

Civil Engineering Technology Program Educational Objectives

The purpose of the Civil Engineering Technology program is to develop, in each student, the degree of technical competence that would allow the graduate to be employed as a civil engineering technician in any engineering company. The educational objectives are the following:

1. Mechanical Ability

The ability to relate to various systems and design processes in the engineering/architectural/construction/surveying environment is the desired outcome. Developing, analyzing, and visualizing various types of materials, engineering drawings and specifications are required activities. Mechanical ability is developed by Technical Specialty Courses and Basic Sciences.

2. Accuracy

The ability to solve problems properly and systematically is the desired outcome. An understanding of mathematics and the design process is required. Accuracy is developed by Basic Sciences and Basic specialty Courses.

3. Manual Dexterity

The ability to use a wide variety of equipment ranging from standard slump cones to CAD systems to sophisticated theodolites, comparable to those used by civil engineering/architectural/construction/surveying technicians, is the desired outcome. A respect for the proper care and maintenance of equipment is also developed. Manual dexterity is developed by Technical Specialty Courses, specifically lab-oriented courses.

4. Creativity & Confidence

The ability to develop and communicate one's own designs and engineering principles in various forms is the desired outcome. The variety of design courses allows for independent student solutions to various engineering/architectural/ construction/surveying problems proposed to the students. Creativity is developed by Technical Specialty Courses. Confidence is developed by Humanities Courses, Communication Courses, and Technical Specialty Courses.

5. Effective Communication & Team Building

The ability to confidently communicate engineering and design information and concepts by oral presentation or in technical reports, in a manner that would gain approval and support, is the desired outcome. Another desired outcome is the attainment of proper social adjustment, which requires positive interaction among colleagues and customers. This interaction outcome is reinforced through teambuilding activities embedded within our technical curriculum.

6. Technical Currency

The ability of present and past students to attain a technically current education is the desired outcome. An understanding of new equipment, methods of design, code modifications, and the impact of the computer on the technology are required. Technical currency is developed by Technical Specialty Courses and Basic Sciences.

Besides the technical and professional skills that our students desire to achieve, another objective is continuing their education for a bachelor degree or beyond. The college has articulation agreements with many universities in the area and Ohio. For instance the University of Akron maintains an accredited Bachelor of Science in Engineering Technology (BSET) and is located within an easy commuting distance for prospective students from this area. Our graduates have been accepted into the BSET program at the University of Akron, with a minimum of difficulty. Many have gone on to graduate with the BSET degree.