

Electrical Construction and Control

Students in the electrical construction and control program learn the basics of electrical wiring used in the installation and maintenance of lighting, appliances, motors, heating, and air conditioning. Training includes the operation, testing, and maintenance of electrical equipment and electronics for skills in electrical controls and solid state devices, as well as computer experience using a programmable controller. Power distribution, industrial maintenance, electrical and service work, installation and service of irrigation equipment, and new construction are some of the areas with employment opportunities for graduates of the two-year electrician program.

The electrical construction and control program has incorporated an employer and student guarantee into its program of study that states: Any “certified” graduate judged to be lacking in technical job skill normally expected of a job-entry level employee will be provided further skill training of up to 14 credit hours, without charge, by Northeast Community College. For more detailed information on this guarantee, contact a program instructor. (Enrollment into this program is limited and is based on the date of application.)

Required Program of Study for Associate of Applied Science Degree (2 years)

<i>Freshman Year</i>

FIRST SEMESTER	
Course	Credits
ELTR 1010 Basic Electricity	3
ELTR 1020 Basic Electricity Lab	2
ELTR 1030 Electrical Wiring I	3
ELTR 1040 Electrical Wiring I Lab	3
ELTR 1050 National Electrical Code I	3
ECON 1010 Personal and Business Finance	2
MATH 1020 Applied Mathematics I	3
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SECOND SEMESTER	
Course	Credits
ELTR 1200 National Electrical Code II	3
ELTR 1210 Electrical Wiring II	3
ELTR 1220 Electrical Wiring II Lab	2
ELTR 1230 Motor Control	2
ELTR 1240 Motor Control Lab	2
ELTR 1250 Blueprint and Cost Estimating	3
HLTH 1710 First Aid	2
MATH 1060 Applied Mathematics II	3
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SUMMER: 12 weeks	
ELTR 1300 Cooperative Internship I	8

<i>Sophomore Year</i>

FIRST SEMESTER	
Course	Credits
ELTR 2000 Motor Repair	2
ELTR 2010 Motor Repair Lab	1
ELTR 2020 Automation Fundamentals	2
ELTR 2030 Automation Fundamentals Lab	2
ELTR 2040 Electrical Energy Conservation I	4
ELTR 2050 Electrical Troubleshooting	4
ELTR 2060 Electrical Troubleshooting Lab	1
ENGL 1050 Career Composition	3
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SECOND SEMESTER	
Course	Credits
ELTR 2210 Control Wiring	3
ELTR 2220 Control Wiring and Solid State Lab	5
ELTR 2230 Electrical Energy Conservation II	3
ELTR 2240 Electrical Energy Conservation II Lab	2
ELTR 2250 Solid State Fundamentals	3
PSYC 1000 Human Relations	2
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