

# Civil Engineering Technology – Construction Management

## Student Learning Outcomes

**Upon graduation from an accredited ACCE Associate Degree program, graduates shall be able to:**

1. Demonstrate effective communication, both orally and in writing.
2. Demonstrate the ability to estimate quantities and costs for the bidding process in a construction project.
3. Demonstrate the ability to schedule a basic construction project.
4. Demonstrate the ability to use current technology related to the construction process.
5. Interpret construction documents (contracts, specifications, and drawings) used in managing a construction project.
6. Apply basic principles of construction accounting.
7. Use basic surveying techniques used in building layout.
8. Discuss basic principles of ethics in the construction industry.
9. Identify the fundamentals of contracts, codes, and regulations that govern a construction project.
10. Recognize basic construction methods, materials and equipment.
11. Recognize basic safety hazards on a construction site and standard prevention measures.
12. Recognize the basic principles of structural design.
13. Recognize the basic principles of mechanical, electrical and piping systems.

Note: In defining the Learning Outcomes for Associate Degree programs, the following verbs consistent with Bloom's taxonomy are used:

**Apply:** (i.e., Demonstrate, Interpret, Use) At this level, students begin to put the information they are learning into context. Here they are able to interpret ideas across multiple situations, or utilize the content in a new way.

**Understand:** (i.e., Recognize, Discuss, Identify) At this level, students demonstrate that they understand the content by explaining, summarizing, classifying, or translating the given information.

**Remember:** The lowest level of the taxonomy requires students to do very little with the information they are learning. They may be asked to recall, list, or name an idea or concept.

## **Program Educational Objectives**

- Prepare Civil Engineering Technology - Construction Management graduates to successfully enter and pursue baccalaureate degrees.
- Prepare Civil Engineering Technology - Construction Management technicians to enter and advance professionally in technical and management positions in the local AEC industry.
- Prepare Civil Engineering Technology – Construction Management graduates to effectively apply project documentation, building methods and materials, as well as estimate project costs and schedule building activities.

## **Program Goals**

The goals of the program seek to facilitate success of the objectives and are as follows:

- Provide pathways to baccalaureate programs such that a student has a smooth transition from Cincinnati State. This will be measured by the percentage of graduates pursuing advanced degrees and their satisfaction with the transition (on the 1-yr Graduate Survey).
- Provide a quality education that is both relevant and rigorous such that a student has a smooth transition into the construction workforce. This will be measured by the percentage of graduates answering such a question on the 1-yr Graduate Survey.
- Provide a quality education that allows advancement into an organization or the industry. This will be measured by the average salary ranges between the 1-yr and 3-yr Graduate Survey.
- Increase visibility of the program within the local Cincinnati area, state, and national level. This will be measured by the participation of faculty on industry boards, accreditation bodies, and other scholarly work.