ENGINEERING TECHNOLOGY/INDUSTRIAL

ETI 1411, Manufacturing Processes I Manufacturing Processes I
3 hrs., 3 crs.,
A study of methods and materials used in industrial production of nonchip producing processes, including casting, forging, welding, stamping, shearing, brake, powder, metallurgy, electrical discharge machining, high energy rate forming.

ETI 1420, Manufacturing Processes Manufacturing Processes
3 hrs., 3 crs.,
(Offered spring). A study of methods, materials, and machines used in industrial production processes, including but not limited to machining, casting, forging, welding, sheetmetal, and additive manufacturing.

ETI 1420H, Honors Manufacturing Processes Honors Manufacturing Processes
3 hrs., 3 crs.,
(Offered spring). A study of methods, materials, and machines used in industrial production processes, including but not limited to machining, casting, forging, welding, sheetmetal, and additive manufacturing.

ETI 1701, Industrial Safety Industrial Safety
3 hrs., 3 crs.,
(Offered fall). 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.

ETI 1949, Manufacturing Internship Manufacturing Internship
3.33 hrs., 1 cr.,
(Offered fall and spring). This course is a structured and supervised internship for students in the Engineering Technology program of study. On-the-job experience will be integrated with scheduled class meetings to review and compare work experiences with respect to workplace skills and technical expectations.

ETI 2001C, Applied Mechanics Applied Mechanics
4 hrs., 3 crs.,
(Offered fall). This course takes a hands-on approach to the identification, use, care of tools, equipment, blueprint reading, geometric dimensioning, and tolerances used in all aspects of operations and manufacturing.

ETI 2110, Introduction to Quality Assurance Introduction to Quality Assurance
3 hrs., 3 crs.,
(Offered spring). This course defines the role of quality in an industrial environment. Topics include the use of quality management techniques and quality philosophies, process development, techniques used for evaluation, approaches used on continuous operations, methods used to control quality, and the International Organization for Standardization (ISO) series of standards. The method of analyzing data through statistical process control (SPC) charts is also covered.

ETI 2110H, Honors Introduction to Quality Assurance Honors Introduction to Quality Assurance
3 hrs., 3 crs.,
(Offered spring). This course defines the role of quality in an industrial environment. Topics include the use of quality management techniques and quality philosophies, process development, techniques used for evaluation, approaches used on continuous operations, methods used to control quality, and the International Organization for Standardization (ISO) series of standards. The method of analyzing data through statistical process control (SPC) charts is also covered.

ETI 2460C, Composites Fundamentals Composites Fundamentals
4 hrs., 3 crs.,
$216.00 lab fee. (Offered fall). This course introduces the student to the theory/ materials/ and basic manufacturing processes of composites. This course focuses on basic composite theory/ including fiber reinforcements/matrix systems/ fabrication techniques/ and safety.

ETI 2464C, Advanced Composites Advanced Composites
4 hrs., 3 crs.,
$256.00 lab fee. This course introduces the student to common core materials used in composites manufacturing and to the inspection and repair of composites structures. This course focuses on basic inspection and repair theory, including damage detections and repair instructions.

ETI 2622, Concepts of Lean Six Sigma Manufacturing Concepts of Lean Six Sigma Manufacturing
3 hrs., 3 crs.,
This course is an overview of lean Six Sigma initiatives. Students will learn the value of using data to identify and eliminate process problems. Various projects will require students to redefine roles and procedures within a group in order to continuously generate the results wanted. This course is not a certification course, but a summary of the components of a Lean Six Sigma program.