

Automated Industrial Technology AAS

| Program Learning Outcomes (PLOs) | Measurable Student Learning Outcomes (MSLOs)- PLO Alignment | | | | | | | | | | | | | |
|---|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | AIT100 | AIT105 | AIT110 | AIT115 | AIT120 | AIT125 | AIT205 | AIT210 | AIT215 | AIT225 | AIT270 | AIT275 | MET289 | WLD221 |
| 1. (Application Level) Install, test, and troubleshoot Programmable Logic Controllers (PLCs). (CSLO 2,3) | | | | ✓ | ✓ | | ✓ | ✓ | | | ✓ | | | |
| 2. (Analysis Level) Analyze AC/DC circuits, and analog and digital systems. (CSLO 2,3) | | | | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | | ✓ |
| 3. (Application Level) Calibrate, adjust and test process control systems. (CSLO 2,3) | | | | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 4. (Application Level) Install, test, operate and troubleshoot motor drives in an electrical control system. (CSLO 2,3) | ✓ | | | ✓ | ✓ | | ✓ | | | | | | ✓ | ✓ |
| 5. (Analysis Level) Perform, monitor and interpret machine operation. (CSLO 2,3) | | ✓ | ✓ | ✓ | ✓ | | | | | ✓ | | | ✓ | ✓ |
| 6. (Analysis Level) Interpret electrical and electronic control and power schematics and measure current, voltage and resistance. (CSLO 2,3) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | | ✓ | ✓ | |
| 7. (Analysis Level) Analyze and perform preventive and predictive maintenance on robotic and other automated industrial equipment. (CSLO 2,3,4) | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 8. (Application Level) Utilize computer information systems, microcomputer applications, and programming techniques. (CSLO 2,3,4) | | | | | | | | ✓ | ✓ | | ✓ | ✓ | ✓ | |
| 9. (Application Level) Apply electronic and mechanical fabrication techniques. (CSLO 2,3) | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | | | | ✓ | | ✓ | ✓ |
| 10. (Comprehension Level) Describe and adhere to safety, health and environmental rules and regulations. (CSLO 2,3,4) | ✓ | ✓ | | | | | | | | | | ✓ | | ✓ |
| 11. (Application Level) Practice professional standards of the industry and ethical behavior. (CSLO 2,3) | | | | | | | | | | | | | | ✓ |
| 12. (Comprehension Level) Communicate effectively, both orally and in writing, in varied settings in a culturally responsive manner. (CSLO 2,3,4) | | | | | | | | | | | | | | |
| 13. (Synthesis Level) Collaborate with diverse individuals and entities to achieve common goals. (CSLO 2,3,4) | | | | | | | | ✓ | | | | | | |

Automated Industrial Technology I Certificate

| Program Learning Outcomes (PLOs) | Measurable Student Learning Outcomes (MSLOs)- PLO Alignment | | | | | |
|--|---|--------|--------|--------|--------|--------|
| | AIT100 | AIT105 | AIT110 | AIT115 | AIT120 | AIT125 |
| 1. (Applying Level) Collaborate with diverse individuals and entities to achieve common goals. (CSLO 2,3,4) | | | | | | |
| 2. (Analyzing Level) Analyze AC/DC circuits, and analog and digital systems. (CSLO 2,3,4) | | | | ✓ | ✓ | ✓ |
| 3. (Applying Level) Perform, monitor and interpret machine operation. (CSLO 2,3) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 4. (Applying Level) Interpret electrical and electronic control and power schematics and measure current, voltage and resistance. (CSLO 2,3) | ✓ | | ✓ | ✓ | ✓ | ✓ |
| 5. (Analyzing Level) Analyze and perform preventive and predictive maintenance on robotic and other automated industrial equipment. (CSLO 2,3,4) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 6. (Applying Level) Utilize computer information systems, microcomputer applications, and programming techniques. (CSLO 2,3,4) | | | | | | |
| 7. (Applying Level) Apply electronic and mechanical fabrication techniques. (CSLO 2,3,4) | | ✓ | ✓ | ✓ | ✓ | |
| 8. (Understanding Level) Describe and adhere to safety, health and environmental rules and regulations. (CSLO 2,3) | ✓ | | | | | |
| 9. (Applying Level) Practice professional standards of the industry and ethical behavior. (CSLO 2,3,4) | | | | | | |
| 10. (Remembering Level) Communicate effectively, both orally and in writing, in varied settings in a culturally responsive manner. (CSLO 2,3,4) | | ✓ | | | | |

Automated Industrial Technology II Certificate

| Program Learning Outcomes (PLOs) | Measurable Student Learning Outcomes (MSLOs)- PLO Alignment | | | | |
|---|---|--------|--------|--------|--------|
| | AIT205 | AIT210 | AIT215 | AIT225 | AIT270 |
| 1. (Applying Level) Collaborate with diverse individuals and entities to achieve common goals. (CSLO 2,3) | | | | | |
| 2. (Applying Level) Install, test and troubleshoot Programmable Logic Controllers (PLCs). (CSLO 2,3,4) | | ✓ | | | |
| 3. (Analyzing Level) Analyze AC/DC circuits, and analog and digital systems. (CSLO 2,3) | ✓ | | ✓ | ✓ | |
| 4. (Applying Level) Install, test, operate and troubleshoot motor drives in an electrical control system. (CSLO 2,3,4) | ✓ | | | ✓ | |
| 5. (Understanding Level) Interpret electrical and electronic control and power schematics and measure current, voltage and resistance. (CSLO 2,3,4) | | | ✓ | ✓ | |
| 6. (Applying Level) Analyze and perform preventive and predictive maintenance on robotic and other automated industrial equipment. (CSLO 2,3,4) | | | | | ✓ |
| 7. (Applying Level) Utilize computer information systems, microcomputer applications, and programming techniques. (CSLO 2,3,4) | | | | | ✓ |
| 8. (Applying Level) Apply electronic and mechanical fabrication techniques. (CSLO 2,3) | ✓ | | ✓ | | ✓ |
| 9. (Analyzing Level) Describe and adhere to safety, health and environmental rules and regulations. (CSLO 2,3) | | | | | ✓ |
| 10. (Applying Level) Practice professional standards of the industry and ethical behavior. (CSLO 2,3,4) | | | | | |
| 11. (Understanding Level) Communicate effectively, both orally and in writing, in varied settings in a culturally responsive manner. (CSLO 2,3) | | | | | |