

Computer Networking and Electronics Technology: Network Maintenance and Digital Technologies

Award Type: Certificate of Achievement

The associate in science degree or certificate option offer students a comprehensive program in networking essentials, basic electronics and computer applications.

The graduate of the Certificate of Achievement in Computer Networking and Electronics Technology: Network Maintenance and Digital Technologies will:

- Demonstrate a fundamental mastery of knowledge and the use of electronic equipment in electrical, digital and analog circuits.
- Use computer simulation and design software to conduct, analyze and interpret electrical, digital and analog circuits.
- Make calculations involving various electrical laws, formulas and principles for predicting circuit parameters using algebra and trigonometry required for electronics.
- Use research strategies to acquire information pertinent to the solution of electronic circuits and systems.
- Write technical laboratory reports with conclusions.
- Demonstrate understanding of how computers communicate with each other and the methods employed to ensure that the communications is reliable.
- Modify operating parameters of infrastructure network devices to meet network requirements.

Program Requirements

A total of 24 units is required for the certificate.

Required core courses (18 units):

Course Number	Course Title	Units
EL 105	PC Preventive Maintenance and Upgrading	3.0
EL 106	Networking Essentials 1	3.0
EL 107	Networking Essentials 2	3.0
EL 108	Networking Essentials 3	4.0
EL 118	Fundamentals of DC and AC Circuits Analysis	3.0
EL 119	Fundamentals of DC and AC Circuits Analysis Laboratory	2.0

Plus a minimum of 3 units selected from the following:

Course Number	Course Title	Units
BUS 101	Introduction to Business	3.0
CBIS 101	Computer Concepts & Applications	3.0
CS 102	Introduction to Computing with HTML	3.0
EL 125	Digital Devices and Circuits and	3.0
EL 126	Digital Devices and Circuits Lab	2.0

Plus a minimum of 3 units selected from the following:

Course Number	Course Title	Units
CS 111	Fundamentals of Programming 1	4.0
EL 370	SkillsUSA	3.0