

ELECTRIC POWER TECHNOLOGY

Overview

Degrees Offered: AAS, Program Certificate

Program Begins: Fall, Spring, Summer

Delivery Method: Online

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Description

Electric Power Technology is an instructor-led program sponsored by the Energy Providers Coalition for Education and developed for current and future electric utility workers. This program teaches students the components, design, and operation of the electrical system and the equipment and safety procedures used when working with electricity. After completion of the core courses, students choose a specialization area to pursue such as line construction, metering, substation, or system design. Classes begin every three to five weeks throughout the year.

Preparation

Knowledge of electricity is helpful. Prospective students should be prepared for the physical demands of entry-level technician positions. Typical industry requirements include passing a physical exam, which may entail lifting 50+ pounds, climbing ladders, and working in confined spaces or heights. Job applicants also may be required to pass a drug screen and eye exam, including the ability to distinguish between colors accurately.

Computer Requirements

All BSC courses use a Learning Management System (LMS) called Blackboard. Chromebooks, Chrome OS devices, iPads, and mobile devices (iOS, Android phones, tablets) do not allow students to satisfactorily access and complete course content.

Please refer to the Computer Specifications for BSC students.

Requirements

Students who complete the curriculum requirements receive a Program Certificate or an Associate in Applied Science degree.

Career Opportunities

Industry forecasts a strong job market for job applicants due to an aging workforce, industry changes and attrition. A graduate will find entry-level employment in many different areas, including line worker, substation technician, mechanic operator, meter technician, substation electrician, distribution dispatcher, substation maintenance, engineering assistant, engineering technician, draft person, and control system specialist.

Additional Information

Credits from this program may be applied to BSC's Bachelor of Applied Science degree (BAS) in Energy Management, offered entirely online. The BAS is designed for individuals interested in supervisory and management positions in the energy industry. The BAS builds on the foundation laid in an AAS degree and includes general education classes, core management courses, and energy specific management courses.

BSC's National Energy Center of Excellence was designated as the National Power Plant Operations Technology and Education Center by U.S. Energy Secretary Samuel W. Bodman in 2007. This official designation recognizes BSC as the premier national center of education and training for operators and technicians in the energy industry.

Degree Plans

- Electric Power Technology Associate in Applied Science
- Electric Power Technology Program Certificate

Program Learning Outcomes

Upon graduation, Electric Power Technology Program students will be able to:

- Describe the essential operational aspects of the electrical system including generation, transmission and distribution of DC and AC electricity.
- Describe the utility workers' responsibilities pertaining to operation, safety, electrical diagram interpretation, and communication and control strategies.
- Explain the components of the electrical system including equipment, systems, protection schemes and grounding principles.