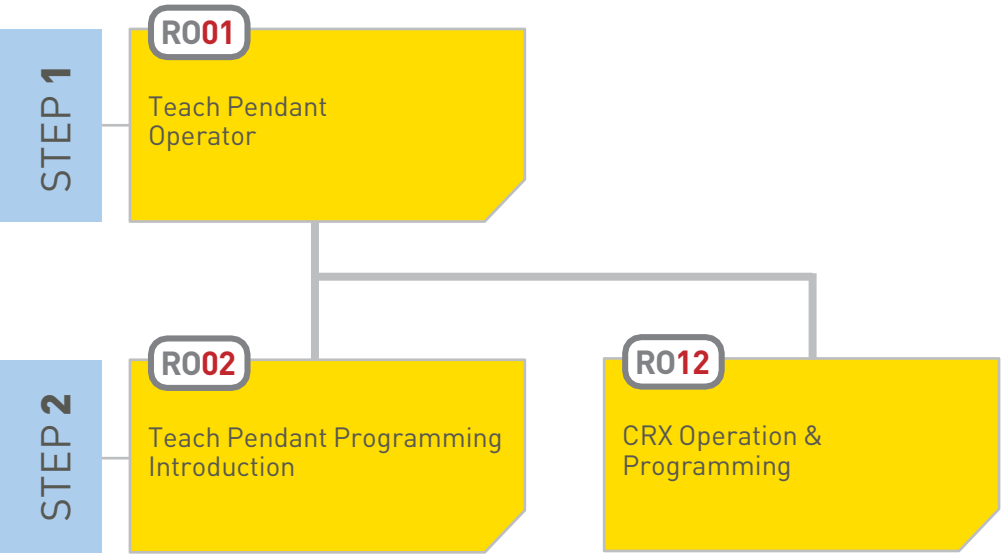
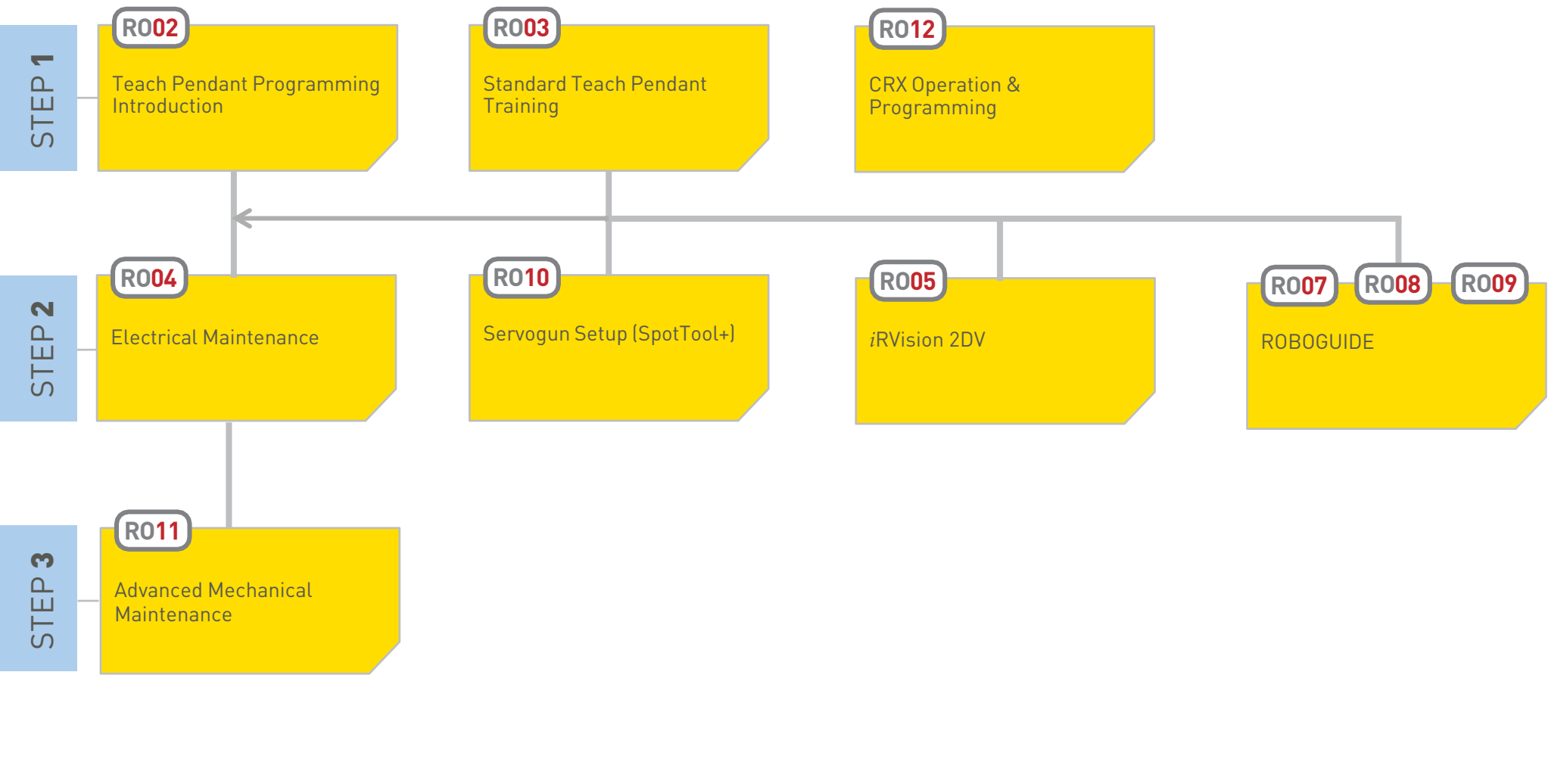
Suggested learning pathway - Operator



