



# **MITCHELLTECH**

## **Electrical Construction & Maintenance**

- Engage in hands-on residential and commercial labs
- Fundamental knowledge working with the National Electrical Code (NEC) standards
- Highly experienced instructors
- Specialty areas include PLCs, industrial controls, fiber, motors and more
- Graduates earn 2000 apprenticeship hours
- Excellent starting wages

**JOB PLACEMENT RATE: 100%\***

**TUITION/FEES/LAPTOP: \$18,675**

*Book and tool costs extra.*

\*Placement data is gathered through graduate surveys, faculty-collected data, and phone surveys started after six months of graduation. In 2021, 44 of the 45 graduates are represented in the data. Employment rate is figured by: (graduates employed)/(responding graduates who are seeking employment).

For information regarding licensure in South Dakota and other states, please visit our website at <https://www.mitchelltech.edu/programs/on-campus/construction-manufacturing-technologies/electrical-construction-maintenance/requirements>

# **BE THE BEST.**

**800-684-1969**  
**mitchelltech.edu**

**Award: AAS Degree**

| First Semester |     | Semester Credits                       |
|----------------|-----|--|
| ECM            | 101 | Electrical Fundamentals..... 4         |
| ECM            | 121 | Electrical Drawing ..... 4             |
| ECM            | 151 | Basic Electrical Lab..... 5            |
| OSHA           | 101 | OSHA 10 Training - Construction .....1 |
| SSS            | 100 | Student Success.....1                  |
|                |     | Math Elective..... 3                   |
|                |     | General Education Elective ..... 3     |
|                |     | 21                                     |

| Second Semester |     | Semester Credits                     |
|-----------------|-----|--------------------------------------|
| ECM             | 103 | Designing Electrical Systems..... 3  |
| ECM             | 122 | Residential Blueprint & Code ..... 3 |
| ECM             | 149 | Basic Conduit Bending ..... 2        |
| ECM             | 157 | Wiring Lab..... 4                    |
| CIS             | 105 | Introduction to Computers..... 3     |
|                 |     | General Education Elective ..... 3   |
|                 |     | 18                                   |

| Third Semester |     | Semester Credits                         |
|----------------|-----|--|
| ECM            | 211 | Power Distribution .....1.5              |
| ECM            | 231 | Electronic Circuits ..... 2              |
| ECM            | 251 | Commercial/Industrial Wiring Lab ..... 4 |
| ECM            | 252 | Industrial Controls ..... 3              |
| ECM            | 255 | Control Lab I..... 1.5                   |
| ECM            | 259 | Programmable Logic Controls ..... 3      |
|                |     | Written Communications Elective..... 3   |
|                |     | 18                                       |

| Fourth Semester |     | Semester Credits                         |
|-----------------|-----|--|
| ECM             | 202 | Motor Theory & Maintenance ..... 2       |
| ECM             | 221 | Commercial Blueprint Reading.....2.5     |
| ECM             | 235 | Structured Cabling..... 4                |
| ECM             | 244 | VFD Motor Drives .....1                  |
| ECM             | 253 | Advanced Control Systems .....2.5        |
| ECM             | 257 | Advanced Control Lab II ..... 2          |
| ECM             | 261 | Adv. Programmable Logic Controls.....3.5 |
| CPR             | 100 | First Aid, CPR & AED ..... 0.5           |
|                 |     | 18                                       |

**Total Credits Required to Graduate: 75**



1800 E. Spruce St., Mitchell, SD 57301  
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