

# ELECTRICAL TECHNOLOGY



## Electrical Technology Program

The Electrical Technology program focuses on preparing you for various entry-level electrical positions in industry and the building trades. The study of electrical theory in the classroom and the practical application of that theory in labs provide the foundation of this program.

Once enrolled in the Electrical Technology program, you'll be required to achieve a minimum grade of C in the technical core and in those courses selected as technical electives.

### CREDENTIALS OFFERED

#### Diplomas

- Construction Electrician
- Industrial Electrician

#### Certificates

- Electrician Construction
- Electrician Trainee Level I
- Electrician Trainee Level II
- Electrical Motor Control Level I
- Electrical Motor Control Level II
- Residential Electricity I
- Residential Electricity II

### Job Outlook

According to the Department of Labor, jobs as electricians are growing faster than the national average at 23%. The national median annual salary is \$48,250 and \$23.20 hourly.

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KENTUCKY COMMUNITY AND TECHNICAL COLLEGE SYSTEM

# ELECTRICAL TECHNOLOGY

## DIPLOMA

### ELECTRICAL TECHNOLOGY GENERAL EDUCATION

#### AREA 1 Credits

Written Communication OR.....	3
Heritage/ Humanities OR.....	(3)
Oral Communications .....	(3)

#### AREA 2

MAT 116 Technical Mathematics OR .....	3
MAT 126 Technical Algebra & Trigonometry OR .....	(3)
Higher Level Mathematics Course .....	(3)
<b>Subtotal</b> .....	6

#### TECHNICAL CORE

ELT 110 Circuits I .....	5
ELT 114 Circuits II .....	5
EET 127 Electrical Capstone .....	1
EET 250 National Electric Code .....	4
EET 264 Rotating Machinery .....	2
EET 265 Rotating Machinery Lab .....	2
EET 270 Electrical Motor Controls I .....	2
EET 271 Electrical Motor Controls I Lab .....	2
*Computer/Digital Literacy OR .....	3
If any student successfully tests out of Computer / Digital Literacy, he or she must take an additional technical course approved by the Electrical Program Coordinator.....	
	(3)
<b>Subtotal</b> .....	25

#### INDUSTRIAL ELECTRICIAN TRACK

EET 154 Electrical Construction I AND.....	2
EET 155 Electrical Construction I Lab AND .....	2
EET 252 Electrical Construction II AND.....	2
EET 253 Electrical Construction II Lab OR.....	2
EET 254 Electrical Construction AND .....	(3)
EET 255 Electrical Construction Lab .....	(4)
EET 272 Electrical Motor Controls II AND.....	2
EET 273 Electrical Motor Controls II Lab AND .....	2
EET 276 Programmable Logic Controllers AND .....	2
EET 277 Programmable Logic Controllers Lab OR .....	2
EET 278 Electrical Motor Controls II and PLCs AND .....	(3)
EET 279 Electrical Motor Controls II and PLCs Lab .....	(4)
Technical Electives* .....	9
<b>Subtotal</b> .....	23-25
<b>Total Credits</b> .....	54-56

#### CONSTRUCTION ELECTRICIAN TRACK

EET 154 Electrical Construction I AND.....	2
EET 155 Electrical Construction I Lab AND .....	2
EET 252 Electrical Construction II AND.....	2
EET 253 Electrical Construction II Lab OR.....	2
EET 254 Electrical Construction AND .....	(3)
EET 255 Electrical Construction Lab .....	(4)
Technical Electives* .....	10
<b>Subtotal</b> .....	17-18
<b>Total Credits</b> .....	48-49

#### MOTOR CONTROLS ELECTRICIAN TRACK

EET 272 Electrical Motor Controls II AND.....	2
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EET 273 Electrical Motor Controls II Lab AND .....	2
EET 276 Programmable Logic Controllers AND .....	2
EET 277 Programmable Logic Controllers Lab OR .....	2
EET 278 Electrical Motor Controls II and PLC's AND .....	(3)
EET 279 Electrical Motor Controls II and PLC's Lab.....	(4)
FPX 100 Fluid Power AND .....	3
FPX 101 Fluid Power Lab OR.....	2
ELT 265 Applied Fluid Power .....	(3)
Technical Electives*.....	7
<b>Subtotal</b> .....	17-20
<b>Total Credits</b> .....	48-51