Suggested learning pathway – Maintenance/Technician





Suggested learning pathway – Programmer

STEP 1

R003 Standard Teach Pendant Training

R012 CRX Operation & Programming

STEP 2

R007 **R008** **R009** ROBOGUIDE

R005 *i*RVision 2DV

R006 DCS Position Speed Check

R010 Servogun Setup (SpotTool+)



RO 01

CNC | **ROBOTICS** | ROBODRILL | ROBOSHOT | ROBOCUT

Teach Pendant Operator

UK-TRN-RO-00001-EN

DESCRIPTION

This course teaches operators, technicians, engineers, and programmers how to safely operate a robot.

It includes presentations, demonstrations, and hands-on exercises to reinforce classroom learning. Safety procedures are emphasized throughout the training.

OBJECTIVES

At the end of the course participants will be able to:

- Safety jog and operate the robot
- Recover the robot to its home position or unsafe DCS zone
- Take system backup
- Understand telephone support procedures

TOPICS COVERED

- Controller cabinet description
- Robot safety and awareness
- *i*Pendant layout and operation
- Recover the robot to HOME position ready to start the next program
- Escaping from an unsafe DCS zone
- Take system backup
- Telephone support procedures

CONTACT	DURATION	DIFFICUTY	COST	PRE REQUISITES	NEXT STEPS
More Information: academy@fanuc.co.uk	1 day 0900 – 1600		£550 per person Max 8 participants	*No prerequisites required to attend*	RO 02 RO 03



RO 02

Teach Pendant Programming Introduction

UK-TRN-RO-00002-EN

DESCRIPTION

This course teaches operators, technicians, engineers, and programmers how to safely operate a robot.

It includes presentations, demonstrations, and hands-on exercises to reinforce classroom learning. Safety procedures are emphasized throughout the training.

OBJECTIVES

At the end of the course participants will be able to:

- Safety jog and operate the robot
- Create and modify basic programs
- Recover the robot home from mid cycle or unsafe DCS zone
- Take backups and restore individual programs
- Understand telephone support procedures

TOPICS COVERED

- Robot safety and awareness
- *i*Pendant layout and operation
- Jogging coordinates systems and singularity
- Simple program creation
- Tool and user frame awareness
- Payload setting awareness
- Restore and backup files
- Escaping from an unsafe DCS zone
- Telephone support procedures

CONTACT

More Information:
academy@fanuc.co.uk

DURATION

2 days

0900 – 1600

DIFFICUTY

COST

£1100 per person

Max 8 participants

PRE REQUISITES

No prerequisites required to attend

NEXT STEPS

RO 03 RO 04 RO 06 RO 07 RO 08

RO 09 RO 10 RO 11



RO 03

Standard Teach Pendant Programming

UK-TRN-RO-00003-EN

eal Approved
Part of the Enginuity Group

DESCRIPTION

This course teaches operators, technicians, engineers, and programmers how to safely operate a robot.

It includes presentations, demonstrations, and hands-on exercises to reinforce classroom learning. Safety procedures are emphasized throughout the training.

OBJECTIVES

At the end of the course participants will be able to:

- Safety jog and operate the robot
- Create and modify programs
- Confidently run and test programs
- Create and restore backups
- Understand telephone support procedures

TOPICS COVERED

- Robot safety and awareness
- Robot / Controller overview
- *i*Pendant layout and operation
- Jogging coordinates systems and singularity
- Tool and user frame setup
- Program creation and modification
- Program elements including use of position registers and offsets
- Use of registers and I/O instructions
- Telephone support procedures

CONTACT	DURATION	DIFFICUTY	COST	PRE REQUISITES	NEXT STEPS
More Information: academy@fanuc.co.uk	4 days 0900 – 1600		£2200 per person Max 8 participants	*No prerequisites required to attend*	RO 04 RO 05 RO 06 RO 07 RO 08 RO 09 RO 10 RO 11



RO 04

Electrical Maintenance

UK-TRN-RO-00004-EN

DESCRIPTION

This course teaches engineers, and programmers how to safely operate a robot how to safely maintain the control system elements of the robot.

It includes presentations, demonstrations, and hands-on exercises to reinforce classroom learning. Safety procedures are emphasized throughout the training.

OBJECTIVES

At the end of the course participants will be able to:

- Identifying controller hardware
- Disassemble and reassemble a FANUC controller
- Have a theoretical understanding of the control system elements
- Fault find on the robot control system using built-in diagnostics
- Harness fault diagnosis
- Master the robot
- Understand telephone support procedures

TOPICS COVERED

- Electrical maintenance and fault finding
- Detailed explanation of components of the robot control and robot and how they work
- Practical examples of electrical maintenance
- Exchange of components
- Practical exercise's fault finding on the robot control and robot
- Mastering
- Telephone support procedures

CONTACT

More Information:
academy@fanuc.co.uk

DURATION

2 days

0900 – 1600

DIFFICUTY

COST

£1100 per person

Max 8 participants

PRE REQUISITES

RO 02 RO 03

Only completion of on of the above required

NEXT STEPS

RO 05 RO 06 RO 07 RO 08 RO 09 RO 10 RO 11



RO 05

*i*RVision 2DV

UK-TRN-RO-00005-EN

DESCRIPTION

This course teaches engineers, and programmers how to safely operate a robot how to setup and program a 2D iRVision .

