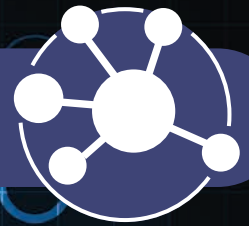


LOGISTICS AND SUPPLY CHAIN (40-50 LESSONS)



This course explores applications of mobile robotic systems. Students will also investigate the concepts of warehousing and logistics - including supply chain logistics, and methods of transporting goods. Investigation of PLC-based industrial control systems, and ladder logic programming is also covered.

Learning Objectives

- Explore careers in the logistics sector
- Investigate mobile robotic systems applications
- Explore how mobile robotic systems are controlled
- Explore sensing systems used by mobile robots
- Design mobile robotic systems for logistics, to meet a given brief
- Recognize the principles of stock control
- Identify appropriate methods of securely and safely transporting goods
- Understand the principles of quality control and monitoring in the procurement process
- Explore the use of PLC-based systems for control of industrial and logistics processes
- Develop sequence algorithms using ladder logic based programming
- Design and program industrial control solutions



Typical Careers

Robotics Technician, Robotics Engineer, Logistics Technician, Aerospace Engineer, Mechatronics Engineer

Lessons

- Introduction - Careers: Mobile Robotics
- Mobile Robotics
- Warehouse and Logistics
- Industrial Control

Design Project

- An Automated Guided Vehicle

Equipment

- Industrial Control Trainer (290-01)
- Engineering Construction Kit (220-01)

