



# ELECTRICAL POWER PRODUCTION TECHNOLOGY

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](http://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.

## Program CONTACT

David Wehrenberg  
(336) 322-2135  
david.wehrenberg@piedmontcc.edu  
Person County Campus - I115

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.
<b>FALL SEMESTER</b>					
*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 <b>OR</b>	1	0	0	1
*ACA 122	College Transfer Success	0	2	0	1
		<b>15-16</b>	<b>4-6</b>	<b>0</b>	<b>18</b>
<b>SPRING SEMESTER</b>					
*ENG 112	Argument-Based Research <b>OR</b>	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
		<b>12</b>	<b>13</b>	<b>0</b>	<b>17</b>
<b>SUMMER SEMESTER</b>					
ELC 117	Motors and Controls	2	6	0	4
		<b>2</b>	<b>6</b>	<b>0</b>	<b>4</b>
<b>FALL SEMESTER</b>					
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
		<b>13</b>	<b>10</b>	<b>0</b>	<b>16</b>
<b>SPRING SEMESTER</b>					
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
		<b>15</b>	<b>11</b>	<b>0</b>	<b>20</b>
		<b>57-58</b>	<b>44-46</b>	<b>0</b>	<b>75</b>

**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