It includes presentations, demonstrations, and hands-on exercises to reinforce classroom learning. Safety procedures are emphasized throughout the training.

OBJECTIVES

At the end of the course participants will be able to:

- Select an appropriate lens for the job
- Calibrate a 2D *i*RVision camera system
- Proficiently set up part detection using GPM locator tools
- Understand telephone support procedures

TOPICS COVERED

- Principles of *i*RVision
- Lens selections
- 2D camera calibration
- GPM Model learning
- Program creation
- Data back-up
- Telephone support procedures

CONTACT

More Information:
academy@fanuc.co.uk

DURATION

3 days

0900 – 1600

DIFFICUTY

COST

£1650 per person

Max 6 participants

PRE REQUISITES

RO 03

NEXT STEPS

RO 06 RO 07 RO 08 RO 09 RO 10



RO 06

DCS Position Speed Check

UK-TRN-RO-00006-EN

DESCRIPTION

This course teaches engineers, and programmers how to safely operate a robot how to setup and safety implement DCS position speed check zones .

It includes presentations, demonstrations, and hands-on exercises to reinforce classroom learning. Safety procedures are emphasized throughout the training.

OBJECTIVES

At the end of the course participants will be able to:

- Understand the fundamentals of the DCS function
- Be able to set up position and speed check functions to safely monitor the robot
- Recover the robot from unsafe DCS zones
- Setup and change DCS passcodes
- Take and restore backup data
- Understand telephone support procedures

TOPICS COVERED

- Cartesian and joint position check functions
- Cartesian and joint speed check functions
- DCS tool and user frames
- User model creation
- Stop position prediction function
- Zone testing and verification
- Safe I/O connect function
- Telephone support procedures

CONTACT

More Information:
academy@fanuc.co.uk

DURATION

3 days

0900 – 1600

DIFFICUTY

COST

£1650 per person

Max 6 participants

PRE REQUISITES

RO 02 RO 03

Only completion of on of the above required

NEXT STEPS

RO 05 RO 07 RO 08 RO 09 RO 10



RO 07

ROBOGUIDE (HandlingPRO)

UK-TRN-RO-00007-EN

DESCRIPTION

ROBOGUIDE is a robot system animation tool specifically developed for the production and maintenance of robot systems. It can be used both in offices and on the factory floor.

This course is designed for developers in order to successfully analyse, simulate, and test applications by offline programming with ROBOGUIDE.

OBJECTIVES

At the end of the course participants will be able to:

- Install and use the software
- Create programs with the virtual teach pendant
- Build and program a simple cell offline
- Launch simulation to test movements, cycle times, collision detection prior to installing robots

TOPICS COVERED

- Workcell creation
- Developing TP programs with ROBOGUIDE
- Importing unique CAD models of parts, tools machines and work cells
- Simulation functions
- Using virtual teach pendant and controller
- Trace and profiler functions
- Creation of complex paths program download
- Calibration function

CONTACT

More Information:
academy@fanuc.co.uk

DURATION

3 days

0900 – 1600

DIFFICUTY

COST

£1650 per person

Max 6 participants

PRE REQUISITES

RO 02 RO 03

Only completion of on of the above required

NEXT STEPS

RO 05 RO 06 RO 08 RO 09 RO 10



RO 08

ROBOGUIDE (WeldPRO)

UK-TRN-RO-00008-EN

DESCRIPTION

ROBOGUIDE is a robot system animation tool specifically developed for the production and maintenance of robot systems. It can be used both in offices and on the factory floor.

This course is designed for developers in order to successfully analyse, simulate, and test applications by offline programming with ROBOGUIDE.

OBJECTIVES

At the end of the course participants will be able to:

- Install and use the software
- Create programs with the virtual teach pendant
- Build and program a simple cell offline
- Launch simulation to test movements, cycle times, collision detection prior to installing robots

TOPICS COVERED

- Workcell creation
- Developing TP programs with ROBOGUIDE
- Importing unique CAD models of parts, tools machines and work cells
- Simulation functions
- Using virtual teach pendant and controller
- Trace and profiler functions
- Creation of complex paths program download
- Calibration function
- CAD to Path, coordinated motion

CONTACT

More Information:
academy@fanuc.co.uk

DURATION

3 days

0900 – 1600

DIFFICUTY

COST

£1650 per person

Max 6 participants

PRE REQUISITES

RO 02 RO 03

Only completion of on of the above required

NEXT STEPS

RO 05 RO 06 RO 07 RO 09 RO 10



RO 09

ROBOGUIDE (PaintPRO)

UK-TRN-RO-00009-EN

DESCRIPTION

ROBOGUIDE is a robot system animation tool specifically developed for the production and maintenance of robot systems. It can be used both in offices and on the factory floor.

This course is designed for developers in order to successfully analyse, simulate, and test applications by offline programming with ROBOGUIDE.

OBJECTIVES

At the end of the course participants will be able to:

- Install and use the software
- Create programs with the virtual teach pendant
- Build and program a simple cell offline
- Launch simulation to test movements, cycle times, collision detection prior to installing robots

TOPICS COVERED

- Workcell creation
- Developing TP programs with ROBOGUIDE
- Importing unique CAD models of parts, tools machines and work cells
- Simulation functions
- Using virtual teach pendant and controller
- Trace and profiler functions
- Creation of complex paths program download
- Calibration function
- Cad-to-path, spray simulation

CONTACT

More Information:
academy@fanuc.co.uk

DURATION

3 days

0900 – 1600

DIFFICUTY

COST

£1650 per person

Max 6 participants

PRE REQUISITES

RO 02 RO 03

Only completion of on of the above required

NEXT STEPS

RO 05 RO 06 RO 07 RO 08 RO 10



RO 10

Servogun Setup (SpotTool+)

UK-TRN-RO-00010-EN

DESCRIPTION

This course teaches engineers, and programmers how to safely operate a robot how to setup and program the robot for a spot-welding application.

