

ELECTRICAL TECHNOLOGY, CISCO CERTIFIED NETWORK INSTALLATION ASSOCIATE - ASSOCIATE IN SCIENCE

Plan Code: 2992

This program will prepare students for entry-level employment in the networking installation and troubleshooting industry. This includes industries that implement internet protocol for factory automation and residential automation control systems. Upon completion the student will be able to install, maintain, and repair CISCO networking equipment and systems in a safe and workmanlike manner.

Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Develop procedures for the successful installation, maintenance and troubleshooting of CISCO related network infrastructure.

Program Admission Requirement

New students must attend an Electrical orientation prior to enrollment. The program requisite is in place to ensure the safety and health awareness of LBCC electrical students.

Program Requirements

This degree requires the completion of General Education coursework plus the following:

Code Number	Course Title	Units
REQUIRED COURSES		
ELECT 204	First Semester Fundamentals of DC Electricity	4
ELECT 209	Second Sem Fund of Motors/Generators	4
ELECT 212	Third Semester Fund of AC Electricity	4
ELECT 214	Fourth Semester AC Principles & Pract	4
ELECT 225	Algebra and Trigonometry for Technicians	4
ELECT 240	Introduction to National Electrical Code	3
ELECT 242	Electrical Code-Grounding	1.5
ELECT 253	OSHA Standards for Construction Safety	2
ELECT 435A	Motor Control Wiring and Troubleshooting	2
Subtotal Units		28.5
IN ADDITION, complete the following:		
CISCO 250	Communications Cabling Installation	2
CISCO 251	Introduction to Networks	2
CISCO 252	Switching Routing Wireless Essentials	2
CISCO 253	Enterprise Network Security Automation	2
Subtotal Units		8
Required Subtotal		36.5
Complete one of the following: ¹		19-39

LBCC General Education (Plan A) (<https://lbcc-public.courseleaf.com/academic-requirements/general-education-transfer-degree-certificate-requirements/general-education-plans/plan-a/>)

CSU GE Breadth (Plan B) (<https://lbcc-public.courseleaf.com/academic-requirements/general-education-transfer-degree-certificate-requirements/general-education-plans/plan-b/>)

IGETC Pattern (Plan C) (<https://lbcc-public.courseleaf.com/academic-requirements/general-education-transfer-degree-certificate-requirements/general-education-plans/plan-c/>)

Electives (as needed to reach 60 degree-applicable units) ²

Minimum Degree Total **60**

¹ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.

² Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.