Electric Power Technology Degree Program

This industry-driven online program, established in 2001, addresses critical employment needs in the electric utilities work force. The Electric Power Technology program provides students with the foundation of knowledge and competencies needed to work in the utility industry. After completion of the core courses, students choose a specialization area to pursue. Areas of choice include Line Construction, Metering, Substation, System Design. Students have the option to transfer into the Bachelor of Applied Science in Energy Management degree, also available entirely online.
The Electric Power Technology (ELPW) program focuses on the transmission and distribution of electricity. What does that mean? Transmission and distribution keeps the flow of electricity safe through power lines and other means of transmission until it reaches you, the consumer.

This program teaches students the components, design and operation of the electrical system and the equipment and safety procedures used when working with electricity.

Students choosing to complete all courses within the Electric Power program can follow the recommended sequence or create a customized schedule based on their needs. The NECE recommends that students consult with their academic advisor prior to registration for academic advice based on individual educational plans.

**Electric Power Technology Associate Degree Technical Courses**

**Semester I:**
- ELPW 101 Basic Computer Skills
- ELPW 111 Introduction to the Electrical Industry & Power Grid
- ENRT 103 Applied Math
- ENRT 106 DC Fundamentals
- ENRT 108 AC Fundamentals

**Semester II:**
- ELPW 105 Electrical System Fundamentals
- ELPW 109 Electrical Industry Safety
- ELPW 110 Basic Print Reading
- ELPW 112 Electrical System Components
- ENRT 115 Industrial Composition

**Semester III:**
- ELPW 118 Industrial Communications
- ELPW 200 Advanced Print Reading
- ELPW 202 Advanced Industrial Safety
- ELPW 204 Advanced Electrical Systems
- ELPW 206 Electrical System Protection

**Semester IV: - Choose one of four specializations**

**Line Construction**
- ELPW 250 Transformers
- ELPW 230 Underground Line Construction
- ELPW 210 Overhead T&D Line Construction

**Substation**
- ELPW 251 Substation Construction and Maintenance
- ELPW 211 Substation Relays
- ELPW 231 Substation Operations

**System Design**
- ELPW 208 Advanced Math
- ELPW 212 System Design Basics
- ELPW 232 System Design Analysis
- ELPW 252 Civil Design

**Metering**
- ELPW 208 Advanced Math
- ELPW 213 Fundamentals of Metering
- ELPW 233 Single-Phase & Polyphase Metering
- ELPW 253 Advanced Metering Technology

For more information on the Electric Power Technology program, visit our website at [bismarckstate.edu/energy](http://bismarckstate.edu/energy).

Contact us at 701.224.5651 or 800.852.5685.