It includes presentations, demonstrations, and hands-on exercises to reinforce classroom learning. Safety procedures are emphasized throughout the training.

OBJECTIVES

At the end of the course participants will be able to:

- Add and master a servo gun axis
- Auto tune and pressure calibrate servo gun
- Create spot welding applications programs
- Understand how to tip dress and apply tip wear compensation

TOPICS COVERED

- Hardware/Software setup
- Servo gun setup and mastering
- Auto tuning
- Pressure calibration
- Gun Backup
- Material thickness (if used)
- Manual Weld (theory/presentation only)
- Spot instruction
- Tip dress/Tip wear compensation / setup

CONTACT

More Information:
academy@fanuc.co.uk

DURATION

2 days

0900 – 1600

DIFFICUTY

COST

£1100 per person

Max 4 participants

PRE REQUISITES

RO 03

NEXT STEPS

RO 05 RO 06 RO 07 RO 08 RO 09



RO 11

Advanced Mechanical Maintenance

UK-TRN-RO-00011-EN

DESCRIPTION

This course teaches maintenance personnel how to mechanically troubleshoot of the robot and controller.

It includes presentations, demonstrations, and hands-on exercises to reinforce classroom learning. Safety procedures are emphasized throughout the training.

OBJECTIVES

At the end of the course participants will be able to:

- Disassemble and reassemble a FANUC robot
- Test the robot characteristics with basic programs
- Resolve common faults
- Proceed to regular preventative maintenance
- Be familiar with FANUC telephone support requirements
- and procedures

TOPICS COVERED

- Robot and controller overview
- Robot safety and awareness
- Backing up procedures
- Removal/strip down and replacement of mechanical unit and controller modules
- Use of FANUC manuals/connection diagrams
- Backups and image recover procedures
- Common fault resolution
- Preventative maintenance procedures and schedules
- Greasing procedures and techniques

CONTACT

More Information:
academy@fanuc.co.uk

DURATION

4 days

0900 – 1600

DIFFICUTY

COST

£2200 per person

Max 4 participants

PRE REQUISITES

RO 02 RO 03

Only completion of on of the above required

NEXT STEPS

RO 05 RO 06 RO 07 RO 08 RO 09 RO 10



RO 12

CRX Operation & Programming

UK-TRN-RO-00012-EN

DESCRIPTION

This course teaches operators, technicians, engineers, and programmers how to safely operate a CRX robot.

It includes presentations, demonstrations, and hands-on exercises to reinforce classroom learning. Safety procedures are emphasized throughout the training.

OBJECTIVES

At the end of the course participants will be able to:

- Understand the basic safety features of a collaborative robot
- Safety jog and operate the robot
- Adjust contact stop parameters
- Utilise quick start guidance to create basic robot setup
- Create and modify basic programs in the timeline editor
- Take backups
- Understand telephone support procedures

TOPICS COVERED

- Collaborative safety awareness
- Tablet TP layout and operation
- Contact stop function
- Manual guided robot operation
- Simple program creation utilising timeline editor
- Basic TCP and payload setup
- Backups
- Telephone support procedures

CONTACT	DURATION	DIFFICUTY	COST	PRE REQUISITES	NEXT STEPS
More Information: academy@fanuc.co.uk	2 days 0900 – 1600		£1100 per person Max 4 participants	*No prerequisites required to attend*	RO 03 RO 05 RO 06 RO 07 RO 08 RO 09 RO 10



FA 01

CNC | ROBOTICS | ROBODRILL | ROBOSHOT | ROBOCUT

FA Foundation

UK-TRN-FA-00001-EN

DESCRIPTION

This course provides machine tool builders an introduction to the FANUC CNC system and automation controls.

This course will have attendees setting up a FANUC CNC system, programming axis motion in ISO G-Code and using ladder programming for auxiliary functions.

OBJECTIVES

At the end of the course participants should be able to:

- Understand the connection requirements of CNC hardware
- Understand and navigate the Fanuc manuals
- Navigate through Fanuc screens
- Navigate and set parameters required for machine operation
- Program simple logic using Fanuc Ladder
- Use simple G code functions for motion control
- Understand the interaction between PMC and CNC control

TOPICS COVERED

- A brief introduction to CNCs and FANUC hardware
- Introduction to software tools available and their use.
- Introduction to CNC Guide 2
- CNC screens and functions.
- Introduction to FANUC Ladder programming
- Introduction to FANUC G CODE functions.
- Introduction to My FANUC, manuals and knowledge resources.

CONTACT

More Information:
academy@fanuc.co.uk

DURATION

4 days

0900 – 1600

DIFFICUTY

COST

£2200 per person

Max 6 participants

PRE REQUISITES

NEXT STEPS

FA 02 FA 03



FA 02

CNC | ROBOTICS | ROBODRILL | ROBOSHOT | ROBOCUT

FA Controls

UK-TRN-FA-00002-EN

DESCRIPTION

This course focuses on the PMC ladder programming required for CNC operation,

The course leads attendees further into the core requirements for PMC programming of a CNC machine. Using CNC guide 2 to simulate a new machine, attendees will be required to program all functions for the simulation to operate.

