

Electrical Technology Associate in Applied Science

Academic Plan Code 4603027039

The electrical technology program focuses on preparing students for entry-level electrician positions in industry and the building trades. The study of electrical theory and practical application of that theory provides the foundation of this program. Laboratory and classroom instruction include such topics as blueprint reading, motor controls, and residential wiring. Construction Electricity concentrates on residential electrical construction, and industrial electricity on industrial electrical construction.

Students enrolled in the Electrical Technology program are required to achieve a minimum grade of “C” in each technical core and technical elective course.

General Education Requirements: Required for all specializations		
MT115	Technical Mathematics OR	3
MT125	Technical Algebra and Trigonometry OR	3
	Higher Level Mathematics Course	3
	Science	3
ENG101	Writing I	3
	Social Interaction	3
	Oral Communications	3
	Heritage/Humanities	3
Subtotal Credit Hours:		18

CORE Requirements: Required for all specializations		
ENGT110	Circuits I	5
ENGT114	Circuits II	5
EET250	National Electric Code	4
EET264	Rotating Machines	2
EET265	Rotating Machines Lab	2
EET270	Motor Controls I	2
EET271	Motor Controls I Lab	2
	Computer Literacy OR If any student successfully tests out of Computer Literacy he/she must take an additional Technical Course approved by the Electrical Program Coordinator	3
Subtotal Credit Hours:		25

Industrial Electrician: 460302701		
EET154	Electrical Construction I AND	2
EET155	Electrical Construction I Lab AND	2
EET252	Electrical Construction II AND	2
EET253	Electrical Construction II Lab	2
EET272	Motor Controls II AND	2
EET273	Motor Controls II Lab AND	2
EET276	Programmable Logic Controllers AND	2
EET277	Programmable Logic Controllers Lab	2
	Technical Electives *	9
Subtotal Credit Hours:		23-25
Total Credit Hours:		66-68

Construction Electrician: 460302702		
EET154	Electrical Construction I AND	2
EET155	Electrical Construction I Lab AND	2
EET252	Electrical Construction II AND	2
EET253	Electrical Construction II Lab	2
	Technical Electives *	10
Subtotal Credit Hours:		17-18
Total Credit Hours:		60-61

Motor Control Electrician: 460302703		
EET272	Motor Controls II AND	2
EET273	Motor Controls II Lab AND	2
EET276	Programmable Logic Controllers AND	2
EET277	Programmable Logic Controllers Lab	2
FPX100	Fluid Power AND	3
FPX101	Fluid Power Lab OR	2
ET265	Applied Fluid Power	3
	Technical Electives *	7
Subtotal Credit Hours:		17-20
Total Credit Hours:		60-63

Electrical Technology Diploma 4603024049

	Technical Electives *	9
	Subtotal Credit Hours:	23-25
	Total Credit Hours:	54-56

General Education Requirements: Required for all specializations		
MT115	Technical Mathematics OR	3
MT125	Technical Algebra and Trigonometry OR	3
	Higher Level Mathematics Course	3
Choose one of the following:		
	Writing/Assessing Information OR	3
	Heritage/Humanities OR	3
	Oral Communications	3
	Subtotal Credit Hours:	6

Construction Electrician: 460302402		
EET154	Electrical Construction I AND	2
EET155	Electrical Construction I Lab AND	2
EET252	Electrical Construction II AND	2
EET253	Electrical Construction II Lab	2
	Technical Electives *	10
	Subtotal Credit Hours:	17-18
	Total Credit Hours:	48-49

CORE Requirements: Required for all specializations		
ENGT110	Circuits I	5
ENGT114	Circuits II	5
EET250	National Electric Code	4
EET264	Rotating Machines	2
EET265	Rotating Machines Lab	2
EET270	Motor Controls I	2
EET271	Motor Controls I Lab	2
	Computer Literacy If any student successfully tests out of Computer Literacy he/she must take an additional Technical Course approved by the Electrical Program Coordinator	3
	Subtotal Credit Hours:	25

