

ETI: ENGINEERING TECH INDUST

Courses	Credit(s)	Contact	Lab
ETI 1110. INTRODUCTION TO QUALITY ASSURANCE. INTRODUCTION TO QUALITY ASSURANCE This course defines the role of quality in an industrial environment. Topics include the use of quality management techniques, quality philosophies, process development, techniques used for evaluation, approaches used on continuous operations, methods used to control quality, the responsibility of quality assurance during engineering, and manufacturing, and the International Organization for Standardization (ISO) series of standards.	3	3	0
ETI 1622. CONCEPTS OF LEAN MANUFACTURING AND SIX SIGMA. CONCEPTS OF LEAN MANUFACTURING AND SIX SIGMA Prerequisite: ETI 1110 This course introduces the basic principles and theories of lean manufacturing. Lean manufacturing involves identifying and eliminating non-value-adding activities in design, production, and supply chain management. The coverage includes topics related to cost reduction, work-free manufacturing, continuous flow, kaizen, the 5s's, value stream mapping, modular manufacturing, and Overall Equipment Effectiveness (OEE).	3	3	0
ETI 1644. PRODUCTION AND INVENTORY CONTROL. PRODUCTION AND INVENTORY CONTROL In this course, students will learn how to use manufacturing planning and control systems to coordinate material, labor, capacity and other resources to optimize manufacturing operations. Students also learn the key features of automated systems that can be used to manage the supply chain process. The course will cover production planning and inventory control including scheduling, MRP, and capacity planning.	3	3	0
ETI 1701. INDUSTRIAL SAFETY. INDUSTRIAL SAFETY This course focuses on the theories and principles of occupational safety and health in a practical and useful real world job related setting. The major topics include the occupational safety and health administration (OSHA) compliance, safety standards, code enforcement, ergonomic hazards, mechanical hazards, falling, lifting, electrical hazards, fire hazards, industrial hygiene, radiation, noise, emergencies, and environmental safety.	3	3	0
ETI 2420. MANUFACTURING MATERIALS AND PROCESSES. MANUFACTURING MATERIALS AND PROCESSES This course provides coverage of the characteristics, fundamentals, and manufacturing properties of materials, including metal alloys, polymers, ceramics, and composites. Metal casting, Shaping, and forming processes are covered along with the machines needed for manufacturing.	3	3	0
ETI 2943. PRACTICUM IN TECH INDUSTRY. PRACTICUM IN TECH INDUSTRY This is a planned work-based experience that provides students with an opportunity to fine-tune skill sets learned in course work and enhance workplace skills through supervised practical experiences related to their career objectives. The number of credit hours awarded will be determined by faculty as described in current articulation agreements. May be repeated for credit up to a maximum of 21 hours, but grade forgiveness cannot be applied.	1-3	variable	

ETI 3116. QUALITY ASSURANCE WITH TESTING METHODS. 3 3 0

QUALITY ASSURANCE WITH TESTING METHODS Prerequisites: Minimum grade of C in MAC 2312 A broad understanding of the quality assurance and control of electronic products, covering all aspects of quality assurance for components used in electronic devices, improve product quality without increasing product cost. Apply Six Sigma process, methodologies, and tools to develop robust engineering products, processes, and services. Minimum grade of C required if used to satisfy Electrical and Computer Engineering Technology, B.S. Degree requirement.

ETI 4448C. APPLIED PROJECT MANAGEMENT. 3 2 1
APPLIED PROJECT MANAGEMENT Prerequisite: Admission to the B.A.S. Software Development program This course covers statement of work, activity decisions, timelines, scheduling, and resource allocation methods in software development projects. Techniques will be appropriate for large and small projects within commercial, academic, or non-profit organizations (Special Fee: \$12.00).