

# CIT

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## Courses

### **CIT 100 Introduction to Engineering and Engineering Technologies**

**2 Credits. 1 Lecture Hour. 3 Lab Hours.**

A course that prepares students for success in Engineering fields and Engineering Technologies fields including Biomedical, Civil, Environmental, Electrical, Industrial, and Mechanical. Topics include: investigating academic and career pathways; and building skills in measurement, data collection and graphing, problem solving, research, and basic computation.

Prerequisites: MAT 093 or appropriate placement

### **CIT 105 OSHA 10 General Industry Safety**

**1 Credit. 1 Lecture Hour. 0 Lab Hour.**

A review of OSHA requirements governing electrical safe work practices at manufacturing and service facilities. Topics include: requirements outlined in OSHA 29 CFR Part 1910 and NFPA Standard 70E. Students who complete the course successfully receive OSHA 10 certification.

Prerequisites: None

### **CIT 110 Introduction to Information Technologies**

**2 Credits. 1 Lecture Hour. 3 Lab Hours.**

A course that prepares students for success in Information Technology fields. Topics include: investigating career pathways; and building skills in problem solving, research, basic computation, and other foundational concepts.

Prerequisites: None

### **CIT 120 Introductory Mathematics for Engineering Applications**

**5 Credits. 4 Lecture Hours. 2 Lab Hours.**

A course on math used within the context of engineering applications.

Topics include: algebraic manipulations of engineering equations, trigonometry, vectors and complex numbers, sinusoids, systems of equations, differentiation, integration, and differential equations.

Prerequisites: ENG 085 and MAT 126 or MAT 152 or MAT 153 or appropriate placements

### **CIT 130 Engineering Programming with MATLAB**

**3 Credits. 2 Lecture Hours. 3 Lab Hours.**

A course on foundation skills in computer programming, using the MATLAB language and environment, for students in engineering technologies majors who have no programming experience. Topics include: variables, arrays, conditional statements, loops, functions, plots, and data acquisition and analysis.

Prerequisites: MAT 125 or appropriate placement

### **CIT 150 Applied Technology Studies: Advanced Sta**

**1-27 Credits. 1-27 Lecture Hour. 0 Lab Hour.**

Students complete courses or training programs or earn certifications that develop expertise in engineering technologies fields, and may receive up to 27 credit hours for these programs/certifications.

Prerequisites: Program Chair consent

Instructor Consent Required

### **CIT 190 Career Preparation: Engineering and Information Technologies**

**1 Credit. 1 Lecture Hour. 0 Lab Hour.**

A course on career planning and exploration for students in Engineering Technologies and Information Technologies fields. Topics include: self assessment, career research, resume development, interview skills, job search strategies, and cooperative education policies and procedures.

Prerequisites: ENG 085 and MAT 124, or appropriate placements

### **CIT 250 Engineering Community**

**2 Credits. 1 Lecture Hour. 3 Lab Hours.**

Students participate in instructor-facilitated community service experiences to engage high school students and teachers in STEM (Science/Technology/Engineering/Mathematics) classroom activities that address applied engineering concepts.

Prerequisites: Instructor consent

Instructor Consent Required