



Fanuc Robot Operations

COURSE OVERVIEW

This course covers the basic operations of FANUC robots, using the teach pendant as the main interface point

1.1 Course Goal

Upon successful completion of this course, the student will be able to perform the following:

- Power up and jog the robot
- Understand Frames
- Execute production operations
- Modify, and execute a teach pendant program
- Backup programs and files

Recommended safety procedures are integrated into all training exercises.

The course consists of lectures, demonstrations and a series of lab exercises designed to reinforce what the student has learned.

In addition to lab exercises, a pre-test and a post-test are used to measure mastery of objectives.



1.2 Objectives

Students successfully completing this course will be able to:

Safely power up the robot from a complete shutdown

- Identify all components of the cell that are part of the power-up sequence
- Recognize the main components of the robot
- Identify all safety considerations related to operating the cell
- Recognize and clear alarms that would inhibit cell operation

Recover from common programming and servo alarm conditions

- Clear servo alarm faults
- Correct programming faults

Safely and predictably jog the robot in specific manual jog systems

- Lab safety in a robot cell in our Plant setting
- Jog the robot in the Joint system
- Setup and use Cartesian Frames while jogging

Test a program

- Test a program using the three-step method

Select/Modify Execute a teach pendant program

- Select a teach pendant program
- Edit the motion components of a program
- Execute the program

Use signals and specific cell and controller parameters

- Force, and monitor signals
- Add signals and I/O instructions to the program

Save/Load individual programs and files to/from a default device

- Set the default device
- Perform file maintenance

1.3 Course content

