



ELECTRICAL SYSTEMS

Associate in Applied Science | Diploma | Certificate

The Electrical Systems Technology curriculum is designed to provide students with the skills and technical background required for entry-level employment in the installation and maintenance of electrical/electronic systems found in residential, commercial and industrial facilities.

To learn more visit www.piedmontcc.edu/elc

More about ELECTRICAL SYSTEMS

The Electrical Systems Technology curriculum is designed to provide students with the skills and technical background required for entry-level employment in the installation and maintenance of electrical/electronic systems found in residential, commercial and industrial facilities.

Most training is hands-on and includes such topics as AC/DC theory, basic wiring practices, digital electronics, programmable logic controllers, industrial motor controls, and the National Electric Code.

Outlook for EMPLOYMENT

Upon successful completion of this program, graduates will qualify for entry-level employment in the electrical/electronics or renewable energy fields. Specific jobs include entry level positions as an electrician, electronics technician or an electrical/electronics maintenance specialist.

Electrician
Electronics Technician
Electrical Maintenance Specialist

Elective COURSES

ELN/ELC Elective Choices

PHY 110/110A Physics ***
 PHY 151 College Physics ***
 ELC 213 Instrumentation

Social Science Elective Choices

ECO 251 Principles of Microeconomics
 ECO 252 Principles of Macroeconomics
 SOC 210 Intro to Sociology
 PSY 150 General Psychology

COURSES

Required Courses for Program	AAS	DIP	CERT
ACA 111 College Student Success *			
ACA 122 College Transfer Success *			
CIS 110 Intro to Computers			
COM 231 Public Speaking			
ELC 112 DC/AC			
ELC 113 Residential Wiring			
ELC 115 Industrial Wiring			
ELC 117 Motors and Controls			
ELC 118 National Electrical Code (NEC)			
ELC 128 Intro to PLC			
ELC 213 Instrumentation			
ELC 228 PLC Applications			
ELC 229 Electrical Project			
ELN 131 Analog Electronics 1			
ELN 133 Digital Electronics			
ELN 135 Electronic Circuits			
ENG 111 Writing and Inquiry			
HUM 110 Tech Society ****			
HUM 115 Critical Thinking ****			
ISC 112 Industrial Safety			
ISC 170 Problem Solving			
MAT 143 Quantitative Literacy **			
MAT 171 Pre-Cal Algebra **			
MAT 172 Pre-Cal Trigonometry ***			
XXX ELC/ELN Elective (See list in the left column)			
XXX Social Science Elective (See list in the left column)			
Total Semester Hours Required	69/70	46/47	17

Courses with matching symbols indicate OR/AND requirements. Review back page or contact Student Development for more information.

AAS = Associate in Applied Science
 DIP = Diploma (Commercial Wiring)
 CERT = Certificate (Residential Wiring)

 Denotes required for degree completion

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Process for ADMISSIONS

- Submit a complete Application for Admission to the Office of Admissions.
- Submit official transcript(s) of high school education and all post-high school course work to the Office of Admissions if requested. Office GED scores or transcript of courses for the Adult High School Diploma may be submitted in lieu of the high school transcript.
- Complete the Admission Placement Test.
- Diploma and certificate admission requirements may vary. Contact the Admissions Office for details.



Mac McCormick

Program CONTACTS

Mac McCormick
(336) 322-2178
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Person County Campus - S120

Walter Montgomery, Dean
(336) 322-2258
walter.montgomery@piedmontcc.edu
Person County Campus - L119

ASSOCIATE IN APPLIED SCIENCE

Suggested Course Sequence

Full-time Student

Course#	Course Name	CL.	LB.	CLIN.	CR.
FALL SEMESTER					
ACA 111	College Student Success OR	1	0	0	1
ACA 122	College Transfer Success	0	2	0	1
ELC 112	DC/AC	3	6	0	5
ELC 113	Residential Wiring	2	6	0	4
ENG 111	Writing and Inquiry	3	0	0	3
MAT 143	Quantitative Literacy OR	2	2	0	3
MAT 171	Pre-Calc Algebra	3	2	0	4
		10-12	14-16	0	16-17

SPRING SEMESTER

ELC 115	Industrial Wiring	2	6	0	4
ELC 118	NEC	1	2	0	2
ELN 131	Analog Electronics 1	3	3	0	4
ISC 112	Industrial Safety	2	0	0	2
MAT 172	Pre-calc Trigonometry OR	3	2	0	4
PHY	Elective (110 & 110A OR 151)	3	2	0	4
		11	13	0	16

SUMMER SEMESTER

ELC 117	Motors and Controls	2	6	0	4
		2	6	0	4

FALL SEMESTER

CIS 110	Intro to Computers	2	2	0	3
ELC 128	Intro to PLCs	2	3	0	3
ELC 213	Instrumentation	2	2	0	4
ELN 133	Digital Electronics	3	2	0	4
ISC 170	Problem Solving	3	0	0	3
		12	9	0	17

SPRING SEMESTER

HUM 110	Tech & Society OR	3	0	0	3
HUM 115	Critical Thinking	3	0	0	3
ELN 135	Electronic Circuits	2	3	0	3
ELC 228	PLC Applications	2	6	0	4
COM 231	Public Speaking	3	0	0	3
SOC/ECO/PSY	Elective	3	0	0	3
		13	9	0	16
		48-50	51-53	0	69-70

TOTAL SEMESTER HOURS REQUIRED FOR DEGREE: 69-70



Person County Campus
1715 College Drive
Roxboro, NC 27573
(336) 599-1181

Caswell County Campus
331 Piedmont Drive
Yanceyville, NC 27379
(336) 694-5707