Your College, Your Future



EGT 152 Fundamentals of CAD

Course Number	EGT-152
Course Title	Fundamentals of CAD
Credit Hours	3
Prerequisites	EGT-151
Course Description	This course includes a related series of problems and exercises utilizing the computer graphics station as a drafting tool.
Course Objectives	Students that complete EGT-152 will be able to interpret industrial prints in all major areas for industrial technology.
Course Developer	Charles Player
Means of Instruction	Lecture, Lab
Required Textbook/Written Materials/Supplies	See Booklist online for current book.

Students will understand the folds and orientation of blue prints.

General Education Core Competencies

General Education Core Competencies	Course Methodology, Content and/or Assessment
Communication: Students will be able to communicate effectively through reading, writing, speaking and listening.	Participation in class discussions is recommended and encouraged. The class consists of exercises that require the students to
 Prepare written documents in a professional manner. Develop oral communication skills to present information in a professional and appropriate manner. Demonstrate appropriate listening skills in one-on-one and small and large group settings. 	complete case scenarios by referring to the appropriate chapter, article, part, and section of the current NEC document. The Instructor will work with each individual student to assure quality workmanship.

General Education Core Competencies	Course Methodology, Content and/or Assessment
Mathematical Reasoning: Students will apply those mathematical skills appropriate to their program of study.	Students will be able to calculate circuit values. Students will use appropriate NEC tables and formulas to calculate various electrical installation requirements.
 Analyze and solve mathematical problems needed in the workplace, daily life and educational environment. Interpret data using analytical methods. 	
Critical Thinking: Students will employ effective processes for resolving problems and making	Students will utilize and determine safety requirements and practices identified in the current edition of the NEC.
 decisions. Identify problems and potential causes. Solve problems using basic research, analysis and interpretation. Evaluate results of solutions and revise strategies as indicated by findings. 	Students, when given a job scenario, will identify electrical installation deficiencies in accordance with the current edition of the NEC. Students when given a job site scenario will specify solutions to reported electrical installation deficiencies IAW the current edition of the NEC.

Technology Utilization: Students will apply knowledge of computers on a level compatible with job and/or educational demands.

Students will utilize computer skills to research and generate solutions to electrical installation challenges that are consistent with requirements of the current edition of the NEC.

- Demonstrate a basic knowledge of computer applications including word processing, spreadsheets, databases, and presentation software.
- Use basic operating system functions competently (e.g. store and retrieve data, load software).
- Demonstrate communication and research skills through use of the internet.

General Education Core Competencies	Course Methodology, Content and/or Assessment
Interpersonal Skills: Students will deal effectively and appropriately with others.	Can work effectively with other students in completing assignments as a project team.
• Interact well with individuals and groups from diverse backgrounds and cultures.	Is able and willing to instruct less experienced students in completing work assignments.
 Work with others in situational analysis, problem solving, and task accomplishment. Demonstrate respect for the rights, work, 	Is willing and able to explain the nature of a problem and the action taken to recommend necessary adjustments or repairs.
and views of others.	Demonstrates flexibility in assigned shared responsibilities.
	Interacts well with individuals from diverse backgrounds and cultures while refraining from discriminatory practices. (ex. Gender)
Professionalism: Students will exhibit professionalism through observances of a code of	The student will have to show the ability and proper attire, to project professionalism in the industrial/ mechatronics field.
ethics, a sense of responsibility, good habits, and a positive attitude.	Be eager for a lifelong learning career.
• Demonstrate personal and business integrity and ethics.	
 Recognize, manage, and cope with the transitions of change. 	
• Utilize informational resources for lifelong learning.	

College Policies

Policy Type	Policy Description
Attendance Policy	Williamsburg Technical College does not require specific attendance in a course. Acknowledging that participation supports student success in coursework, however, individual instructors may set attendance guidelines for the course. Those specific guidelines must be included in the course syllabus. (See Syllabus Addendum provided by the instructor.)
	In addition, students must attend during the first two weeks of class or inform the instructor of their intent to attend to remain on the class roster. If no prior arrangements have been made and the student does not attend during the first two weeks following the semester start date, the student will be dropped as a "no show" from that course following the second week of class. Class rosters will be final as of the end of the second week of classes.
	Students may withdraw from a class at any time by completing a withdrawal form in the Student Services Office. A student can only receive a "WP" grade if withdrawal is completed in the Student Services Office prior to the last date to receive a "WP" grade published in the academic calendar. Students who fail to withdraw by the specified time will receive a letter grade for the course. For specific procedures related to this policy, refer to WTC Procedure D-23.1.
Policy Type	Policy Description
Policy for Students with Disabilities	The Student Affairs Division provides counseling and support services which help students with disabilities to pursue academic programs of their choice and participate fully in campus life.
	The AVP for Student Affairs can arrange counseling, special parking, priority registration, and other reasonable services needed by students with disabilities. Students with disabilities are encouraged to contact the AVP for Student Affairs to discuss needs and concerns as they arise.
Policy for Academic Misconduct	All forms of academic dishonesty including, but not limited to, cheating on tests, plagiarism, collusion, and falsification of information will call for discipline. See the Student Code & Grievance Procedure in the Williamsburg Technical College Catalog for details.

The College operates on the semester hour system, following symbols are used in grading: A Excellent B Above Average C Average D Passing F Failure I Incomplete WF Withdrawal while failing WP Withdrawal while passing Policy for Class Safety and Emergencies Injuries must be reported to the AVP for Student A immediately. Insurance claim forms are available in Student Affairs division. Please refer to the college catalogue for more information on how Williamsbu Technical College addresses safety and emergency in For additional information, contact Student Affairs 843.355.4162. Students taking coursework at off-site locations are responsible for reading and adhering to all safety instructions and guidance at the off-site location. Health Services and First Aid	and the
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Williamsburg Technical College is a commuter instituterefore, infirmary facilities are not provided. Basifor minor injuries is available, and first aid kits are levarious departments of the College. Major illness of will be treated by health professionals. The campus located adjacent to Williamsburg Regional Hospital Each student is covered by accident insurance at no additional cost. This group insurance covers the student on campus and during college-sponsored groups.	first aid ocated in injury is