OBJECTIVES

At the end of the course participants should be able to:

- Program a Fanuc PMC using Ladder III
- Understand and use basic controls (counters, timers etc.)
- Understand and use advanced functions (Window, Macro etc.)
- Fault find their PMC programming
- Add IO Link i devices

TOPICS COVERED

- FANUC ladder programming
- IO Link i devices
- Basic functions (timers, counter, coils, contacts etc.)
- Operational modes
- PMC through CNC variables
- PMC / CNC communications
- Auxiliary commands (M, S and T codes)

CONTACT	DURATION	DIFFICUTY	COST	PRE REQUISITES	NEXT STEPS
More Information: academy@fanuc.co.uk	4 days 0900 – 1600		£2200 per person Max 6 participants	FA 01	FA 03



FA 03

FA UI

UK-TRN-FA-00003-EN

DESCRIPTION

This course teaches the basics of Fanuc Picture

The attendees will work through creating a custom user interface for a simulated CNC machine. This will include simple graphics, buttons, input and output functions. More advanced functions using Ruby script is also included.

OBJECTIVES

At the end of the course participants should be able to:

- Create a Fanuc picture project and add to a CNC
- Create and use Fanuc picture basic functions
- Link interface functions to PMC variables
- Understand and use basic Ruby script

TOPICS COVERED

- Creating Fanuc picture projects
- File management for picture projects
- Downloading picture to CNC systems
- Binary functions (lamps, buttons etc.)
- Data functions (sting variables)
- FOCAS functions
- Ruby script

CONTACT

More Information:
academy@fanuc.co.uk

DURATION

3 days

0900 – 1600

DIFFICUTY

COST

£1650 per person

Max 6 participants

PRE REQUISITES

FA 01 FA 02

NEXT STEPS



FA 04

Manual Guide *i* Milling

UK-TRN-FA-00004-EN

DESCRIPTION

This course focuses on the functions available in Manual Guide i for milling machines.

The attendees will learn how to navigate though Manual Guide i screens, set tools and add functions to a program. They will work through multiple examples for machining parts using the guided picture/conversational wizards of Manual Guide i and simulate the results using CNC guide 2 software.

OBJECTIVES

At the end of the course participants will be able to:

- Navigate through MGi screens.
- Set customer G code functions (Start, End blocks etc.)
- Use Milling functions
- Use drilling functions
- Set tools
- Set offsets
- Navigate program selection

TOPICS COVERED

- MANUAL GUIDE *i* introduction, overview and programming rules
- Program lists and editing
- Fixed form sentences
- Workpiece coordinate system
- Tool offsets and tool data
- Work piece offsets
- Editing, creating programs/ subprograms
- Simulation functions

CONTACT

More Information:
academy@fanuc.co.uk

DURATION

2 days

0900 – 1600

DIFFICUTY

COST

£1100 per person

Max 6 participants

PRE REQUISITES

FA 07

NEXT STEPS



FA 05

Manual Guide *i* Turning

UK-TRN-FA-00005-EN

DESCRIPTION

This course focuses on the functions available in Manual Guide i for turning machines.

The attendees will learn how to navigate though Manual Guide i screens, set tools and add functions to a program. They will work through multiple examples for machining parts using the guided picture/conversational wizards of Manual Guide i and simulate the results using CNC guide 2 software.

OBJECTIVES

At the end of the course participants will be able to:

- Navigate through MGi screens.
- Set customer G code functions (Start, End blocks etc.)
- Use Mill/turning functions
- Use Turning functions
- Use Drilling functions
- Set tools
- Set offsets
- Navigate program selection

TOPICS COVERED

- MANUAL GUIDE *i* introduction, overview and programming rules
- Program lists and editing
- Fixed form sentences
- Workpiece coordinate system
- Tool offsets and tool data
- Work piece offsets
- Editing, creating programs/ subprograms
- Simulation functions

CONTACT

More Information:
academy@fanuc.co.uk

DURATION

2 days

0900 – 1600

DIFFICUTY

COST

£1100 per person

Max 6 participants

PRE REQUISITES

FA 08

NEXT STEPS



FA 06

Macro B Programming

UK-TRN-FA-00006-EN

DESCRIPTION

This course focuses on the macro programming functions, statements and variables.

The attendees will learn the range of macro functions and variables available to be used in G code programming. Using worked examples to demonstrate their use and exercises to practice in the virtual environment of CNC guide 2

OBJECTIVES

At the end of the course participants will be able to:

- Set custom macro variables
- Use system macro variables
- Use macro statements
- Use mathematical functions

TOPICS COVERED

- What is a macro program
- Variable types
- Mathematical functions
- Statements
- System variables
- Creating alarms and messages
- Writing and creating basic macro programs
- Demonstration of advanced macro programming

CONTACT

More Information:
academy@fanuc.co.uk

DURATION

2 days

0900 – 1600

DIFFICUTY

COST

£1100 per person

Max 6 participants

PRE REQUISITES

FA 07 FA 08

NEXT STEPS



FA 07

CNC | ROBOTICS | ROBODRILL | ROBOSHOT | ROBOCUT

ISO G Code Programming Milling

UK-TRN-FA-00007-EN

DESCRIPTION

This course is designed to teach the fundamentals of G code programming.

The attendees will learn work though slowly building up knowledge from the basis of G code motion to canned cycles, offsets and coordinate transitions. They will be able to test their skills using CNC Guide 2 simulation with both worked examples and exercises.

