

Electronic Systems Technology



HEARTLAND
COMMUNITY COLLEGE

Associate in Applied Science 64-66.5 Semester Hours

General Education Requirements

		hrs
COMM 101	Intro to Oral Communication	3
ENGL 101	Composition I	3
MATH 109	College Algebra for Math & Science	4
Or		
TMAT 103	Technical Math I	4
MATH 128	Trigonometry	3
Or		
TMAT 105	Technical Math II	4
BIOL 121	Essentials of Anatomy & Physiology ¹	4
Or		
	Physical Science Elective ²	<u>4</u>
	TOTAL	17-18

Technical Requirements

BUSN 145	Employment Success Strategies	1
CSCI 101	Intro to Computer Info Science	4
ELTC 102	DC Electronics	3
ELTC 103	AC Electronics	3
ELTC 206	Digital Electronics & Microprocessors	3
ELTC 207	Solid State Electronics	
	Troubleshooting & Measurements	3
ELTC 220	Data Communications	<u>3</u>
	TOTAL	20

Electronic Systems Option

CAD 101	Introduction to AutoCAD	3
ELTC 212	Automation & Control Electronics	3
MAIN 201	Electrical Wiring & Maintenance	3
Or		
NETW 208	Data and Cabling Systems	3
MAIN 220	Mechatronics	3
MAIN 222	Industrial Controllers	3
NETW 160	Introduction to Networking	3
TECH 114	Introduction to Technical Graphics	3
	Technical Elective ³	<u>6</u>
	TOTAL	27

Building Automation Option

CAD 101	Introduction to AutoCAD	3
CNST 103	Building Mechanical & Electrical Systems	3
ELTC 212	Automation & Control Electronics	3
MAIN 202	Fluid Power Systems	3
MAIN 222	Industrial Controllers	3
NETW 160	Introduction to Networking	3
REEC 110	Green Building Technology	3
REEC 210	Building Automation	3
	Technical Elective ³	<u>3</u>
	TOTAL	27

Telecommunications Option

		hrs
NETW 121	Networking Fundamentals	3
NETW 122	Routing Protocols and Concepts	3
NETW 123	Local Area Networks	3
NETW 124	Wide Area Networks	3
NETW 150	Workstation Operating Systems	3
NETW 151	PC Hardware Maintenance & Repair	3
NETW 172	Wireless Networking with Security	3
NETW 208	Data and Cabling Systems	3
NETW 283	Introduction to Voice Over IP	<u>3</u>
	TOTAL	27

Biomedical Option

BIOL 191	Biology for Health Careers	3
ELTC 212	Automation and Control	3
HLTH 104	BLS for Healthcare Providers	0.5
HLTH 110	Medical Terminology	3
HLTH 111	Diseases of the Human Body	3
HLTH 202	Professional Issues in Health Care	3
NETW 160	Introduction to Networking	3
NETW 150	Workstation Operating Systems	3
	Technical Elective ^{3,4}	<u>6</u>
	TOTAL	27.5

Program Description

By enrolling in the Electronic Systems Technology program, you gain transferable knowledge and skills while studying in an area where there is rapid growth in employment opportunities. As you progress through your classes, you choose to focus on an Electronic Systems, Building Automation, Telecommunications, or Biomedical option. When you complete this program, you can seek employment as a technician in very broad range of areas including industry, business, health care, communications, utilities, government and more.

¹This is the required science elective if you are planning to complete the Biomedical Option of Electronic Systems Technology AAS degree

²This is the required science elective if you are planning to complete the Electronic Systems, Building Automation, or Telecommunications Options of the Electronic Systems Technology AAS degree

³Technical electives may be taken as approved by advisor or STEM & Business Division; consider choosing these electives in order to earn additional Skills Certificates

⁴Consider choosing to complete an internship at a medical-related organization as part of your Technical Elective hours