#### CERTIFICATES

##### ELECTRICAL CONSTRUCTION Credits

ELT 110 Circuits I.....	5
ELT 114 Circuits II.....	5
EET 150 Transformers.....	2
EET 151 Transformers Lab .....	1
EET 250 National Electric Code .....	4
EET 154 Electrical Construction I AND .....	2
155 Electrical Construction I Lab AND .....	2
EET 252 Electrical Construction II AND .....	2
EET 253 Electrical Construction II Lab OR .....	2
EET 254 Electrical Construction AND .....	(3)
EET 255 Electrical Construction Lab.....	(4)
EET 264 Rotating Machinery AND .....	2
EET 265 Rotating Machinery Lab AND .....	2
EET 270 Electrical Motor Controls I AND .....	2
EET 271 Electrical Motor Controls I Lab OR .....	2
EET 268 Rotating Machinery Electrical Motor Controls I AND .....	(3)
EET 269 Rotating Machinery Electrical Motor Controls I Lab.....	(4)
<b>Total Credits</b> .....	31-34

##### ELECTRICIAN TRAINEE LEVEL I

ELT 110 Circuits I.....	5
Technical Electives.....	3
<b>Total Credits</b> .....	8

##### ELECTRICIAN TRAINEE LEVEL II

ELT 110 Circuits I.....	5
ELT 114 Circuits II.....	5
Technical Electives.....	3
<b>Total Credits</b> .....	13

##### RESIDENTIAL ELECTRICITY LEVEL I

ELT 110 Circuits I.....	5
ELT 114 Circuits II.....	5
EET 154 Electrical Construction I .....	2
EET 155 Electrical Construction I Lab .....	2
<b>Total Credits</b> .....	14

##### RESIDENTIAL ELECTRICITY LEVEL II

ELT 110 Circuits I.....	5
ELT 114 Circuits II.....	5
EET 154 Electrical Construction I AND .....	2
EET 155 Electrical Construction I Lab AND.....	2
EET 252 Electrical Construction II AND .....	2

EET 253 Electrical Construction II Lab OR .....	2
EET 254 Electrical Construction AND.....	(3)
EET 255 Electrical Construction Lab .....	(4)
EET 250 National Electrical Code.....	4
<b>Total Credits</b> .....	21-22

##### ELECTRICAL MOTOR CONTROL LEVEL I Credits

ELT 110 Circuits I .....	5
ELT 114 Circuits II .....	5
EET 150 Transformers AND .....	2
EET 151 Transformers Lab AND.....	1
EET 264* Rotating Machinery AND .....	2
EET 265* Rotating Machinery Lab OR .....	2
EET 266 Rotating Machinery and Transformers AND ..	(3)
EET 267 Rotating Machinery and Transformers Lab ....	(3)
EET 250 National Electrical Code.....	4
EET 270 Electrical Motor Controls I AND .....	2
EET 271 Electrical Motor Controls I Lab AND.....	2
EET 264* Rotating Machinery AND .....	(2)
EET 265* Rotating Machinery Lab OR .....	(2)
EET 268 Rotating Machinery Electrical Motor Controls I AND.....	(3)
EET 269 Rotating Machinery Electrical Motor Controls I Lab .....	(4)
CPU 150 Computer Fundamentals OR.....	3
CIS 105 Introduction to Computers.....	(3)
<b>Total Credits</b> .....	28-30

\*May be offered in different combinations

##### ELECTRICAL MOTOR CONTROL LEVEL II

ELT 110 Circuits I .....	5
ELT 114 Circuits II .....	5
EET 150 Transformers AND .....	2
EET 151 Transformers Lab AND.....	1
EET 264* Rotating Machinery AND .....	2
EET 265* Rotating Machinery Lab OR .....	2
EET 266 Rotating Machinery and Transformers AND ..	(3)
EET 267 Rotating Machinery and Transformers Lab ....	(3)
EET 250 National Electrical Code.....	4
EET 264* Rotating Machinery AND .....	(2)
EET 265* Rotating Machinery Lab AND.....	(2)
EET 270 Electrical Motor Controls I AND .....	2
EET 271 Electrical Motor Controls I Lab OR .....	2
EET 268 Rotating Machinery Electrical Motor Controls AND.....	(3)
EET 269 Rotating Machinery Electrical Motor Controls I Lab .....	(4)
EET 272 Electrical Motor Controls II AND .....	2
EET 273 Electrical Motor Controls II Lab AND.....	2
EET 276 Programmable Logic Controllers AND .....	2
EET 277 Programmable Logic Controllers Lab OR.....	2
EET 278 Electrical Motor Controls II and PLCs AND.....	(3)
EET 279 Electrical Motor Controls II and PLCs Lab .....	(4)
CPU 150 Computer Fundamentals OR.....	3
CIS 100 Introduction to Computers.....	(3)
<b>Total Credits</b> .....	35-38

Revised: 4/04/2017

Contact Information: Danny Ingram, Program Coordinator/Instructor  
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