

# Electrical Systems Technology



HEARTLAND  
COMMUNITY COLLEGE

## Certificate

31 Semester Hours

### General Education Requirements

COMM 101	Intro to Oral Communication	3
MATH 109	College Algebra for Math & Science	4
Or		
TMAT 103	Technical Mathematics I*	4
	TOTAL	7

### Technical Core Requirements

ELTC 102	DC Electronics	3
ELTC 103	AC Electronics	3
ELTC 206	Digital Electronics & Microprocessors	3
ELTC 207	Solid State Electronics Troubleshooting & Measurements	3
* Technical Electives		12
	TOTAL	24

### \* Technical Electives

Technical Elective concentrations may be taken from the following groups. Other electives are possible as approved by advisor or department.

### Building Automation

CNST 103	Building Mechanics	3
MAIN 222	Industrial Controllers	3
REEC 110	Green Building Technology	3
REEC 210	Building Automation	3

### Electrical Maintenance

ELTC 212	Automation & Control Electronics	3
MAIN 101	Industrial Electricity and Systems	3
MAIN 201	Electric Wiring & Maintenance	3
MAIN 222	Industrial Controllers	3

### Electronic Systems Technology

ELTC 212	Automation & Control Electronics	3
ELTC 220	Data Communications	3
MAIN 201	Electric Wiring & Maintenance	3
Or		
NETW 208	Data and Cabling Systems	3
NETW 160	Introduction to Networking	3

### Renewable Energy

ELTC 212	Automation & Control Electronics	3
MAIN 102	Mechanical Systems	3
REEC 140	Renewable Energy Concepts I	3
REEC 240	Renewable Energy Concepts II	3

### Program Description

The Electrical Maintenance Technology Certificate is a one-year program designed to prepare graduates for employment or advancement in electrical-related maintenance areas within industry. This program includes introductions to electricity, electronics, digital electronics and solid state electronics, and allows students to select elective courses. Students choosing to continue their education after the Electrical Maintenance Technology Certificate may easily continue into the Electronic Systems Technology or Maintenance Technology Associate in Applied Science degree programs.



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