

ENGINEERING AND ELECTRONICS TECHNOLOGY - AAS

Offered at: Big Sandy Community and Technical College, Bluegrass Community and Technical College, Elizabethtown Community and Technical College, Hopkinsville Community College, Jefferson Community and Technical College, Owensboro Community and Technical College, Somerset Community College, Southcentral Kentucky Community and Technical College

Program Plan Number: 1503997019

Course	Title	Credits
General Education		
Select one of the following three options:		3
MAT 150	College Algebra	
MAT 126	Technical Algebra and Trigonometry	
Higher Level Quantitative Reasoning Course		
Select one of the following two options:		3-4
PHY 171	Applied Physics	
Natural Science with Consent of Program Coordinator		
ENG 101	Writing I	3
Social/Behavioral Sciences		3
Oral Communications		3
Heritage/Humanities		3
Subtotal		18-19
Core		
Select one of the following two options:		5
ELT 110	Circuits I	
IMT 110 & IMT 111	Industrial Maintenance Electrical Principles and Industrial Maintenance Electrical Principles Lab	
ELT 114	Circuits II	5
ELT 210	Devices I	4
ELT 120	Digital I	3
Select one of the following three options:		3-4
CAD 100	Introduction to Computer Aided Design ¹	
BRX 120	Basic Blueprint Reading	
Equivalent Course with Consent of Program Coordinator		
ELT 289	Engineering and Electronics Technology Capstone	1
Digital Literacy ¹		3
Subtotal		24-25
General Education and Technical Core Subtotal		42-44

Students must complete one of the tracks listed below to complete the AAS requirements.

¹ If a student takes CAD 100 Introduction to Computer Aided Design (3 credit hours) to meet Digital Literacy requirements, he/she **must** take an additional three (3) credit hours of elective credit not used in the selected track.

Apprenticeship Track

Offered at: Jefferson Community and Technical College

Program Plan Number: 150399701

Course	Title	Credits
General Education and Technical Core Subtotal		42-44
APS 201	Apprenticeship Studies	24
Total Credits		66-68

Communications Track

Offered at: Bluegrass Community and Technical College, Elizabethtown Community and Technical College

Program Plan Number: 150399708

Course	Title	Credits
General Education and Technical Core Subtotal		42-44
ELT 214	Devices II	4
ELT 220	Digital II	3
ELT 240	Communications Electronics	6
Technical Electives ¹		7
Total Credits		62-64

¹ Any EET, ELT, IMT, CIT, ISM, CAD, ICT, MFG, PLW, WLD or any other course as approved by the program coordinator.

Computer Aided Design Track

Offered at: Hopkinsville Community College, Jefferson Community and Technical College

Program Plan Number: 150399702

Course	Title	Credits
General Education and Technical Core Subtotal		42-44
CAD 200	Intermediate Computer Aided Drafting	4
CAD 201	Parametric Modeling	4
Technical Electives ¹		12
Total Credits		62-64

¹ Any EET, ELT, IMT, CIT, ISM, CAD, ICT, MFG, PLW, WLD or any other course as approved by the program coordinator.

Computer Maintenance Track

Offered at: Bluegrass Community and Technical College, Elizabethtown Community and Technical College, Jefferson Community and Technical College, Somerset Community College

Program Plan Number: 150399703

Course	Title	Credits
General Education and Technical Core Subtotal		42-44
Select one of the following two options:		4-6
ELT 234 & ELT 232	Computer Hardware Maintenance and Computer Software Maintenance	
CIT 111	Computer Hardware and Software	
ELT 220	Digital II	3

CIT 160	Intro to Networking Concepts	4
or CIT 161	Introduction to Networks	
Technical Electives ¹		7
Total Credits		60-64

¹ Any EET, ELT, IMT, CIT, ISM, CAD, ICT, MFG, PLW, WLD or any other course as approved by the program coordinator.