OBJECTIVES

At the end of the course participants will be able to:

- Use basic G codes for positional and cutting motion
- Use canned cycles for drilling
- Understand G code structure
- Understand the use of T, M and S codes

TOPICS COVERED

- Basics of G code G0, G1, G2/3
- Auxiliary codes (M,S and T)
- Canned cycles
- Work offsets
- Tool offsets
- Simulation options
- Sub programs
- Rotary and polar coordinates
- Macros

CONTACT

More Information:
academy@fanuc.co.uk

DURATION

3 days

0900 – 1600

DIFFICUTY

COST

£1650 per person

Max 6 participants

RECOMMENDED PRE LEARNING

NEXT STEPS

FA 04 FA 06



FA 08

ISO G Code Programming Turning

UK-TRN-FA-00008-EN

DESCRIPTION

This course is designed to teach the fundamentals of G code programming.

The attendees will learn work though slowly building up knowledge from the basis of G code motion to canned cycles, offsets and coordinate transitions. They will be able to test their skills using CNC Guide 2 simulation with both worked examples and exercises.

OBJECTIVES

At the end of the course participants will be able to:

- Use basic G codes for positional and cutting motion
- Use canned cycles
- Understand G code structure
- Understand the use of T, M and S codes

TOPICS COVERED

- Basics of G code G0, G1, G2/3
- Auxiliary codes (M,S and T)
- Canned cycles
- Work offsets
- Tool offsets
- Simulation options
- Sub programs
- Macros

CONTACT

More Information:
academy@fanuc.co.uk

DURATION

3 days

0900 – 1600

DIFFICUTY

COST

£1100 per person

Max 6 participants

PRE REQUISITES

NEXT STEPS

FA 05 FA 06



FA09

PMC Service Maintenance

UK-TRN-FA-00009-EN

DESCRIPTION

This course focuses aimed for maintenance teams who may need to add equipment, set new options and fault find PMC programming.

The attendees will work be introduced to the PMC functions through both the CNC screens and Fanuc ladder. This course will focus on the functionality of PMC operations, add in simple operations and fault finding.

OBJECTIVES

At the end of the course participants will be able to:

- Navigate PMC function on the CNC
- Find PMC operations
- Edit PMC functions
- Add PMC controlled devices
- Navigate Fanuc ladder

TOPICS COVERED

- PMC function introduction
- PMC setup and maintenance function on CNC screens
- IO diagnostics and setup on CNC Screens
- Introduction to Ladder III
- Ladder navigation and editing on CNC screens
- Ladder functions and their use
- PMC diagnostics

CONTACT	DURATION	DIFFICUTY	COST	PRE REQUISITES	NEXT STEPS
More Information: academy@fanuc.co.uk	3 days 0900 – 1600		£1650 per person Max 6 participants		



FA 10

CNC | ROBOTICS | ROBODRILL | ROBOSHOT | ROBOCUT

Power Motion Programming

UK-TRN-FA-00010-EN

DESCRIPTION

This course is designed for customers looking to use Power Motion and G code to control standard automation system such as Cartesian gantries.

The attendees will be introduced to Fanuc manuals, hardware configuration, ladder programming and G code programming.

OBJECTIVES

At the end of the course participants will be able to:

- Understand the requirements for motion hardware
- Understand IO connectivity
- Navigate CNC screens
- Set parameters for connected hardware
- Navigate Fanuc ladder
- Program functions in ladder
- Use G code for motion

TOPICS COVERED

- Introduction to Fanuc
- Manuals
- Drive and control hardware connections
- IO hardware and connection
- Ladder programming
- G code programming

CONTACT

More Information:
academy@fanuc.co.uk

DURATION

3 days

0900 – 1600

DIFFICUTY

COST

£1650 per person

Max 6 participants

PRE REQUISITES

NEXT STEPS

FA 02 FA 06 FA 07



RS 01

CNC | ROBOTICS | ROBODRILL | **ROBOSHOT** | ROBOCUT

ROBOSHOT Maintenance

UK-TRN-RS-00001-EN

DESCRIPTION

This course teaches maintenance engineers how to safely maintain and repair a ROBOSHOT injection moulding machine.

Combining classroom and workshop exercises, on one of our α-S*i*A machines, the student will finish with a full and comprehensive knowledge of the machine

OBJECTIVES

At the end of the course participants will be able to:

- Know how to use the screen maintenance functions
- Understand the mechanical design of the machine
- Have detailed knowledge of the control system
- Be fully conversant with the electrical drawings
- Carry out routine maintenance confidently
- Fault find efficiently and replace parts efficiently
- Understand telephone support procedures

TOPICS COVERED

- Safe operation and maintenance
- Machine mechanical & electrical overview
- Routine maintenance requirements
- Screw and barrel maintenance (FANUC specific)
- Fault finding using alarms and indicators
- Drive Belt inspection & Autolube overview
- Machine Levelling procedures
- Periphery I/O & Custom Signals
- Resetting the zero position of all axis
- SRAM backup and restore procedure

CONTACT

More Information:
academy@fanuc.co.uk

DURATION

4 days

0900 – 1600

DIFFICUTY

COST

£2200 per person

Max 4 participants

PRE REQUISITES

No prerequisites required to attend

NEXT STEPS



RS 02

CNC | ROBOTICS | ROBODRILL | **ROBOSHOT** | ROBOCUT

ROBOSHOT Operation

UK-TRN-RS-00002-EN

DESCRIPTION

This course teaches operators, technicians, and validation engineers how to safely operate a ROBOSHOT and setup a new tool for production.

