

ENGINEERING TECHNOLOGY (ENTC)

ENTC 1271 Introduction to Engineering Technology 2 Credits (2 Lec, 1 Lab)

This course is an introduction to engineering technology including career exploration, history and applications of engineering technology, tools, and safety practices.

Course Type: Technical

ENTC 1323 Strength of Materials 3 Credits (2 Lec, 2 Lab)

This course includes the study of the relationship between externally applied forces and internally induced stresses and the resulting deformations in structural members.

Course Type: Technical

ENTC 1343 Statics 3 Credits (2 Lec, 2 Lab)

This course includes a study of the composition and resolution of forces and the equilibrium of forces acting on structures. Includes the concepts of friction, moments, couples, centroids, and moment of inertia.

Prerequisite(s): SCIT 1418 or PHYS 1301/1101 or PHYS 2325/2125, Reading level 7, Writing level 7, Math level 8

Course Type: Technical

ENTC 1347 Safety and Ergonomics 3 Credits (2 Lec, 3 Lab)

The course covers Occupational Safety and Health Administration (OSHA) safety guidelines including electrical, chemical, and hazardous material safety. Ergonomic considerations to include repetitive motion, plant layout, and machine design as well as industrial safety awareness, accident cost and prevention, and workman's compensation issues.

Course Type: Technical

ENTC 1349 Reliability and Maintainability 3 Credits (2 Lec, 3 Lab)

This course includes equipment reliability and maintainability. Includes development and assessment of maintenance programs.

Prerequisite(s): INTC 1307, Reading level 7, Writing level 7, Math level 8

Course Type: Technical

ENTC 2331 Manufacturing Materials 3 Credits (2 Lec, 3 Lab)

This course includes the identification of materials used in manufacturing including metals, plastics, composite materials, concrete, ceramics, and wood. Includes application of material properties and quality standards for selection of materials to manufacture components.

Prerequisite(s): METL 1401, Reading level 7, Writing level 7, Math level 8

Course Type: Technical

ENTC 2380 Cooperative Education - Engineering Technology, General 3 Credits (1 Lec, 20 Lab)

This work-based learning course includes career-related activities encountered in the student's area of specialization offered through an individualized agreement among the College, employer, and student. Under the supervision of the College and the employer, the student combines classroom learning with work experience. Includes a lecture component and the theory and application of instrumentation test equipment. This course requires a work-based learning experience of 320 hours during the semester it is offered.

Prerequisite(s): ENTC 1347, METL 1401, ENTC 1343 or ENGR 2301, DFTG 1313 or ENGR 1304, Reading level 7, Writing level 7, Math level 8

Course Type: Technical