

ETI-ENGINEERING TECHNOLOGY: INDUSTRIAL

ETI 1110C Introduction to Quality Assurance (3 Credits)

This course provides a survey of the skills that are necessary to ensure that production and manufacturing systems meet quality system requirements as defined by businesses and customers. This course prepares students for an assessment leading to the Manufacturing Skill Standards Council Certified Production designation. (MSSC,CPT)

ETI 1420C Manufacturing Processes and Materials (3 Credits)

This course introduces students to the various functions of manufacturing, industry, and production processes. This course prepares students for assessment leading to the Manufacturing Skill Standards Council Certified Production Technician designation (MSSC,CPT)

ETI 1701C Industrial Safety (3 Credits)

This course covers the historical aspects of industrial safety. It also reviews the Occupational Safety and Health Administration (OSHA) laws and regulations. This course prepares students for an assessment leading to the Manufacturing Skill Standard Council Certified Production Technician designation (MSSC-CPT).

ETI 1843C Motors and Controls (2 Credits)

This course explores the theory and application of AC and DC motors, types of single-phase motors, three-phase power, three-phase motors, remote and local control, forward and reversing motor starters, and various motor control circuits. DC drives and variable-frequency drives are included with control applications. Wiring and troubleshooting exercises of electric three-phase motor control circuits are emphasized in the laboratory.

Prerequisite: C or higher in EET 1084C

ETI 1949 Engineering Technology Internship (1-3 Credits)

Manufacturing Internship is designed for students seeking hands-on experience in real-world industrial settings. Students will immerse themselves in practical application, preparing them for successful careers in the manufacturing sector. Through these industry internships, students gain valuable experience and build a strong foundation for a rewarding career in manufacturing.

Prerequisite: C or higher in ETD 1320C, EET 1084C, ETM 1010C, ETI 1420C, ETI 1110C, ETI 1701C

ETI 2950C Capstone in Manufacturing (3 Credits)

This course builds on the knowledge and skills gained throughout the advanced manufacturing program, providing students with a comprehensive understanding of advanced manufacturing principles and practices. Students will work collaboratively in teams to solve real-world challenges by designing innovative solutions using industry-standard tools and technologies. Guided by instructors and industry mentors, students will develop critical thinking, problem-solving, and project management skills to tackle complex manufacturing problems. From designing automated systems to optimizing production processes, students will have the opportunity to apply their creativity and technical expertise, making significant contributions to the field of advanced manufacturing. The course culminates in a comprehensive capstone project that showcases students' ability to apply advanced manufacturing principles and techniques to solve real-world challenges.

Prerequisite: C or higher in ETS 2544C and ETS 1540C (both may also be taken as a corequisite)