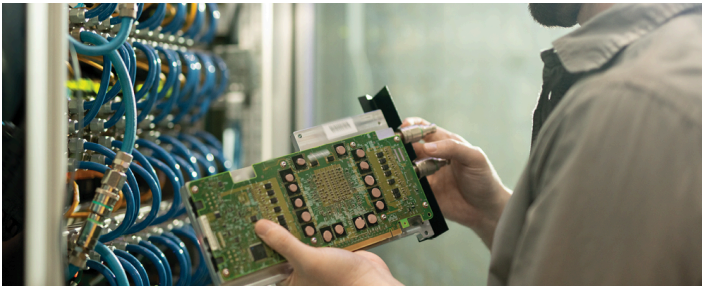# ELECTRICAL/ELECTRONIC ENGINEERING TECHNOLOGY WITH A CONCENTRATION IN COMPUTER NETWORKING HARDWARE, ASSOCIATE OF APPLIED SCIENCE

Students will be prepared for careers dealing with network hardware systems analysis, planning and implementation. Students will gain the necessary skills to design, build and maintain small to medium size networks and manage network hardware systems. Skills acquired will assist students in preparing to take industry certification exams.

Program contact: Learn more

There will be no new students accepted in the program for Academic year 2025-2026. Core curriculum for this program has been incorporated into the Information Technology - Networking Software program. Current students should reach out to an academic counselor to create an academic plan to complete the Electrical/Electronic Engineering Technology - Networking Hardware program by the end of the Summer 2027 semester or to create an academic plan to transition to the redesigned Information Technology - Networking Software program.

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

- Information Technology - Networking Software Associate of Applied Business degree
- Cisco, Short-Term Certificate
- IT Support Professional, Certificate of Proficiency

Related Training and Credentials

- Cisco Network Support Technician
- CompTIA Certified Computer Support Specialist

Program Admission Requirements

- High School Diploma/GED not required, but highly recommended
- ENG-0995 Applied College Literacies or appropriate score on English Placement Test.
- MATH-0955 Beginning Algebra or qualified Math Placement.

Program Outcomes

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

1. Communicate effectively utilizing verbal, written and presentation skills in person, on the phone, and via the Internet with all levels in the organization.
2. Communicate appropriately with diverse audiences to provide high level customer service to internal and external constituents.
3. Work independently and effectively within a team to meet the needs of the organization.
4. Operate within diverse business cultures with professionalism, integrity and accountability.
5. Demonstrate ethical behavior and recognize legal issues.
6. Adapt to change within their profession by demonstrating a commitment to continuous learning and the flexibility to deal with different requirements from different clients with a wide range of personality styles and prior computer knowledge.
7. Plan, organize, and prioritize tasks in order to meet project deadlines.
8. Apply analytical, critical and creative thinking and problem solving/troubleshooting techniques to develop effective information technology solutions in the context of business needs.
9. Apply fundamental concepts of computer hardware, operating systems, business applications, networking, security, backup and recovery procedures to troubleshoot, maintain and support PC hardware and software to ensure an efficient and effective operation.
10. Apply knowledge of network hardware, the Open Systems Interconnection (OSI) Model, protocols, diagnostic tools and troubleshooting to assist in the design, selection of equipment, installation, configuration, testing and optimization of an organization's production network to ensure appropriate access and response time.
11. Use knowledge of network backup hardware and software to implement, maintain, and execute an organization disaster recovery plans.
12. Sit for A+ and CCNA certification exam.

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Suggested Semester Sequence

Summer Start		Credit Hours
EET-1015	Introduction to Computer Maintenance and Repair	3

IT-1025	Information Technology Concepts for Programmers	3
Select one of the following:		3
IT-1090	Computer Applications	
IT-109H	Honors Computer Applications	
	Credit Hours	**9**
First Semester		
BADM-1020	Introduction to Business	3
EET-1035	Operating Systems and Software for PC Technicians	4
EET-1055	Computer Hardware Support	4
ITNT-2300	Networking Fundamentals	3
	Credit Hours	**14**
Second Semester		
BADM-1050	Professional Success Strategies	3
ITNT-2320	Network Administration I	3
MATH-1190	Algebraic and Quantitative Reasoning (or higher Approved Ohio Transfer 36 Mathematics course) [1]	3
Select one of the following:		3
ENG-1010	College Composition I	
ENG-101H	Honors College Composition I	
	Credit Hours	**12**
Third Semester		
EET-1303	Cisco I	3
EET-2303	Cisco II	3
Arts and Humanities/Social and Behavioral Sciences requirement		3
Select one of the following:		3
COMM-1010	Fundamentals of Speech Communication	
COMM-101H	Honors Speech Communication	
	Credit Hours	**12**
Fourth Semester		
EET-2313	Cisco III	3
ITNT-2990	Networking Capstone	3
ITNT-2370	Network Security Fundamentals	3
Natural and Physical Sciences requirement (lecture)		3
Select one of the following:		1-3
IT-2XXX	IT or ITNT elective	
IT-2830	Cooperative Field Experience	
	Credit Hours	**13-15**
	Total Credit Hours	**60-62**

[1] MATH-1100 Mathematical Explorations or MATH-1240 Contemporary Mathematics taken prior to Fall 2024 will be accepted to meet mathematics requirement for this program.

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.