BUILD A CAREER IN ELECTRICAL

Learn the skills needed to succeed in the field.

Electrical skills are always in-demand. Construction technology is becoming a profession of specialists open to many interests and skills. At Sitting Bull College the Electrical certificate program can start your journey into work as an electrician or another lucrative career using electrical skills.

The Sitting Bull College Electrical certificate program focuses on hands-on and classroom education to ensure students have the knowledge and know-how to execute basic electrical work safely and complying with the National Electrical Code Guidelines.
Construction technology is becoming a profession of specialists open to many interests and skills.

**PROGRAM OUTCOMES**

**Program Outcomes For: Certificate in Building Trades**
1. The student will prepare building site according to building plan.
2. The student will demonstrate the proper use of hand and power tools.
3. The student will estimate amount of material needed to complete building project.
4. The student will be able to layout and construct exterior wall sections and roofing according to a building plan.
5. The student will be able to install interior walls and ceilings, doors and trim, and cabinets and special built-ins according to building plan.

**Program Outcomes For: Certificate in Commercial Driver's License (CDL)**
1. The students will gain a working knowledge of a tractor trailer and basic skill driving.
2. The students will gain a working knowledge of standard safety practices set by the Occupational Safety and Health Administration.
3. The students will understand an overview of all North or South Dakota Department of Transportation Regulations.

**Program Outcomes For: Certificate in Electrical**
1. The student will be able to lay out the electrical system in new residential and light commercial installations according to the National Electrical Code Guidelines.
2. The student will be able to identify the materials needed to complete a project.
3. The student will be able to complete the rough-in stage of residential writing using romex cable, light commercial writing and using conduit in accordance with the National Electrical Code Guidelines.
4. The student will be able to complete the trim-out of new residential and light commercial projects including installing outlets, switches, light fixtures, smoke detectors, service panels, and meters.

Program Outcomes For: Certificate in Heavy Equipment Operator (HEO)
1. The student will attain the technical skills and knowledge necessary to earn credentials from NCCER in Heavy Equipment Operations
2. The student will use critical thinking to describe basic mechanical operations and implement maintenance procedures, and to demonstrate knowledge of laws, regulations and safety requirements of the profession.
3. The student will demonstrate familiarity with the realities of employment in the heavy equipment industry.

Program Outcomes For: Certificate in Welding
1. The student will understand the theory behind the various welding processes.
2. The student will be able to demonstrate their ability to perform welds utilizing the SMAW, FCAW, and FMAW processes.
3. The student will be able to perform proper welds in the following positions: 1G-Flat, 2G-Horizontal, and 3G-Vertical.
4. The student will demonstrate knowledge of OSHA standards for welding safety practices.
CERTIFICATE – ELECTRICAL

CERTIFICATE REQUIREMENTS
ECAL 101 Electrical Fundamentals I ............................................................................. 3 cr.
ECAL 102 Electrical Fundamentals II .............................................................................. 3 cr.
ECAL 103 Electrical Code Study ....................................................................................... 3 cr.
ECAL 104 Electrical Trades Math ..................................................................................... 2 cr.
ECAL 106 Electrical Practicum I ....................................................................................... 4 cr.
ECAL 132 Commercial & Agricultural Wiring ................................................................. 3 cr.
ECAL 133 Residential Wiring ......................................................................................... 2 cr.
ECAL 206 Electrical Practicum II ..................................................................................... 4 cr.
HPER 210 First Aid/CPR/AED ......................................................................................... 2 cr.
OSHA 100 Safety Course ................................................................................................ 1 cr.
SOC 099 Job Skills ......................................................................................................... 2 cr.
TOTAL CERTIFICATE REQUIREMENTS ........................................................................... 29 CREDITS

Student’s must follow SBC’s admissions requirements and may be required to complete a College Writing Preparation and College Math Preparation course(s) before enrolling in certificate courses.

CERTIFICATE – HEAVY EQUIPMENT OPERATION I

CERTIFICATE REQUIREMENTS
CDL 100 CDL Permit ........................................................................................................... 4 cr.
CDL 105 Novice CDL Training .......................................................................................... 2 cr.
HEO 101 Heavy Equipment Operation Training I ................................................................. 8 cr.
HPER 210 First Aid/CPR/AED ......................................................................................... 2 cr.
SOC 099 Job Skills ......................................................................................................... 2 cr.
TOTAL CERTIFICATE REQUIREMENTS ........................................................................... 18 CREDITS

Student’s must follow SBC’s admissions requirements and may be required to complete a College Writing Preparation and College Math Preparation course(s) before enrolling in certificate courses.

CERTIFICATE – HEAVY EQUIPMENT OPERATION II

CERTIFICATE REQUIREMENTS
CDL 106 CDL Refresher Course .......................................................................................... 1 cr.
CDL 107 Advanced CDL Driving ...................................................................................... 3 cr.
CDL 109 Driver Endorsements .......................................................................................... 3 cr.
HAZ 099 HAZWOPER Training – 24 Hour ..................................................................... 1 cr.
HEO 201 Heavy Equipment Operation Training II ............................................................ 8 cr.
OSHA 201 Construction Course – 30 Hour ....................................................................... 2 cr.
TOTAL CERTIFICATE REQUIREMENTS ......................................................................... 18 CREDITS

Student’s must follow SBC’s admissions requirements and may be required to complete a College Writing Preparation and College Math Preparation course(s) before enrolling in certificate courses.