ROBOTICS CERTIFICATE

David Haus, PhD, **Dean** Phone: (419) 995-8422 Email: haus.d@rhodesstate.edu Office: JJC 117

The Robotics Certificate prepares students to operate, maintain, and troubleshoot industrial robots. Students will use a variety of robot types to prepare for different industrial robotics applications, and they will also complete their Fanuc robot certification--a highly desired third-party credential.

Program Learning Outcomes

Upon completion, the student will be able to:

- 1. Develop programs to control industrial robots for a variety of applications.
- 2. Recognize the application of problem-solving techniques.
- 3. Describe and apply safety rules while working on robots.
- 4. Analyze the technical specifications of manufacturing systems, modules, and components.
- 5. Perform as part of a team to complete a complex automated systems project.

Technical Standards

See here for details.

Robotics

| Code | Title | Hours |
|-------------|--|-------|
| AMT 1020 | Preventive Maintenance | 2 |
| IMT 1911 | Technical Math I | 3 |
| CPT 1250 | Computer Applications in the Workplace | 3 |
| AMT 1040 | Blueprint Reading and Schematics | 2 |
| or MET 1000 | Engineering Graphics with AutoCAD | |
| AMT 1070 | Basic Electricity and Electronics | 3 |
| EET 1110 | Circuit Analysis I | 3 |
| FMS 2110 | Basic Robotics and Mechatronics | 3 |
| EET 1330 | Digital Circuits | 4 |
| FMS 2130 | Industrial Mechatronics and Robotics | 3 |
| AMT 2050 | Robot Maintenance | 3 |
| AMT 2970 🎓 | Troubleshooting Capstone | 3 |
| Total Hours | | 32 |