National Center for Supply Chain Automation

MASTER SYLLABUS

Introduction to the Automated Warehouse

Semester Credit Hours: 3.00

Prerequisites: None

## COURSE DESCRIPTION

An introduction to equipment that supports material handling in warehouses and distribution centers to include safety, tools, robotics, networks, mechanical drives, structures, cybersecurity, maintenance, welding, electricity and troubleshooting.

## STUDENT LEARNING OUTCOMES

Upon successful completion of the course, students should be able to perform the following:

* List safety procedures for mechanical applications;
* List and describe the operation of common hand and power tools;
* Describe the physical properties of mechanical devices;
* Describe the different types of structures;
* Identify the common types of drive devices;
* Describe the basic maintenance types and applications;
* Select the proper procedures for troubleshooting failed components;
* Understand the operation of Ethernet TCI/IP;
* Compare and contrast common security issues;
* Identify different types of welds;
* Identify and use critical thinking to acquire information.

**COURSE OUTLINE**

* Safety
* Measurement
* Tools and applications
* Physical properties
* Structures
* Lifting and rigging
* Mechanical drives
* Maintenance
* Introduction to networks
* Impact of cyber attacks on businesses manufacturers and supply chains
* Introduction to welding
* Troubleshooting and Failure Analysis