

## **ISO Programming Course**

**Title:** Basic Turning Course for Fanuc Controls Oi-T/16i-T/18i-T/21i-T/3xi.

**Duration:** 3 Days

Day 1	Start	Finish
	9·00am	4:00nm

General Layout of Machine & Keyboard Explanation

Axes Configuration.

**Program Memory Arrangement** 

How to edit a program and create new

**Tool Offsets** 

**Work Offsets** 

G10 Programmable data input

How To Start making a Program. Safe Start.

G20-G21 Inch-Metric, G40, etc.

G Code Description Type A, B or C.

M code descriptions

Other addresses explained

G98-G99 Feed/rev & Feed/mm.

G50-G92 Clamping Maximum Spindle Speeds.

Day 2	Start	Finish
	9·00am	4:00nm

G00-G01 Rapid Traverse & Feed Rate Commands.

G02-G03 Circular Interpolation using "R", "I" & "K".

Absolute & Incremental Programming, "U" & "W".

G17-G18-G19 Plane Selection

G28 Reference Point return.

G30 Setting 2nd, 3rd, 4th Reference Point return.

Test piece for G01 - absolute and inc

Test piece for G02/G03 - absolute and incremental

How To End a Program. M02, M30.

M98-M99 Sub-Program use & nesting.

G22-G23 Stored Stroke Protected Area.

G41-G42 Cutter Compensation, Imaginary Tool Points.

G70-G73 Multi-Repetition Cycles.

G90-G94 Canned Cycles Roughing, & Facing (if required).

G80 - G89 Canned cycles.

G96-G97 Constant Surface Speed Control.

G32 & G92 Threading Cycles.



Day 3	Start	Finish
	9:00am	4:00pm

Test Piece 2 (Drill - Rough Bore - Finish)

G74-G75 Canned Cycles for Grooving & Drilling.

Test Piece 3 (Side Grooving - Face Grooving - Drilling)

G32-G92 & G76 Threading Cycles.

Test Piece 4 (Rough Turn - Drill - Bore - Thread - Part)

C & R Chamfer Corner Radius Function.

Test Piece 5 (Turn using direct Drawing)

Inputting and Outputting Programs (RS232 / Mem Card)

Backup control

P/S Alarms

Brief Explanation of Macro Programming & uses. (See also Macro Course).

Program your own component (if time left)