

ELECTRICAL POWER PRODUCTION

Associate in Applied Science

The Electrical Power Production Technology curriculum is designed to provide students with the skills and technical background required for entry-level employment in the operation of modern non-nuclear fueled power facilities.

To learn more visit www.piedmontcc.edu/power

More about ELECTRICAL POWER PRODUCTION

The Electrical Power Production Technology curriculum is designed to provide students with the skills and technical background required for entry-level employment in the operation of modern non-nuclear fueled power facilities. to include coal, oil, natural gas, biomass and solar.

Students will study major plant systems needed for the reliable operation of power plants, including but not limited to boilers, combustion equipment, steam turbines, generators, control logic, fundamentals of operation, equipment maintenance, environmental control equipment, and associated governmental regulations.

Outlook for EMPLOYMENT

Upon successful completion of this program, graduates will qualify for entry-level employment in the electric utility industry, industrial power facilities, and other power production occupations. Graduates also will qualify for many other industrial positions such as electromechanical technician, electrical troubleshooter, and PLC programmer.

Electromechanical Technician
Electrical Troubleshooter
PLC Programmer

COURSES

Required Courses for Program

*ACA 111 College Student Success **
*ACA 122 College Transfer Success **
*CIS 110 Intro to Computers
*ELC 112 DC/AC Electricity
*ELN 131 Analog Electronics I
*ENG 111 Writing and Inquiry
*ENG 112 Argument-Based Research ***
*ENG 114 Prof Research & Reporting ***
*HUM Elective
*MAT 171 Pre-Calculus Algebra
*MAT 172 Pre-Calculus Trigonometry
*PSY 150 General Psychology
BPR 115 ELC/Fluid Power Diagrams
ELC 117 Motors and Controls
ELC 128 Intro to PLC's
ELC 213 Instrumentation
ELC 228 PLC Applications
EPP 110 Intro to Power Plant Operations
EPP 112 Fuels & Combustion
EPP 210 Power Plant Systems
EPP 212 Steam & Combustion TG
EPP 214 Power Plant Environ Mgt
HYD 110 Hydraulics/Pneumatics
ISC 112 Industrial Safety
ISC 170 Problem Solving
MNT 230 Pumps & Piping Systems
WAT 120 Intro to Water Treatment
Total Semester Hours Required for Degree = 75

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

*“**” means these courses may be offered spring or fall.*

ELECTRICAL POWER PRODUCTION

ASSOCIATE IN APPLIED SCIENCE

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. 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
mac.mccormick@piedmontcc.edu
Person County Campus - S120

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

“*” means these courses may be offered spring or fall.

ASSOCIATE IN APPLIED SCIENCE

Suggested Course Sequence

Full-time Student

Course#	Course Name	CL.	LB.	CLIN.	CR.
FALL SEMESTER					
*ENG 111	Writing and Inquiry	3	0	0	3
*MAT 171	Pre-Calculus Algebra	3	2	0	4
*CIS 110	Intro to Computers	2	2	0	3
ISC 112	Industrial Safety	2	0	0	2
EPP 110	Intro to Power Plant Operations	2	0	0	2
EPP 112	Fuels & Combustion	3	0	0	3
*ACA 111	College Student Success OR	1	0	0	1
*ACA 122	College Transfer Success	0	2	0	1
		15-16	4-6	0	18

SPRING SEMESTER

*ENG 112	Argument-Based Research OR	3	0	0	3
*ENG 114	Prof Research & Reporting	3	0	0	3
*MAT 172	Pre-Calculus Trigonometry	3	2	0	4
*ELC 112	DC/AC Electricity	3	6	0	5
HYD 110	Hydraulics/Pneumatics	2	3	0	3
BPR 115	ELC/Fluid Power Diagrams	1	2	0	2
		12	13	0	17

SUMMER SEMESTER

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

FALL SEMESTER

ELC 128	Intro to PLC's	2	3	0	3
*PSY 150	General Psychology	3	0	0	3
ELC 213	Instrumentation	3	2	0	4
EPP 210	Power Plant Systems	2	2	0	3
ISC 170	Problem Solving	3	3	0	3
		13	10	0	16

SPRING SEMESTER

WAT 120	Intro to Water Treatment	2	0	0	2
MNT 230	Pumps & Piping Systems	1	3	0	2
EPP 212	Steam & Combustion TG	2	2	0	3
EPP 214	Power Plant Environ Mgt	2	0	0	2
ELC 228	PLC Applications	2	6	0	4
*HUM	Elective	3	0	0	3
*ELN 131	Analog Electronics I	3	0	0	4
		15	11	0	20
		57-58	44-46	0	75

TOTAL SEMESTER HOURS REQUIRED FOR DEGREE: 75



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

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