

APPLIED INDUSTRIAL TECHNOLOGY (COMMUNICATION TRANSPORT SYSTEMS), ASSOCIATE OF APPLIED SCIENCE

Students must be currently working in a registered apprenticeship program in conjunction with the U.S. Department of Labor, Bureau of Apprenticeship and Training. The apprenticeship program prepares the student to earn a journey-level status in Communication Transport Systems, as well as earn an Associate of Applied Science degree in Applied Industrial Technology. A four year apprenticeship emphasizes the skill set required to be a highly skilled craftsman. Trade specifics include low voltage wiring, wireless communication transport system and other transmission mediums including fiberglass.

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.

Program Admission Requirements

- High School Diploma/GED
- 18 years old; Valid driver's license

Other Information

- Students must be currently working in a registered apprenticeship program in conjunction with the U.S. Department of Labor, Bureau of Apprenticeship and Training. A four year apprenticeship emphasizes the skill set required to be a highly skilled craftsman.

Program Learning Outcomes

This program is designed to prepare students to demonstrate the following learning outcomes:

1. Use active listening and communication skills to ensure that the work is being performed correctly and efficiently.
2. Communicate the scope of their work with crew members, general contractors, and end users.
3. Work independently and as a member of a crew that is focused on a common goal within your scope of authority.
4. Work in accordance with the Communication Workers of America's (CWA) Code of Ethics.
5. Use appropriate personal protective equipment, tools and work safely in accordance with OSHA, employer and customer safety protocols, and policies.

6. Apply basic math and electrical knowledge to transport cabling systems in an efficient manner following industry standards and safe work practices.
7. Apply math, electrical and mechanical knowledge and interpret prints to install, terminate, test and commission basic copper and fiber transport systems using best practices, industry standards, and safe work practices.
8. Apply math, electrical, mechanical, equipment and advanced copper and fiber knowledge to install, test, commission, and service end user equipment and systems using best practices, industry standards and safe work practices.
9. Plan, lead and manage the implementation of the scope of work to complete the project to the end users' satisfaction.

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.

Suggested Semester Sequence

First Semester		Credit Hours
ATCW-1010	Worker Safety for Communication Transport	2
ATCW-1020	Communications Worker History	2
ATCW-1040	Basic Information Systems	2
ATCW-xxxx	Elective	2
MATH-1240	Contemporary Mathematics (or higher)	3
Select one of the following:		3
ENG-1010	College Composition I	
ENG-101H	Honors College Composition I	
Credit Hours		14
Second Semester		Credit Hours
ATCW-1210	Introduction to Information Transport - Copper	2
ATCW-xxxx	Elective	2
ISET-1410	Applied Electricity I	3
DEGR-xxxx	General Elective (See List Below)	3
Select one of the following:		3
BADM-xxxx	Business Elective	
CNST-xxxx	CNST Elective	
Select one of the following:		3
IT-1090	Computer Applications	
IT-109H	Honors Computer Applications	
Credit Hours		16
Third Semester		Credit Hours
ATCW-1250	Infrastructure Layout	2
ATCW-1270	Grounding and Bonding	1
ATCW-2010	Information Transport - Fiber	2
ATCW-2050	Audio Visual	1
DEGR-xxxx	General Elective (See List Below)	3

Social & Behavioral Science/Natural and Physical Science requirement (see AAB/AAS Degree Requirements)	3
Select one of the following:	3
BADM-xxxx Business Elective	
CNST-xxxx CNST Elective	
Credit Hours	15
Fourth Semester	
AIT-2990 Contracting in a Diverse World	3
ATCW-2070 Information Transport Circuits	1
ATCW-2120 Advanced Systems Transport	2
COMM-1000 Fundamentals of Interpersonal Communication	3
DEGR-xxxx General Elective (See List Below)	3
Arts & Humanities requirement	3
Credit Hours	15
Total Credit Hours	60

Electives

Recommended courses to fulfill elective requirements:

Code	Title	Credit Hours
ACCT-1011	Business Math Applications	3
BADM-1050	Professional Success Strategy	3
BADM-1301	Small Business Management	3
BADM-1210	Labor-Management Relations	3
CNST-1731	Construction Print Reading	3
CNST-2131	Construction Methods and Materials	3
CNST-2631	Construction Management Systems	3
CNST-2990	Construction Estimating & Cost Analysis	3
ESCI-1310	Physical Geography	3
ESCI-1410	Physical Geology	3
FIN-1061	Personal Finance	3
GEN-1010	Personal Development	2
HLTH-1230	Standard First Aid and Personal Safety	1
HLTH-1100	Personal Health Education	3
COMM-1010	Fundamentals of Speech Communication	3
COMM-101H	Honors Speech Communication	3
DEGR-xxxx	Arts & Hum/Soc & Beh Sci/Nat & Phy Sci	