

# ELECTRICAL TECHNOLOGY, HIGH VOLTAGE TEST TECHNICIAN - ASSOCIATE IN SCIENCE

Plan Code: 2995

The Associate in Science in High Voltage Test Technician will prepare students for entry-level employment in the high voltage testing and certification industry. NETA (InterNational Electrical Testing Association) is a group of member companies that specialize in the testing and certification of high voltage power distribution equipment. Upon completion of the Electrical Technology Certificate of Achievement and the High Voltage Test Technician Certificate of Achievement, the student will be able to test, maintain, and repair high voltage electrical 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 maintenance and troubleshooting of high voltage electrical switchgear, over-current protection and power distribution systems.

## 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
<b>REQUIRED COURSES</b>		
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
<b>Subtotal Units</b>		<b>28.5</b>
IN ADDITION, complete the following:		
ELECT 250	Electrical Code-Industrial	3
ELECT 256	High Voltage Safety Awareness	1
ELECT 265	Conductors	2
ELECT 266	Circuit Breakers	2
ELECT 267	Switchgear and Switchboards	2
ELECT 268	Transformers	2

<b>Subtotal Units</b>	<b>12</b>
<b>Required Subtotal</b>	<b>40.5</b>
Complete one of the following: <sup>1</sup>	19-39
LBCC General Education (Plan A) ( <a href="https://lbcc-public.courseleaf.com/academic-requirements/general-education-transfer-degree-certificate-requirements/general-education-plans/plan-a/">https://lbcc-public.courseleaf.com/academic-requirements/general-education-transfer-degree-certificate-requirements/general-education-plans/plan-a/</a> )	
CSU GE Breadth (Plan B) ( <a href="https://lbcc-public.courseleaf.com/academic-requirements/general-education-transfer-degree-certificate-requirements/general-education-plans/plan-b/">https://lbcc-public.courseleaf.com/academic-requirements/general-education-transfer-degree-certificate-requirements/general-education-plans/plan-b/</a> )	
IGETC Pattern (Plan C) ( <a href="https://lbcc-public.courseleaf.com/academic-requirements/general-education-transfer-degree-certificate-requirements/general-education-plans/plan-c/">https://lbcc-public.courseleaf.com/academic-requirements/general-education-transfer-degree-certificate-requirements/general-education-plans/plan-c/</a> )	
Electives (as needed to reach 60 degree-applicable units) <sup>2</sup>	
<b>Minimum Degree Total</b>	<b>60</b>

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

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

# ELECTRICAL TECHNOLOGY, HIGH VOLTAGE TEST TECHNICIAN - CERTIFICATE OF ACHIEVEMENT

---

Plan Code: 3995

The High Voltage Test Technician Certificate of Achievement will prepare students for entry-level employment in the high voltage testing and certification industry. NETA (InterNational Electrical Testing Association) is a group of member companies that specialize in the testing and certification of high voltage power distribution equipment. Upon completion of the Electrical Technology Certificate of Achievement and the High Voltage Test Technician Certificate of Achievement, the student will be able to test, maintain, and repair high voltage electrical systems in a safe and workmanlike manner.

## Program Student Learning Outcomes

- Develop procedures for the successful maintenance and troubleshooting of high voltage electrical switchgear, over-current protection and power distribution systems.

## 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

Code Number	Course Title	Units
<b>REQUIRED COURSES</b>		
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
<b>Subtotal Units</b>		<b>28.5</b>
IN ADDITION, complete the following:		
ELECT 250	Electrical Code-Industrial	3
ELECT 256	High Voltage Safety Awareness	1
ELECT 265	Conductors	2
ELECT 266	Circuit Breakers	2
ELECT 267	Switchgear and Switchboards	2
ELECT 268	Transformers	2
<b>Subtotal Units</b>		<b>12</b>
<b>Total Units</b>		<b>40.5</b>

# HIGH VOLTAGE TEST TECHNICIAN - CERTIFICATE OF ACHIEVEMENT

---

Plan Code: 3935

The High Voltage Test Technician Certificate of Achievement will prepare students for entry-level employment in the high voltage testing and certification industry. NETA (InterNational Electrical Testing Association) is a group of member companies that specialize in the testing and certification of high voltage power distribution equipment. Upon completion of the Electrical Technology Certificate of Achievement and the High Voltage Test Technician Certificate of Achievement, the student will be able to test, maintain, and repair high voltage electrical systems in a safe and workmanlike manner.

## Program Student Learning Outcomes

- Develop procedures for the successful maintenance and troubleshooting of high voltage electrical switchgear, over-current protection and power distribution systems.

## Program Requirements

Code Number	Course Title	Units
<b>REQUIRED COURSES</b>		
ELECT 250	Electrical Code-Industrial	3
ELECT 256	High Voltage Safety Awareness	1
ELECT 265	Conductors	2
ELECT 266	Circuit Breakers	2
ELECT 267	Switchgear and Switchboards	2
ELECT 268	Transformers	2
<b>Total Units</b>		<b>12</b>