OBJECTIVES

At the end of the course participants will be able to:

- Safely install and set up tool for production
- Understand correct usage of mould & ejector protection systems
- Automatically & manually purge material
- Produce components to a set specification
- Set up trend charts to monitor process stability
- Understand telephone support procedures

TOPICS COVERED

- Safe operation and maintenance
- Overview of machine structure and control
- Tool installation procedures & machine setup
- Advanced mould & ejector protection systems
- Barrel Temperature, soak timer, shutdown management, Screw / tip breakage protection system
- Manual & auto purging options
- Practical machine setup for part production
- Process monitoring functions
- Advanced feature overview

CONTACT	DURATION	DIFFICUTY	COST	PRE REQUISITES	NEXT STEPS
More Information: academy@fanuc.co.uk	2 days 0900 – 1600		£1100 per person Max 4 participants	*No prerequisites required to attend*	RS 03



RS 03

CNC | ROBOTICS | ROBODRILL | **ROBOSHOT** | ROBOCUT

ROBOSHOT Advanced Level

UK-TRN-RS-00003-EN

DESCRIPTION

This course teaches technicians and validation engineers how to use the advanced functions available on the ROBOSHOT to enhance production.

OBJECTIVES

At the end of the course participants will be able to:

- Optimise mould & ejector protection systems
- Control barrel temperatures efficiently
- Setup minimum clamp force control
- Setup precision metering setup and usage
- Setup pre-injection function
- Understand core control system
- Understand telephone support procedures

TOPICS COVERED

- AI mould & ejector protection optimisation
- Barrel temperature control management
- Injection setup
- Minimum clamp force control
- AI pressure profile trace & AI extruder functions
- Precision metering system
- Overview of core control system
- Telephone support procedures

CONTACT

More Information:
academy@fanuc.co.uk

DURATION

2 days

0900 – 1600

DIFFICUTY

COST

£1100 per person

Max 4 participants

PRE REQUISITES

RS 02

NEXT STEPS



RS 04

CNC | ROBOTICS | ROBODRILL | **ROBOSHOT** | ROBOCUT

Polymer Material Science

UK-TRN-RS-00004-EN

I·M3 Quality Assured & PD Approved 2025

Sierra 57 Train - Develop - Retain

DESCRIPTION

This course gives material handlers, trainee setters, IMM operators, apprentices, quality personnel, procurement, estimators and middle management a basic understanding of polymer materials. Increasing their knowledge of different polymer families.

The course can also be used as a refresher on materials for more experienced individuals.

OBJECTIVES

At the end of the course participants will be able to:

- Understand basic polymers and additive materials
- Improve material handling and reduce scrap
- Understand handling process and requirements
- Improve CAPEX requirements

TOPICS COVERED

- What are plastics and where do they come from?
- Uses of plastics and the diversity of the plastics industry
- Classification of plastics materials
- Homo-Polymers, Co-polymers, Ter-Polymers, Blends and Alloys
- Amorphous and Semi-Crystalline Plastics
- Intermediate Molecular Structures of Plastics

CONTACT	DURATION	DIFFICUTY	COST	PRE REQUISITES	NEXT STEPS
More Information: academy@fanuc.co.uk	1 days 0900 – 1600		£275 per person Max 10 participants	*No prerequisites required to attend*	



RS 05

CNC | ROBOTICS | ROBODRILL | **ROBOSHOT** | ROBOCUT

Injection Moulding Machine Processing

UK-TRN-RS-00005-EN

I·M3 Quality Assured & PD Approved 2025

Sierra 57 Train - Develop - Retain

DESCRIPTION

This course teaches operators, technicians, and engineers' essential skills to enhance efficiency and quality in manufacturing.

It includes presentations, demonstrations, and hands-on exercises to reinforce classroom learning.

OBJECTIVES

At the end of the course participants will be able to:

- Understand workplace hazards, appropriate PPE usage and plastic industry related illnesses
- How to control the relationship between pressure & speed
- Understand the importance of mould protection
- Understand the basic principles of the injection moulding process
- Understand the definition & importance of quality
- Take backups
- Perform simple tool care and maintenance activities

TOPICS COVERED

- Health & Safety in the workplace
- Fundamental principles of pressure and speed
- Mould protection
- Fundamental principles of injection moulding
- The importance of quality in the injection moulding Industry
- Simple Tool Care and Maintenance

CONTACT	DURATION	DIFFICUTY	COST	PRE REQUISITES	NEXT STEPS
More Information: academy@fanuc.co.uk	4 days 0900 – 1600		£1100 per person Max 6 participants	*No prerequisites required to attend*	



RS 06

CNC | **ROBOTICS** | ROBODRILL | **ROBOSHOT** | ROBOCUT

Injection Moulding & Robot Appreciation

UK-TRN-RS-00006-EN

Sierra 57 Train - Develop - Retain

DESCRIPTION

This course teaches operators, technicians, engineers, and programmers how to safely operate a CRX robot.

It includes presentations, demonstrations, and hands-on exercises to reinforce classroom learning. Safety procedures are emphasized throughout the training.

OBJECTIVES

At the end of the course participants will be able to:

- Understand the differences between electric, hybrid & hydraulic injection moulding machines
- Understand the pros and cons of each drive technology
- Understand the differences between different robot types (Industrial, Collaborative, Scara & Delta)
- Safety jog and operate an industrial & collaborative robot
- Understand robot interfacing & advanced options available

TOPICS COVERED

- IMM technology & selection for application
- Energy Efficiency, cycle time, precision and repeatability benefits
- Mouldshop environment & reliability benefits
- IMM size selection & maintenance comparison
- Robot type overview
- Where can a robot be used?
- Programming Introduction (Collaborative and Industrial)
- Interfacing and advanced option overview

CONTACT

More Information:
academy@fanuc.co.uk

DURATION

2 days

0900 – 1600

DIFFICUTY

COST

£550 per person

Max 8 participants

PRE REQUISITES

No prerequisites required to attend

NEXT STEPS



RD 01

ROBODRILL Operation

UK-TRN-RD-00001-EN

DESCRIPTION

This course teaches operators how to safely operate a ROBODRILL.

