

CONSTRUCTION OPERATIONS, SHORT-TERM CERTIFICATE



Education and training for employment for entry level work as construction inspectors, field technicians, and office support. Students will be introduced to the construction industry and how to read drawings in order to verify work completion. Elective courses enable students to learn the fundamentals in specific areas that are geared towards specific areas of employment.

Financial Assistance funds cannot be applied towards this program. Request for eligibility to utilize Financial Assistance funds for this program is currently pending.

This certificate will be automatically awarded when the certificate requirements are completed. If you do not want to receive the certificate, please notify the Office of the Registrar at RegistrarOffice@tri-c.edu.

Learn more about how certificate credits apply to the related degree.

Program Admission Requirements

- High School Diploma/GED.
- ENG-0995 Applied College Literacies or appropriate score on English placement test.
- Recommend MATH-0965 Intermediate Algebra, with "C" or higher, or qualified Math placement.

First Semester		Credit Hours
CNST-1281	Construction Engineering Orientation	3
CNST-1290	Construction Print Reading	2
CNST-1750	Construction Safety	3
Credit Hours		8
Second Semester		Credit Hours
CNST-1410	Architectural CAD I	3
Select one of the following:		3
ENG-1010	College Composition I	
ENG-101H	Honors College Composition I	
Electives (select from below list)		4-6
Credit Hours		10-12
Total Credit Hours		18-20

Recommended Electives

Code	Title	Credit Hours
CNST-1510	Green Building & Sustainability I	3
CNST-1660	Material Testing	2
CNST-1670	Highway Inspection	2
CNST-1740	Fundamentals of Geographic Information Science ¹	3
CNST-1760	General Industry Safety	2
CNST-1770	Hazardous Waste Operations and Emergency Response	2
CNST-2110	Basic Survey Practices ²	3
CNST-2131	Construction Methods and Materials	3
CNST-2830	Cooperative Field Experience	1-3
CNST-18XX or 28XX	Special Topics in Construction Engineering Technology	1-3
CNST-2XXX	2000 level CNST Elective	3
IT-1090	Computer Applications	3
MATH-1540	Trigonometry (or higher)	3

¹ MATH-1410 Elementary Probability and Statistics I, MATH-1470 Modern Mathematics for Business and Social Science I or MATH-1530 College Algebra is required as a prerequisite for this course.

² MATH-1540 Trigonometry is required as a prerequisite for this course.

MATH-1140, MATH-1141, MATH-1200, MATH-1270, and MATH-1280 can no longer count towards fulfilling the college-level mathematics requirement. These courses were re-classified as developmental mathematics by the state of Ohio in 2016. Tri-C established a 5-year transitioning window for students who had completed these courses prior to 2016 to apply them towards meeting graduation requirements, which expired in Summer 2021. It is highly recommended to see a counselor to determine the appropriate math required for your current major.

Program Learning Outcomes

- Use critical thinking skills to anticipate, identify, respond to, and resolve problems.
- Use verbal and written skills with technological tools to clearly and effectively communicate, using appropriate protocols to project stakeholders.
- Obtain OSHA 30 certification for the construction industry.
- Read and interpret various types of construction drawings including commercial, structural, civil, and highway drawings.
- Utilize CAD software to develop working drawings for a domestic structure.
- Explain professional practices, current issues, and developments in construction, including stages of a construction project, management roles and responsibilities, and concepts for estimating, planning and scheduling.