

UTILITIES TECHNOLOGY, ASSOCIATE OF APPLIED SCIENCE



The Associate of Applied Science degree in Utilities Technology is designed to provide students with a background in essential utilities construction and operations. Students will learn about telecommunications/fiber, water, wastewater, and gas system operations and standard construction tasks that includes fiber splicing and training on how to operate equipment such as aerial lifts, directional boring machines, hydrovac trucks, and mini-excavators safely. Students will learn about aerial and underground construction methods and utility components. This program includes potential for paid internships in the utilities industry.

Prepare yourself for careers that keep communities and cities thriving by making sure utility systems are working!

Program contact: Learn more

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify the Office of the Registrar at RegistrarOffice@tri-c.edu.

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

Related Degrees and Certificates

- Construction Engineering Technology, Associate of Applied Science
- Construction Project Management, Certificate of Proficiency
- Construction Operations, Short-Term Certificate
- Utilities Safety and Operations Fundamentals, Certificate of Proficiency

Program Admission Requirements

- High School Diploma/GED.
- ENG-0995 Applied College Literacies or appropriate score on English placement test.
- MATH-0965 Intermediate Algebra, with "C" or higher, or qualified Math placement.
- Completion of CNST-1751 Construction Safety, CNST-1290 Construction Print Reading
- 18 years or older
- Possess a valid Ohio Driver's license
- Drug-free

Program Learning Outcomes

1. Incorporate safety awareness, principles and practice in every aspect of work and as a way of life.
2. Earn OSHA 30 for the Construction Industry Outreach credential.
3. Apply the knowledge of aerial and underground construction equipment to safely install aerial fiber and underground conduits/pipe for fiber, water, wastewater, and gas utilities.
4. Perform basic operational and troubleshooting tasks in telecommunications, water, wastewater, and gas distribution/ collection utilities systems.
5. Complete tasks and projects on schedule through the effective use of time management, appropriate math skills, and teamwork that fosters inclusion, synergized efforts in problems identification, and troubleshooting for successful resolution of problems towards the achievement of set goals and objectives.
6. Perform common managerial and maintenance tasks required in maintaining a utility system.
7. Model ethical behavior in professional engagements.
8. Communicate effectively and efficiently with diverse individuals and teams, all levels of employees, customers, and suppliers by means of verbal, written (memos, reports, emails, etc.), graphics, symbols, and effective listening skills and using appropriate technology.

Suggested Semester Sequence

First Semester		Credit Hours
CNST-1281	Construction Engineering Orientation	3
CNST-1290	Construction Print Reading	2
CNST-1751	Construction Safety	2
CNST-1640	Utility Locating and Traffic Flagging	2
EET-1220	Circuits and Electronics for Automation	3
Select one of the following:		3
ENG-1010	College Composition I	
ENG-101H	Honors College Composition I	
Credit Hours		15
Second Semester		Credit Hours
CNST-2050	Advanced Construction Safety	3
CNST-2131	Construction Methods and Materials	3
CNST-2220	Telecommunication Systems	3
MATH-1530	College Algebra	4
UT-2000	Equipment Operations I	3
Credit Hours		16
Summer Session		Credit Hours
Select on of the following		1-3
CNST-2830	Cooperative Field Experience	
CNST-XXXX: CNST Elective		
Credit Hours		1-3
Third Semester		Credit Hours
CNST-2230	Gas Pipeline Systems	3
CNST-2240	Water and Wastewater Systems	3
IT-1090	Computer Applications	3
UT-2100	Aerial Construction	3
UT-2200	Underground Construction I	3
Credit Hours		15

Fourth Semester

Select one of the following	3
COMM-1010 Fundamentals of Speech Communication	
ENG-1020 College Composition II	
ENG-102H Honors College Composition II	
ENG-2151 Technical Writing	
ESCI-1410 Physical Geology	3
ESCI-141L Lab in Physical Geology	1
UT-2010 Equipment Operations II	3
UT-2210 Underground Construction II	3
Arts and Humanities/Social and Behavioral Sciences requirement	3
Credit Hours	16
Total Credit Hours	63-65

¹ If student anticipates completing a bachelor degree, recommend student complete CNST-2990 Construction Estimating & Cost Analysis and ACCT-1311 Financial Accounting prior to transferring.

² Students are encouraged to complete a commercial driver license (CDL) program.