

CIVIL ENGINEERING TECHNOLOGY (CET)

CET 150 (3 credit hours)

Civil Engineering Graphics

This course provides the opportunity for the student to learn the basic theory necessary to generate and understand typical civil engineering working drawings. The student will develop graphic communication skills using current industry standard software. Lecture: 2 credits (30 contact hours); Laboratory: 1 credit (45 contact hours).

Pre-requisite: CAD 100.

Attributes: Technical

Components: LAB: Laboratory, LEC: Lecture

CET 200 (3 credit hours)

Civil Engineering Materials

The course will provide a practical look at current practice in the use of materials for civil engineering applications. Students will learn test procedures, design considerations, and overall evaluation methods for these materials. The course will include the study of soils, aggregates, concrete, and asphalt cement. Lecture: 2 credits (30 contact hours); Laboratory: 1 credit (45 contact hours).

Pre-requisite: Consent of Instructor.

Attributes: Technical

Components: LAB: Laboratory, LEC: Lecture

CET 210 (3 credit hours)

Infrastructure Analysis and Design

Covers infrastructure for civil engineering technology students, including different types of building loads and their effect upon the various materials used by architects, engineers and technologists. Introduces infrastructure construction techniques utilizing applicable materials and methods. Utilization of industry manuals, specifications, and computer programs to familiarize the student with current technology. Lecture: 3 credits (45 contact hours).

Pre-requisite: Consent of Instructor.

Attributes: Technical

Components: LEC: Lecture

CET 220 (4 credit hours)

Intermediate Surveying

The course will include the application of surveying practices for route surveying for highways, construction staking, and topographic surveys. Students will perform deed research and evaluation, convert outdated deed descriptions into current measurements, and prepare record plats.

Pre-requisite: SMT 110 or Consent of Instructor Lecture: 3 credits (45 contact hours); Laboratory: 1 credit (45 contact hours).

Components: LAB: Laboratory, LEC: Lecture

CET 260 (3 credit hours)

Hydrology and Drainage

Students will be introduced to the fundamentals of hydrology, including hydraulics of open and closed systems, water quality and drainage. Characteristics of pressures and flows in pipes, storm water runoff, culvert and ditch flow will be studied. Lecture: 2 credits (30 contact hours); Laboratory: 1 credit (45 contact hours).

Pre-requisite: Consent of Instructor.

Attributes: Technical

Components: LAB: Laboratory, LEC: Lecture

CET 280 (3 credit hours)

Highway Design

Students will be introduced to the fundamentals of highway design. Different components involved in designing a typical highway, including planning, surveying, mapping, and preliminary and final design will be explored using computer design software. Lecture: 2 credits (30 contact hours); Laboratory: 1 credit (45 contact hours).

Pre-requisite: CET 150 or Consent of Instructor.

Attributes: Technical

Components: LAB: Laboratory, LEC: Lecture

CET 295 (1-4 credit hours)

Independent Problems

Provide a problem or special project, approved by the instructor, as an opportunity for independent study for Civil Engineering Technology students. Research or study current jobs or previous experience in Civil Engineering related topics. Complete required courses by studying the same materials and topics present during a normal semester offering; thereby allowing the student to complete the required course during a semester that it is not offered. This course may be repeated to a maximum of six credits. Lecture: Variable. Laboratory: Variable.

Pre-requisite: Consent of instructor.

Attributes: Technical

Components: LAB: Laboratory, LEC: Lecture