

# TECHNICAL & VOCATIONAL PROGRAMS

## Electrical/Electronics Technology

### D 35 22 0 Diploma

The Electrical/Electronics Technology curriculum is designed to provide training for persons interested in the installation and maintenance of electrical/electronic systems found in residential, commercial and industrial facilities. Training, most of which is hands-on, includes such topics as AC/DC theory, basic wiring practices, electronics, programmable logic controllers, industrial motor controls, the National Electric Code, and other subjects as local needs require. Upon completion of this program, students will receive a diploma and certificates in Electrical/Electronics Technology. Graduates should qualify for a variety of jobs in the electrical/electronics field as an on-the-job trainee or apprentice, assisting in the layout, installation, and maintenance of electrical/electronic systems.

#### General Education Courses

<i>Communications</i>	<i>[prerequisite]</i>	<i>Seq</i>	<i>Class</i>	<i>Lab</i>	<i>Credits</i>
ENG 102 Applied Communications II		F1	3	0	3
COM 101 Workplace Communications		S1	3	0	3

#### Major Courses: Core

<i>Core courses</i>	<i>[prerequisite]</i>	<i>Seq</i>	<i>Class</i>	<i>Lab</i>	<i>Credits</i>
ELC 112 DC/AC Electricity		F1	3	6	5
ELC 113 Basic Wiring I		F1	2	6	4
ELC 121 Electrical Estimating		F1	1	2	2
ELC 125 Diagrams & Schematics		F1	1	2	2
ELC 127 Software for Technicians		F1	1	3	2
ELC 114 Basic Wiring II		S1	2	6	4
ELC 117 Motors and Controls		S1	2	6	4
ELC 118 National Electrical Code		S1	1	2	2
ELC 119 NEC Calculations		S1	1	2	2
ELC 215 Electrical Maintenance		S1	2	3	3

#### Other Required Hours

<i>Courses</i>	<i>[prerequisite]</i>	<i>Seq</i>	<i>Class</i>	<i>Lab</i>	<i>Credits</i>
CIS 111 Basic PC Literacy		F1	2	0	2
COE 111 Co-op Work Experience I	[2.0 GPA/9 CrHrs in Major]	S1	0	10	1

**Total Semester Hours Required for Diploma:**

**39**

## Electrical/Electronics Technology

### C 35 22 0I Certificate: Electrical/Electronics Technology Level I

The Electrical/Electronics Technology curriculum is designed to provide training for personnel interested in the installation and maintenance of electrical/electronic systems found in residential, commercial, and industrial facilities. Training, most of which is hands-on, includes such topics as AC/DC theory, basic wiring practices, electronics, programmable logic controllers, industrial motor controls, the National Electric Code, and other subjects as local needs require. Upon completion of this program, students will receive a certificate in Electrical/Electronics Technology. Graduates should qualify for a variety of jobs in the electrical/electronics field as an on-the-job trainee or apprentice, assisting in the layout, installation, and maintenance of electrical/electronic systems.

*Prerequisites: None*

#### Major Courses: Core

<i>Core courses</i>	<i>[prerequisite]</i>	<i>Seq</i>	<i>Class</i>	<i>Lab</i>	<i>Credits</i>
ELC 112 DC/AC Electricity		F1	3	6	5
ELC 113 Basic Wiring I		F1	2	6	4
ELC 121 Electrical Estimating		F1	1	2	2
ELC 125 Diagrams & Schematics		F1	1	2	2

**Total Semester Hours Required for Certificate:**

**13**

### C 35 22 0II Certificate: Electrical/Electronics Technology Level II

The Electrical/Electronics Technology curriculum is designed to provide training for personnel interested in the installation and maintenance of electrical/electronic systems found in residential, commercial, and industrial facilities. Training, most of which is hands-on, includes such topics as AC/DC theory, basic wiring practices, digital electronics, programmable logic controllers, industrial motor controls, the National Electric Code, and other subjects as local needs require. Upon completion of this program, students will receive a certificate in Electrical/Electronics Technology. Graduates should qualify for a variety of jobs in the electrical/electronics field as an on-the-job trainee or apprentice, assisting in the layout, installation, and maintenance of electrical/electronic systems.

