

LINEWORKER (ELECTRICAL)

Overview

Degrees Offered: AAS, Program Certificate

Limited Enrollment: Yes

Program Begins: Summer

Delivery Method: On Campus

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Description

BSC's Lineworker program educates students to become skilled apprentice lineworkers. Instruction includes classroom study and indoor and outdoor laboratory work at the 20-acre facility north of Mandan. Students gain intensive training in all facets of power line construction, maintenance and equipment operation, including state-of-the-art technology. Coursework includes applied and fundamental electrical distribution, basic electricity, safety, electrical apparatus, transformers and rope and rigging. A class of 60 students enrolls each year. Enrollees have access to all student facilities on the BSC campus.

Students are required to take three weeks of classes in June (Introduction to Climbing Techniques and Introduction to Equipment Operations) before admittance to the program to increase familiarity and security in climbing poles.

Preparation

One year of high school algebra or one semester of college algebra, basic computer literacy, and good written and oral communication skills is helpful. Electrical lineworkers should be in good physical condition for outdoor work in all types of weather. Shift work and overtime hours are common. A commercial driver's license (Class A) is required by the industry. A commercial driver's permit (Class A with air brakes) is required for LNWK 113.

Students must meet all Federal Medical Requirements in 49 CFR 391. Some of the medical conditions which may disqualify an individual are: 1) heart condition, 2) hearing impairment, 3) worse than 20/40 visual acuity in either eye, 4) diabetes controlled with insulin, 5) epilepsy, 6) loss of or loss of the use of a limb, or 7) seizure disorder requiring anti-seizure medication. Non-residents are encouraged to contact the Department Chair for CDL guidelines.

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.

Requirements

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

Special Costs

A doctor's examination, drug test, and clear driving record are required after acceptance into the program. Tools and supplies are estimated at \$2,000. CLD fee is \$3,800 for LNWK 113. Please see the lineworker webpage for current prices.

Career Opportunities

A career as an electrical lineworker offers men and women the prospect of good wages, dependable and often strong job demand, and opportunity to work in any of nearly 3,100 public utilities across the United States. Job markets include rural electric cooperatives, investor-owned utilities and government utilities.

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

- Lineworker (Electrical) Associate in Applied Science
- Lineworker (Electrical) Program Certificate

Program Learning Outcomes

Upon graduation, Lineworker students will be able to:

- Describe the technical and safety aspects of lineworkers.
- Explain lineworkers' techniques, responsibilities, and tools used for the repair and maintenance of power lines.
- Demonstrate through practice and testing, standard industry climbing techniques.
- Inspect and analyze a wide variety of electrical distribution equipment in order to assist in installation, repair and preventive maintenance.
- Demonstrate through simulation and road practice testing safe tractor trailer driving techniques.