

# 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

**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 Technical Training Institute
- 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 appropriate score on Math Placement Test.

## 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.

## 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 Strategy	3
ITNT-2320	Network Administration I	3
Select one of the following:		3
ENG-1010	College Composition I	
ENG-101H	Honors College Composition I	
MATH-1XXX	1000-level MATH course or higher	3
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