

ROBOTICS AND AUTOMATION - DIPLOMA

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, Southcentral Kentucky Community and Technical College

Program Plan Number: 1503994039

Course	Title	Credits
General Education		
<i>Area 1</i>		
Select one of the following two options:		3
Written Communication		
Oral Communications		
<i>Area 2</i>		
Select one of the following three options:		3
MAT 150	College Algebra	
MAT 126	Technical Algebra and Trigonometry	
Higher Level Quantitative Reasoning Course		
Subtotal		6
Core		
Select one of the following three options:		5
ELT 110	Circuits I	
EET 119	Basic Electricity	
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
Select one of the following three options:		1-2
COED 198	Practicum	
COE 199	Cooperative Education: (Topic)	
Equivalent Course with Consent of Program Coordinator		
Subtotal		25-27
Select one of the following two options:		3-5
ELT 265	Applied Fluid Power	
FPX 100	Fluid Power	
or FPX 101	Fluid Power Lab	
Select one of the following three options:		4-5
ELT 260	Robotic and Industrial Automation	
IMT 200	Industrial Robotics and Robotic Maintenance	
EET 200 & EET 201	Robotic Systems I and Robotic Systems II	

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 ²		5
Subtotal		20-23
Total Credits		51-56

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.

² Any EET, ELT, IMT, CIT, ISM, CAD, ICT, MFG, PLW, WLD, DPT or any other course as approved by the program coordinator.