

ENGINEERING TECHNOLOGY (ENGT)

ENGT 12005 APPLICATIONS IN COMPUTER-AIDED DESIGN 2 Credit Hours

Course for training on the use of a popular, computer-aided drafting and design software. Practice with the advanced features of the software applicable to modern design in the graphics, mechanical, industrial and electronics fields.

Prerequisite: None.

Schedule Type: Lecture

Contact Hours: 2 lecture

Grade Mode: Standard Letter

ENGT 20192 INTERNSHIP IN ENGINEERING TECHNOLOGY (ELR) 2 Credit Hours

(Repeatable for credit) Supervised internship experience in approved business or industrial environment relative to the student's major. The internship experience must be for a period of at least 12 consecutive weeks at 25 hours per week, or 20 hours per week for 15 weeks, totaling not less than 300 hours. Most co-ops occur during the summer.

Prerequisite: Sophomore standing; and special approval.

Schedule Type: Practical Experience

Contact Hours: 20 other

Grade Mode: Standard Letter

Attributes: Experiential Learning Requirement

ENGT 22000 STATISTICAL PROCESS CONTROL 4 Credit Hours

Process variability, process monitoring, statistical methods using control charts for variables and attributes; acceptance sampling plans; process capability, process adjustment, process improvement.

Prerequisite: Special approval.

Schedule Type: Lecture

Contact Hours: 4 lecture

Grade Mode: Standard Letter

ENGT 22003 SUPERVISION AND LABOR RELATIONS 5 Credit Hours

Practical methods and techniques for improving supervision and labor relations in industry. Personnel and performance evaluation, implementing policy, labor contracts, collective bargaining, wage and salary administration.

Prerequisite: None.

Schedule Type: Lecture

Contact Hours: 5 lecture

Grade Mode: Standard Letter

ENGT 22006 ECONOMIC DECISION ANALYSIS 3 Credit Hours

Economic decision making for industrial engineering technology with applications emphasis, estimating economic elements, interest and economic equivalence, methods of comparing alternatives and evaluating replacement alternatives.

Prerequisite: None.

Schedule Type: Lecture

Contact Hours: 3 lecture

Grade Mode: Standard Letter

Attributes: TAG Engineering

ENGT 22009 ENGINEERING TECHNOLOGY PROJECT 2 Credit Hours

A practical, hands-on experience which emphasizes the integration of analytical and design skills acquired in companion courses. Students will work in teams under direct faculty supervision. Engineering communication such as reports and oral presentations are covered. The capstone design projects include creative and challenging projects within the engineering discipline.

Prerequisite: None.

Corequisite: EERT 22014.

Schedule Type: Lecture

Contact Hours: 1 lecture, 2 lab

Grade Mode: Standard Letter

ENGT 22010 COMPUTER INTEGRATED MANUFACTURING 3 Credit Hours

Planning, developing and implementing a strategy to control and coordinate all the engineering production and business operations within a manufacturing enterprise.

Prerequisite: None.

Schedule Type: Lecture

Contact Hours: 3 lecture

Grade Mode: Standard Letter

ENGT 30000 ADVANCED MANUFACTURING 3 Credit Hours

This course will introduce students to the concepts of advanced manufacturing technologies, processes and equipment. Covered topics include automation and process control, flexible manufacturing systems, and manufacturing using additive processes such as 3D printing. Students will learn hands on programming and operation of relevant equipment during the laboratory sessions.

Prerequisite: Junior standing.

Schedule Type: Combined Lecture and Lab

Contact Hours: 2 lecture, 2 lab

Grade Mode: Standard Letter

ENGT 33095 SPECIAL TOPICS IN ENGINEERING TECHNOLOGY 1-4 Credit Hours

Special topics of immediate interest in engineering technology.

Prerequisite: Junior standing.

Schedule Type: Lecture

Contact Hours: 1-4 lecture

Grade Mode: Standard Letter

ENGT 42003 LEAN MANUFACTURING, SIX SIGMA AND OPERATIONS TECHNOLOGY 3 Credit Hours

Designed to provide a better understanding of the components and underlying philosophy of Theory of Constraints, Lean, and Six Sigma and how the elements and philosophies work together to support an companies operational plan.

Prerequisite: None.

Schedule Type: Lecture

Contact Hours: 3 lecture

Grade Mode: Standard Letter

ENGT 43092 ENGINEERING TECHNOLOGY PRACTICUM (ELR) 1-3 Credit Hours

(Repeatable for a maximum to 3 credit hours) Supervised work experience. One credit hour for 50 work hours.

Prerequisite: None.

Schedule Type: Practical Experience

Contact Hours: 3.33-10 other

Grade Mode: Satisfactory/Unsatisfactory

Attributes: Experiential Learning Requirement