Welding Technology

This turnkey automated welding station gives students training and skills in production welding methods, robotic programming and control. Using RoboCell software students safely perform entire welding processes in 3D simulation before executing actual automated welding applications.

Course Information

<table>
<thead>
<tr>
<th>Type</th>
<th>Virtual, Lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>Languages</td>
<td>English</td>
</tr>
<tr>
<td>Hours of instruction</td>
<td>15</td>
</tr>
</tbody>
</table>

Course Outline

- Getting Started
- Automated Welding Simulation Software
- Recording Robot Positions
- Basic Robotic Programming Tools
- Advanced Robotic Programming Tools
- Programming Gravity Feeder Operations
- Programming Jig and Gun Operations
- Programming Welding Operations
- Programming a Fully Automated Welding Cycle
- T-Joint Welding: Fine-Tuning
- Performing a T-joint Weld
- Programming a Butt Joint Weld
- Performing a Butt Weld
- Preventing Thermal Deformation
- Changing Parameters: Inert Gas Shield
- Changing Parameters: Robot Speed and Feed Rate
- Welding Your Name (1)
- Welding Your Name (2)

Lab Hardware Includes

- SCORBOT-ER 4u robot arm
- RoboCell simulation software
- Teach pendant
- Parts feeder
- Welding torch holder
- Extruded aluminum frame welding booth
- Welding fixtures
- Gripper adapter for ER 4u
- Filter plates (shade 10) for UV and EYE Protection
- MIG Welder

Automated welding includes LearnMate®, Intelitek’s innovative e-learning platform. Self-paced interactive LearnMate content may be deployed stand-alone or through the robust learning management system (LMS). The LearnMate e-learning suite provides everything needed for the ultimate blended learning experience:

- SCORM-compliant interactive content
- Anytime, anywhere accessibility
- Student and class management
- Grade tracking
- Skill/competency reporting mapped to national academic skill standards

Ordering Information

Curriculum

Automated Welding with SCORBOT-ER 4u

LearnMate course, Virtual  77-3001-0000

Bundles

Automated Welding with SCORBOT-ER 4u includes curriculum, hardware and software  R08-WELD-ER4U