

Power Transmission and Distribution Technology A.A.S

Program Description

The Power Transmission and Distribution Technology program prepares individuals to work in the electrical power of transmission and distribution industry, both public and private. This career opportunity is one of the most demanding. People choosing this career will be required to work outdoors in all kinds of weather and conditions. Coursework in electrical principles, safety, pole climbing, driver safety, high voltage transmission and distribution and field work will qualify the graduate to work in the numerous public and private power utilities around Oklahoma and the United States.

Technical Occupational Specialty

			29 Credit Hours	Date	Institution
<input type="checkbox"/>	PTDT 1104	Introduction to Utility Industry/Climbing	4		
<input type="checkbox"/>	PTDT 1102	Elements of Electricity and Electronics	2		
<input type="checkbox"/>	PTDT 1154	Electric Circuits-High Voltage	4		
<input type="checkbox"/>	PTDT 1353	Lineman Safety/Equipment	3		
<input type="checkbox"/>	PTDT 1453	Principles of Power Transmission	3		
<input type="checkbox"/>	PTDT 2003	Principles of Power Distribution	3		
<input type="checkbox"/>	PTDT 2023	Principles of Switching and Metering	3		
<input type="checkbox"/>	PTDT 2043	Electrical Capstone Experience	3		
<input type="checkbox"/>	PTDT 2104	Internship	4		

Employment Information

Graduates of this program can expect to find employment in many segments of the power industry. Graduates will normally start out in an apprenticeship program and expect to work up to a journeyman lineman position. The employment data indicates this will be a field with high demand for new employee.

Support and Related Courses

			15 Credit Hours	Date	Institution
<input type="checkbox"/>	PTDT 1103	Plan Reading	3		
<input type="checkbox"/>	CIS 1113	Computer Concepts with Applications	3		
<input type="checkbox"/>	FPST 1313	Introduction to Occupational Safety	3		
<input type="checkbox"/>	PTDT 2013	Driver Safety and CDL Training	3		
<input type="checkbox"/>	<i>Elective (Must be approved by advisor)</i>		3		

Degree Awarded

Associate in Applied Science

General Education Requirements

			18 Credit Hours	Date	Institution
<input type="checkbox"/>	ENGL 1113	English Composition I	3		
<input type="checkbox"/>	ENGL 1213	English Composition II	3		
or					
<input type="checkbox"/>	SPCH 1113	Introduction Speech Communication	3		
<input type="checkbox"/>	HIST 1483	U.S. History to 1865	3		
or					
<input type="checkbox"/>	HIST 1493	U.S. History Since 1865	3		
<input type="checkbox"/>	MATH 1413	General College Math	3		
or					
<input type="checkbox"/>	MATH 1513	College Algebra	3		
<input type="checkbox"/>	POLS 1113	American Government	3		
<input type="checkbox"/>	<i>General Education Elective (Must be approved by advisor)</i>		3		

For More Information Contact:

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Total to Graduate

62 Credit Hours

Student Name:	_____
CWID:	_____
Counselor:	_____

PTDT 1104 INTRODUCTION TO THE UTILITY INDUSTRY/CLIMBING

This course will introduce the student to the career paths in the electrical utility industry both public and private. The course will present materials to help an individual determine if the utility industry is the correct career path for them. The course will include the basic principles, techniques, and procedures of overhead line construction, including pole climbing. Lab: four hours per week.

PTDT 1154 ELECTRICAL CIRCUITS-HIGH VOLTAGE

The study of electricity involving electrical properties of materials, electrical laws, units, components, impedance, resonance and magnetism. Lab: two hours per week.

PTDT 1353 LINEMAN SAFETY/EQUIPMENT

An overview of the specific concerns and equipment used by the power transmission technician. Lab: two hours per week.

PTDT 1453 PRINCIPLES OF POWER TRANSMISSION

A course dedicated to the study of transmitting electrical power. The course will contain working practices and situations that transmission lineman encounter: extra high voltage, towers, pole configurations, bare hands and other work practices. Prerequisite: PTDT 1104 Lab: two hours per week.

PTDT 2003 PRINCIPLES OF POWER DISTRIBUTION

A study of underground and above ground high voltage distribution systems. Transformer configurations, conduit sizing, line voltage drops, etc. will be discussed, as well as equipment and safety procedures for both. Lab: two hours per week.

PTDT 2023 PRINCIPLES OF SWITCHING AND METERING

Students will learn the basic switching and metering systems used in the power industry.

PTDT 2043 ELECTRICAL CAPSTONE EXPERIENCE

This is the final course in the curriculum and various topics of the power industry, job searching techniques and related topics will be covered. Course content will be tailored to the needs of the students to prepare them for job placement.

PTDT 2104 INTERNSHIP

This course provides on-the-job training for students. Work experience may be substituted if the student is currently working in the industry and with advisor approval.

PTDT 1102 ELEMENTS OF ELECTRICITY AND ELECTRONICS

An introduction to the elementary principles of basic electric units, Ohm's Law circuit solutions of series and parallel network, magnetism, inductance and capacitance. Same as EET 1102.