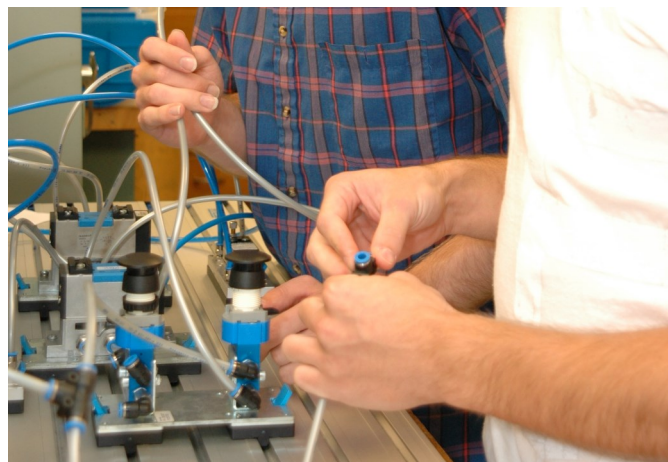


Industrial Electrical Certificate

This program will focus on learning experiences that will prepare students with the technical skills to work in the industrial electrical field in positions such as Industrial Electrician, Electrical Technician, Industrial Controls Technician or Maintenance Technician. All of these courses apply toward the comparable associate degree. Students in the program will be trained not only in traditional electrician skills, but also how to operate and troubleshoot state-of-the-art programmable controller systems, solid state motor drives, instrument systems and industrial computer systems used by maintenance personnel in manufacturing and process plants.

Students will receive hands-on training on AC/DC motors, transformers, test equipment, basic hydraulic systems, and industrial wiring practices according to the National Electrical Code. Most of the technical classes will have 50 percent of the learning experience in the classroom and the other 50 percent in the laboratory with hands-on training. This program focuses on basic fundamentals so that graduates can also adapt to the continuous changes in technology.



Career Outlook

As manufacturers invest in new highly technological equipment, the demand for the Industrial Electrician is great.

STEM and Industrial Technology Division



Franklin Roberts
Dean

Questions:

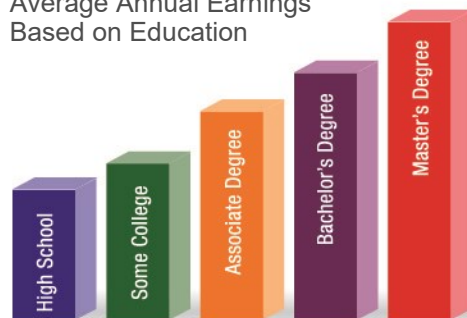
NSCC Admissions Office
(419) 267-1320
admissions@NorthwestState.edu

www.NorthwestState.edu

2019-2020

Education Pays

Average Annual Earnings
Based on Education



Based on data from the Bureau of Labor Statistics

NSCC is accredited by:
The Higher Learning Commission
(312) 263-0456
www.ncahigherlearningcommission.org

PROGRAM SEQUENCE

| First Semester / 1st 8 weeks | | Credits |
|--------------------------------------|-------------------------------------|----------------|
| +IND120 | Industrial Electricity I | 3 |
| IND110* | Industrial Computing I | 3 |
| IND105 | Industrial Safety | 2 |
| | | <hr/> |
| | | 8 |
| First Semester / 2nd 8 weeks | | Credits |
| +IND121 | Industrial Electricity II | 3 |
| +IND134 | Industrial Fluid Power I | 3 |
| +IND122 | Industrial Wiring (NEC) | 3 |
| | | <hr/> |
| | | 9 |
| Second Semester / 1st 8 weeks | | Credits |
| +IND220 | Electrical Prints & Troubleshooting | 3 |
| +IND223 | Motors and Motor Controls | 3 |
| +PLC200 | Programmable Controller I | 3 |
| | | <hr/> |
| | | 9 |
| Second Semester / 2nd 8 weeks | | Credits |
| +IND221 | Instrumentation & Controls I | 3 |
| +PLC230 | Servo/Robotics Systems | 3 |
| | Communications Elective | 3 |
| | | <hr/> |
| | | 9 |
| Total Program Credit Hours | | 35 |

* Prior to taking IND110, students should have basic computer literacy in Windows and at least one Windows application.

+ Students must attain a 2.00 grade point average in these technical courses to graduate.

Gainful employment information for NSCC's certificate programs can be found online at:

<https://northweststate.edu/gedt/indust-elec/>

Gainful employment information includes: estimated cost of the program, average student loan debt and types of jobs available.