It includes presentations, demonstrations, and hands-on exercises to reinforce classroom learning. Safety procedures are emphasized throughout the training.

OBJECTIVES

At the end of the course participants will be able to:

- Safety jog and operate the machine
- Competently create basic programs
- Safely prove operation of programs
- Set and modify tool data
- Save and load program data
- Understand telephone support procedures

TOPICS COVERED

- General machine overview and safety
- Operator, Keyboard & Soft-key Explanation.
- Axes Configuration.
- Basic machining principles and tooling descriptions
- MDI function
- Basic program creation
- File program management
- Setting tool data
- Setting up the CNC machine ready to run

CONTACT	DURATION	DIFFICUTY	COST	PRE REQUISITES	NEXT STEPS
More Information: academy@fanuc.co.uk	2 days 0900 – 1600		£1100 per person Max 4 participants	*No prerequisites required to attend*	



RD 02

ROBODRILL Maintenance

UK-TRN-RD-00002-EN

DESCRIPTION

This course teaches maintenance engineers how to safely maintain the machine and exchange key components.

It includes presentations, demonstrations, and hands-on exercises to reinforce classroom learning. Safety procedures are emphasized throughout the training.

OBJECTIVES

At the end of the course participants will be able to:

- Safety maintain and recover the machine
- Diagnose and fix machine issues
- Understand spindle replacement procedure
- Take data backups of machine
- Understand telephone support procedures

TOPICS COVERED

- ROBODRILL basic navigation
- PPM schedule, including fans, battery and filter replacement
- Component exchange (Fans, battery, filter and motor)
- Tool change, maintenance and recovery
- Spindle & spindle motor replacement theory
- Machine troubleshooting and PMC diagnostics
- Machine data backup procedure

CONTACT	DURATION	DIFFICUTY	COST	PRE REQUISITES	NEXT STEPS
More Information: academy@fanuc.co.uk	3 days 0900 – 1600		£1650 per person Max 4 participants	*No prerequisites required to attend*	



Operation & Maintenance

UK-TRN-RC-00001-EN

DESCRIPTION

This course teaches maintenance engineers how to safely maintain the machine and exchange key components.

It includes presentations, demonstrations, and hands-on exercises to reinforce classroom learning. Safety procedures are emphasized throughout the training.

OBJECTIVES

At the end of the course participants will be able to:

- Safety maintain and recover the machine
- Diagnose and fix machine issues
- Understand spindle replacement procedure
- Take data backups of machine
- Understand telephone support procedures

TOPICS COVERED

- ROBODRILL basic navigation
- PPM schedule, including fans, battery and filter replacement
- Component exchange (Fans, battery, filter and motor)
- Tool change, maintenance and recovery
- Spindle & spindle motor replacement theory
- Machine troubleshooting and PMC diagnostics
- Machine data backup procedure

CONTACT	DURATION	DIFFICUTY	COST	PRE REQUISITES	NEXT STEPS
More Information: academy@fanuc.co.uk	3 days 0900 – 1600		£1650 per person Max 4 participants	*No prerequisites required to attend*	RC 02



CAM*i*

UK-TRN-RC-00002-EN

DESCRIPTION

This course teaches maintenance engineers how to safely maintain the machine and exchange key components.

It includes presentations, demonstrations, and hands-on exercises to reinforce classroom learning. Safety procedures are emphasized throughout the training.

OBJECTIVES

At the end of the course participants will be able to:

- Safety maintain and recover the machine
- Diagnose and fix machine issues
- Understand spindle replacement procedure
- Take data backups of machine
- Understand telephone support procedures

TOPICS COVERED

- ROBODRILL basic navigation
- PPM schedule, including fans, battery and filter replacement
- Component exchange (Fans, battery, filter and motor)
- Tool change, maintenance and recovery
- Spindle & spindle motor replacement theory
- Machine troubleshooting and PMC diagnostics
- Machine data backup procedure

CONTACT	DURATION	DIFFICUTY	COST	PRE REQUISITES	NEXT STEPS
More Information: academy@fanuc.co.uk	1 days 0900 – 1600		£550 per person Max 4 participants	RC 01	



TRN01

CNC | ROBOTICS | ROBODRILL | ROBOSHOT | ROBOCUT

Bespoke Training

UK-TRN-00001-EN | UK-TRN-00002-EN | UK-TRN-00003-EN | UK-TRN-00004-EN | UK-TRN-00005-EN

DESCRIPTION

Training is available for all functions and features across the product range.

Whether you would like training on a specific function not covered in our standard training portfolio or would like to combine aspects from different courses, this tailored approach ensures we can deliver what you need.

OBJECTIVES

Customised training developed to your requirements

- Each training course is designed to meet your specific needs.
- It focuses on your learning outcomes, ensuring that the content is directly applicable what you need to know.

CONTACT	DURATION	DIFFICUTY	COST	PRE REQUISITES	NEXT STEPS
More Information: academy@fanuc.co.uk	To suit requirement		£800 per person/day Max participants dependant on equipment and complexity	*Prerequisites dependant upon requested cost content*	*Recommended options can be discussed when training scope is defined*