Engineering Technology: Civil Engineering

Award Type: Associate in Science

The associate degree in civil engineering technology provides a background for employment in a civil engineering office or for field work in support of and under the direction of a professional engineer. Typical employment is in surveying, field crews recording data to prepare subdivision maps, street and highway proposals and grading maps.

The graduate of the Associate in Science in Engineering Technology: Civil Engineering will:

- Develop familiarity with the components, materials, types, and methods of building construction; terminology as applied to codes, foundations, concrete, light frame wood, heavy timber, soils, and the structural elements.
- Develop graphic communication skills including orthographic projection; detail and assembly drawings; auxiliaries; sections; dimensioning; and surface development.
- Become familiar with the origin, nature and application of the fundamental concepts and principles of physics and its application to the field of civil engineering technology.
- Become familiar with the principles of physical geology including the identification of rocks and minerals.
- Be able to interpret topographical and geological maps.
- Become familiar with land forms and structures.
- Become familiar with force systems and equilibrium condition and develop the ability to use these principles to solve engineering problems.

Program Requirements

Required core courses (22 units):

Course Number	Course Title	Units
ARCH 131	Building Construction Materials and Methods	3.0
ENGR 152	Statics	3.0
GEOL 100	Physical Geology	4.0
MATH 181	Calculus 1	4.0
PHYS 141	General Physics 1	4.0
PHYS 142	General Physics 2	4.0