

# ARCHITECTURE: CONSTRUCTION TECHNOLOGY CERTIFICATE

|                      |                       |           |
|----------------------|-----------------------|-----------|
| ARCH 2040            | Environmental Systems | 3         |
| <b>Total Credits</b> |                       | <b>28</b> |

**Program code:** CTEC-CC

**Location:** Norwalk, Three Rivers

## Program Description

The Construction Technology certificate program extends opportunities to students desiring a career in the construction industry by preparing them with essential entry-level skills. This two-semester certificate program includes a broad range of courses required for basic performance in offices which support the construction industry, including construction companies, architecture, and engineering firms. Entry level knowledge and competencies in drafting, CAD, construction materials, documents & codes, and project management principles, prepare graduates with industry entry-level skills along with being prepared to transfer into associate or bachelor's degree programs in construction management.

## Learning Outcomes

1. Utilize traditional and emerging digital media for 2- and 3-dimensional graphic representation to develop, refine, and communicate construction graphics and implement written industry documentation used to convey typical project information.
2. Demonstrate knowledge of building systems including materials, assemblies, mechanical systems, and life safety features.
3. Practice execution of industry forms and documents, code and regulation research, and preparation of typical industry submittals.
4. Demonstrate and apply construction management skills including site logistics, critical path, procurement, scheduling, and equipment labor.
5. Perform and communicate effectively as a contributing individual or team member and understand the importance of workplace safety and ethics, and effective teamwork.
6. Appreciate the value of life-long learning and intellectual growth as an integral part of a career in construction technology due to ever-evolving components and systems.

## Certificate Requirements

| Code                    | Title                                   | Credits |
|-------------------------|---|---------|
| <b>Required Courses</b> |   |         |
| ARCH 1002               | Architecture of the World               | 3       |
| ARCH 1005               | Architecture Fundamentals I             | 4       |
| ARCH 1008               | Construction Materials and Methods      | 3       |
| ARCH 1011               | Building Codes and Ordinances           | 3       |
| ARCH 1129               | Fundamentals of Construction Management | 3       |
| ARCH 2015               | Construction Documents                  | 3       |
| ARCH 2229               | Construction Estimating                 | 3       |
| ARCH 2030               | CAD 3D Architectural Parametric         | 3       |