

GENERAL ENGINEERING (GE)

Course Descriptions

GE 101. Technical Computer Applications. 3 Credit Hours.

Technical Computer Applications is an introduction to the use of personal computers. Topics of this course include PC hardware, operating systems, word processing, spreadsheets, presentation software, computer aided design, and the Internet.

Prerequisites: Reading Proficiency

GE 122. Engineering Design and Development. 3 Credit Hours.

Students will work in teams to design and build solutions to authentic engineering problems. Student teams will make progress reports to their peers, mentor and instructor, and will present their research paper and defend their projects to a panel of engineers, business leaders and instructors for professional review and feedback.

Prerequisites: GE 121 and EGR 147 or ME 121 with minimum grades of "C"; or ME 151 and EGR 100 with minimum grades of "C"

GE 131. Engineering Technology Orientation. 1 Credit Hour.

Engineering Technology Orientation introduces students to college-level thinking skills, interpersonal skills, effective study skills, and college services necessary for academic and professional success in engineering technology. Students will also be exposed to career opportunities and responsibilities in various fields of technology.

Prerequisites: Reading Proficiency

GE 135. Blueprint Reading for Engineering Technicians. 2 Credit Hours.

Blueprint Reading for Engineering Technicians covers mechanical drawings, electrical drawings, and electrical schematics and introduces Geometric Dimensioning and Tolerancing (GDT). Topics include reading specifications from the drawing, understanding basic symbols, and interpreting the drawings for producing parts.

Prerequisites: Reading Proficiency

GE 140. Industrial Occupations Fundamentals. 3 Credit Hours.

Industrial Occupations Fundamentals teaches students concepts tied to basic skills within the manufacturing industry. Topics include measurement systems, measurement tools, and basic calculations in mechanical and electrical applications. Safety in the workplace and professional skills are introduced.

Prerequisites: Reading Proficiency

GE 141. OSHA 10. 1 Credit Hour.

OSHA 10 introduces basic safety and health information to entry-level workers in general industry occupations. Occupational Safety and Health Administration (OSHA) general industry training covers a wide range of occupational hazards, including risks related to walking and working surfaces, materials handling, bloodborne pathogens, fires, and machinery. Students completing this course will receive the OSHA 10 card.

Prerequisites: Reading Proficiency

GE 240. Product Design and Fabrication. 4 Credit Hours.

Product Design and Fabrication presents students with a real-world engineering design challenge. Engineering technology students from a variety of disciplines work together to define problems, evaluate possible solutions, and build a functional prototype.

Prerequisites: ME 151 or EE 134 or EGR 100 or ME 111 with minimum grades of "C" or department approval, and Reading Proficiency

GE 290. Workplace Learning: General Engineering. 1-6 Credit Hours.

Workplace Learning: General Engineering provides the student the opportunity to apply theory and skills learned in the classroom, learn new skills, and explore career possibilities while supervised by a professional in the field and a faculty member. Students will observe and participate in the functions of the industry to enhance their preparation for entering the field. Minimum 50 hours per credit hour in the workplace throughout the term.

Prerequisites: Department approval and Reading Proficiency