

IAR 212 6 Axis Robotic Arm in Industrial Automation

Module 1: Introduction

- *Introduction*

Module 2: Introduction to 6 Axis Arm

- *Lesson 1: Introduction to the 6 Axis arm*
- *Lesson 2: Color Coding for formative, Summative, Interactions, and video*
- *Lesson 3: Articulated Arm system*
- *Lesson 4: Articulated arm Anatomy of Arm*
- *Lesson 5: Articulated arm designs*

Module 3: Robot Controllers

- *Lesson 6: Robot Pendant details*
- *Lesson 7: Robot Controller details*

Module 4: Theory of Robot Arms•

- *Lesson 8: Common uses of an articulated robot arm*
- *Lesson 9: Strengths / Weaknesses*
- *Lesson 10: Payload*
- *Lesson 11: Workplace & Reach study*
- *Lesson 12: End of travel / hardstops*
- *Lesson 13: Coordinate Frames*
- *Lesson 14: Singularities*

Module 5: Robot Brands

- *Lesson 15: Different Robot Brands*
- *Lesson 16: Robot Options*
- *Lesson 17: Home Position*
- *Lesson 18: Robot Startup/Shutdown*
- *Lesson 19: Robot motion stop / estop*
- *Lesson 20: Robot Troubleshooting*

Module 6: Interactive Timed Assessment

Module 7: Conclusion

- *Lesson 15: Conclusion*