

## 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