## WESTERN DAKOTA TECH

## ELECTRICAL TRADES – AUTONOMOUS EQUIPMENT TECHNICIAN

## Certificate, 24-30 Credit Hours, 9-Month Program

The Electrical Trades – Autonomous Equipment Technician certificate program provides in-depth instruction in the skills required to install, commission, and maintain electrical and mechanical systems. The Autonomous Equipment Technician will bridge the gap between basic mechanical systems and advanced IT systems. Principles of electricity, networking, welding, and mechanical skills will provide a foundation for various autonomous systems.

| Course | No. | Course Title                                     | Credits |
|--------|-----|--|---------|
|        |     | Technical Requirements                           |         |
| CIS    | 131 | NETWORKING TECHNOLOGIES I 3                      |         |
| CT     | 110 | CONSTRUCTION SAFETY/OSHA 3                       |         |
| IEL    | 105 | INTRODUCTION TO INDUSTRIAL ELECTRONICS           |         |
| MEC    | 105 | FUNDAMENTALS OF AUTONOMOUS EQUIPMENT APPLICATION |         |
| MEC    | 130 | MECHANICAL BASICS 3                              |         |
| MEC    | 150 | AUTONOMOUS TECHNOLOGY 6                          |         |
| MEC    | 199 | INTERNSHIP (OPTIONAL)                            |         |
| WDM    | 100 | WELDING AND FABRICATION FOR GENERAL APPLICATIONS | 2       |
|        |     | Total  | 24-30   |

## Semester Breakdown Certificate

| Semester Dreakdown Certificate |  |    |  |  |  |  |  |
|--------------------------------|--|----|--|--|--|--|--|
|                                | First<br>Semester                                | CR | Second<br>Semester CR  |  |  |  |  |
|                                | Networking Technologies I                        | 3  | MEC 150 Autonomous Technology (1st 8 weeks) 6                  |  |  |  |  |
|                                | Construction Safety/OSHA                         | 3  | MEC 199 Internship (2 <sup>nd</sup> 8 weeks) <i>optional</i> 6 |  |  |  |  |
| IEL 105                        | Introduction to Industrial Electronics           | 4  |  |  |  |  |  |
|                                | Fundamentals of Autonomous Equipment Application | 3  |  |  |  |  |  |
|                                | Mechanical Basics                                | 3  |  |  |  |  |  |
| WDM 100                        | Welding and Fabrication for General Applications | 2  |  |  |  |  |  |
|                                | Total Credit Hours                               | 18 | Total Credit Hours 6-12  |  |  |  |  |

If you are or have been convicted, pleaded guilty or no contest to, or received a suspended imposition of sentence for a felony or certain misdemeanors, you are advised that you may not be able to complete all course requirements for your chosen program, you may be prevented from taking required certification/licensure examinations in your chosen program field, and you may be prevented from gaining employment in your program field.

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