Electronics Track

Offered at: Big Sandy Community and Technical College, Bluegrass Community and Technical College, Elizabethtown Community and Technical College, Hopkinsville Community College, Jefferson Community and Technical College, Owensboro Community and Technical College, Somerset Community College

Program Plan Number: 150399707

Course	Title	Credits
General Education and Technical Core Subtotal		42-44
ELT 214	Devices II	4
ELT 220	Digital II	3
Technical Electives ¹		13
Total Credits		62-64

¹ Any EET, ELT, IMT, CIT, ISM, CAD, ICT, MFG, PLW, WLD or any other course as approved by the program coordinator.

Industrial Track

Offered at: Big Sandy Community and Technical College, Bluegrass Community and Technical College, Hopkinsville Community College, Jefferson Community and Technical College, Owensboro Community and Technical College

Program Plan Number: 150399704

Course	Title	Credits
General Education and Technical Core Subtotal		42-44
ELT 214	Devices II	4
ELT 220	Digital II	3
Select one of the following two options:		4
ELT 244	Electrical Machinery and Controls	
EET 270 & EET 271	Electrical Motor Controls I and Electrical Motor Controls I Lab	
Select one of the following two options:		4
ELT 250	Programmable Logic Controllers	
EET 276 & EET 277	Programmable Logic Controllers and Programmable Logic Controllers Lab	
Technical Electives ¹		5
Total Credits		62-64

¹ Any EET, ELT, IMT, CIT, ISM, CAD, ICT, MFG, PLW, WLD or any other course as approved by the program coordinator.

Instrumentation Track

Offered at: Big Sandy Community and Technical College, Elizabethtown Community and Technical College, Jefferson Community and Technical College

Program Plan Number: 150399709

Course	Title	Credits
General Education and Technical Core Subtotal		42-44
ELT 220	Digital II	3
ISM 102	Fundamentals of Instrumentation	4
ISM 210	Fundamentals of Process Control	4
Technical Electives ¹		7
Total Credits		60-62

¹ Any EET, ELT, IMT, CIT, ISM, CAD, ICT, MFG, PLW, WLD or any other course as approved by the program coordinator.

Mechanical Track

Offered at: Jefferson Community and Technical College, Owensboro Community and Technical College

Program Plan Number: 150399706

Course	Title	Credits
General Education and Technical Core Subtotal		42-44
Select one of the following two options:		4-5
ELT 122 & ELT 124	Mechanical Power Transmission Systems and Mechanical Power Transmission Systems Lab	
IMT 150 & IMT 151	Maintaining Industrial Equipment I and Maintaining Industrial Equipment I Lab	
Select one of the following two options:		3-5
ELT 265	Applied Fluid Power	
FPX 100 & FPX 101	Fluid Power and Fluid Power Lab	
CAD 200	Intermediate Computer Aided Drafting	4
Technical Electives ¹		8
Total Credits		61-66

¹ Any EET, ELT, IMT, CIT, ISM, CAD, ICT, MFG, PLW, WLD or any other course as approved by the program coordinator.

Robotics and Automation Track

Offered at: Big Sandy Community and Technical College, Bluegrass Community and Technical College, Elizabethtown Community and Technical College, Hopkinsville Community College, Jefferson Community and Technical College, Owensboro Community and Technical College, Southcentral Kentucky Community and Technical College

Program Plan Number: 150399705

Course	Title	Credits
General Education and Technical Core Subtotal		42-44
Select one of the following two options:		3-5
ELT 265	Applied Fluid Power	
FPX 100 & FPX 101	Fluid Power and Fluid Power Lab	
ELT 260	Robotic and Industrial Automation	5
Select one of the following two options:		4
ELT 244	Electrical Machinery and Controls	
EET 270 & EET 271	Electrical Motor Controls I and Electrical Motor Controls I Lab	

Select one of the following two options: 4

ELT 250	Programmable Logic Controllers	
EET 276 & EET 277	Programmable Logic Controllers and Programmable Logic Controllers Lab	

Technical Electives ¹ 4

Total Credits 62-66

¹ Any EET, ELT, IMT, CIT, ISM, CAD, ICT, MFG, PLW, WLD or any other course as approved by the program coordinator.