 2114\*****Benchmarking, 3 credit hours, 45 lec. (Offered as needed)**

A course covering the fundamentals of benchmarking. Major topics include: rationale for benchmarking, management's role in benchmarking, obstacles to benchmarking, selection of processes to benchmarking, and acting on benchmarking data.

\* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.

❖ This college credit course qualifies as having an international and/or diversity focus for Teacher Education Programs common prerequisites.

**ETI 2117\*****Introduction to Total Quality, 3 credit hours, 45 lec. (Offered as needed)**

This course covers the fundamentals of Total Quality including the following: quality culture, customer focus, employee empowerment, team building, decision making, problem solving, conflict management, quality tools, benchmarking, continuous improvement, quality function deployment, Statistical Process Control, Just-In-Time Manufacturing, and Implementing Total Quality.

**ETI 2118\*****Implementing Total Quality, 3 credit hours, 45 lec. (Offered as needed)**

This course covers all 20 steps required to implement Total Quality in any type of organization. Emphasis is placed on specific requirements for implementation, the critical role of executive level leaders, and variation among organizations. Prerequisite: ETI 2117.

**ETI 2131\*****Statistical Process Control, 3 credit hours, 45 lec. (Offered as needed)**

A course covering the fundamentals of SPC. Major topics include: rationale for SPC, inhibitors of SPC, management's role in SPC, the quality tools, and control charts.

**ETI 2414C\*****Advanced Concepts of CNC Machines and CNC Machining Practices, 3 credit hours, 30 lec., 30 lab. (Offered as needed)**

This course is designed to provide the student with advanced concepts in CNC machines and CNC machining to include: Theory, Operation, Setup, Safety, and Practices.

**ETI 2940\*****Directed Work Study-Industrial-Technical, 1 credit hour, 45 lab. (Offered as needed)**

Directed experience in instructional, laboratory and/or materials assistance in a designated industrial-technical area. This course may be taken up to four (4) times for credit. Department chair approval required.

**FAD 1123****Adults in a Changing Society, 3 credit hours, 45 lec. (Fall, Spring, Summer)**

A course focusing on personal development and traditional or nontraditional career options available to adults in today's changing society.

**FRE 1000 ❖****Practical French, 3 credit hours, 45 lec. (Spring term only)**

This course provides training for verbal mastery of French in practical situations as well as instruction in contemporary francophone culture and in the historical and cultural significance of the French-speaking world. Students will research a French country/region.

**FRE 1120 ❖****French I, 4 credit hours, 60 lec. (Fall term only)**

Pronunciation and grammatical structures of French, with emphasis upon balanced development of all four skills – listening, speaking, reading, and writing. Covers all basic structures of the language.