*Prerequisites: Electrical/Electronics Technology Level One*

#### Major Courses: Core

<i>Core courses</i>	<i>[prerequisite]</i>	<i>Seq</i>	<i>Class</i>	<i>Lab</i>	<i>Credits</i>
ELC 114 Basic Wiring II		S1	2	6	4
ELC 117 Motors and Controls		S1	2	6	4
ELC 118 National Electrical Code		S1	1	2	2
ELC 119 NEC Calculations		S1	1	2	2
ELC 215 Electrical Maintenance		S1	2	3	3

**Total Semester Hours Required for Certificate:**

**15**



**College of The Albemarle**  
 Diploma-Electrical/Electronics Technology  
 (D 35 22 0)  
 Graduation Check Sheet – 2009-2011 Catalog

Listed below are the requirements for your degree program. It is your responsibility to keep this sheet up-to-date and review it with your advisor to know what you need to graduate. Complete the Graduation Application one semester prior to the intended date of graduation.

Title	Sequence	Credit	Grade	Semester
<b>I. GENERAL EDUCATION COURSES</b>				
<b>Communications</b>				
ENG 102 Applied Communications II	F1	3	_____	_____
COM 101 Workplace Communications	S1	3	_____	_____
<b>II. MAJOR COURSES:</b>				
<b>A. CORE</b>				
ELC 112 DC/AC Electricity	F1	5	_____	_____
ELC 113 Basic Wiring I	F1	4	_____	_____
ELC 121 Electrical Estimating	F1	2	_____	_____
ELC 125 Diagrams & Schematics	F1	2	_____	_____
ELC 127 Software for Technicians	F1	2	_____	_____
ELC 114 Basic Wiring II	S1	4	_____	_____
ELC 117 Motors & Controls	S1	4	_____	_____
ELC 118 National Electric Code	S1	2	_____	_____
ELC 119 National Electric Code Calculations	S1	2	_____	_____
ELC 215 Electrical Maintenance	S1	3	_____	_____
<b>C. OTHER MAJOR HOURS</b>				
CIS 111 Basic PC Literacy	F1	2	_____	_____
COE 111 Co-op Work Experience I [P=2.0 GPA/9 CrHrs in Major]	S1	1	_____	_____
<b>Total Semester Hours Required for Diploma</b>		<b>39</b>		



**College of The Albemarle**  
Electrical/Electronics Technology  
Certificate-(C 35 22 01)  
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**Certificate – Electrical/Electronics Technology: (C35220 I)**

<b>Title</b>	<b>Sequence</b>	<b>Credit</b>	<b>Grade</b>	<b>Semester</b>
<b>II. MAJOR COURSES: CORE</b>				
ELC 112 DC/AC Electricity	F1	5	_____	_____
ELC 113 Basic Wiring I	F1	4	_____	_____
ELC 121 Electrical Estimating	F1	2	_____	_____
ELC 125 Diagrams & Schematics	F1	2	_____	_____
<b>Total Semester Hours Required for Diploma</b>		<b>13</b>		



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Certificate-(C 35 22 0II)  
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<b>Title</b>	<b>Sequence</b>	<b>Credit</b>	<b>Grade</b>	<b>Semester</b>
<b>II. MAJOR COURSES: CORE</b>				
ELC 114 Basic Wiring II	S1	4	_____	_____
ELC 117 Motors and Controls	S1	4	_____	_____
ELC 118 National Electric Code	S1	2	_____	_____
ELC 119 NEC Calculations	S1	2	_____	_____
ELC 215 Electrical Maintenance	S1	3	_____	_____
<b>Total Semester Hours Required for Diploma</b>		<b>15</b>		