Motor Controls Electrician: 460302403		
EET272	Motor Controls II AND	2
EET273	Motor Controls II Lab AND	2
EET276	Programmable Logic Controllers AND	2
EET277	Programmable Logic Controllers Lab	2
FPX100	Fluid Power AND	3
FPX101	Fluid Power Lab OR	2
ET265	Applied Fluid Power	3
	Technical Electives *	7
	Subtotal Credit Hours:	17-20
	Total Credit Hours:	48-51

Electrical Technology Certificates

Industrial Electrician: 460302401		
EET154	Electrical Construction I AND	2
EET155	Electrical Construction I Lab AND	2
EET252	Electrical Construction II AND	2
EET253	Electrical Construction II Lab	2
EET272	Motor Controls II AND	2
EET273	Motor Controls II Lab AND	2
EET276	Programmable Logic Controllers AND	2
EET277	Programmable Logic Controllers Lab	2

Electrical Construction 4603023029		
ENGT110	Circuits I	5
ENGT114	Circuits II	5
EET 250	National Electric Code	4
EET150	Transformers	2
EET151	Transformers Lab	1
EET 270	Rotating Machines	2
EET 271	Rotating Machines Lab	2
EET 270	Motor Controls I	2

BLUEGRASS COMMUNITY AND TECHNICAL COLLEGE

EET 271	Motor Controls I Lab	2
EET 154	Electrical Construction I AND	2
EET 155	Electrical Construction I Lab	2
EET 252	Electrical Construction II AND	2
EET 253	Electrical Construction II Lab	2
Total Credit Hours:		33

Electrician Trainee Level I 4603023039		
ENGT 110	Circuits I	5
	Technical Elective	3
Total Credit Hours:		8

Residential Electricity Level I 4603023049		
ENGT 110	Circuits I	5
ENGT 114	Circuits II	5
EET 154	Electrical Construction I AND	2
EET155	Electrical Construction I Lab	2
Total Credit Hours:		14

Electrician Trainee Level II 4603023059		
ENGT 110	Circuits I	5
ENGT 114	Circuits II	5
	Technical Elective	3
Total Credit Hours:		13

Residential Electricity Level II 4603023069		
ENGT 110	Circuits I	5
ENGT 114	Circuits II	5
EET 154	Electrical Construction I AND	2
EET 155	Electrical Construction I Lab	2
EET 252	Electrical Construction II AND	2
EET 253	Electrical Construction II Lab	2
EET 250	National Electric Code	4
Total Credit Hours:		22

Electrical Motor Control Level I 4603023079		
ENGT 110	Circuits I	5
ENGT 114	Circuits II	5

EET 250	National Electric Code	4
EET150	Transformers AND	2
EET151	Transformers Lab	1
EET 270	Rotating Machines	2
EET 271	Rotating Machines Lab	2
EET 270	Motor Controls I	2
EET 271	Motor Controls I Lab	2
CPU 150	Computer Fundamentals OR	3
CIS 100	Introduction to Computers	3
Total Credit Hours:		28

Electrical Motor Control Level II 4603023089		
ENGT 110	Circuits I	5
ENGT 114	Circuits II	5
EET 250	National Electric Code	4
EET150	Transformers AND	2
EET151	Transformers Lab	1
EET 270	Rotating Machines	2
EET 271	Rotating Machines Lab	2
EET 270	Motor Controls I	2
EET 271	Motor Controls I Lab	2
EET 272	Motor Controls II AND	2
EET 273	Motor Controls II Lab	2
EET 276	Programmable Logic Controllers AND	2
EET 277	Programmable Logic Controllers Lab	2
CPU 150	Computer Fundamentals OR	3
CIS 100	Introduction to Computers	3
Total Credit Hours:		36

(Courses are listed by category and not necessarily in the order to be taken)