# Fanuc – Turning

## Day 1

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- 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

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- 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**

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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)

**Day 4**

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Introduction to C Axis and Driven Tooling
Cylindrical Interpolation
Polar Coordinate Milling
Side Canned Cycles
Face Canned Cycles
Balance Milling
Y Axis Milling
Thread Milling
Sub spindle work

**Day 5**

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Wait Codes
Multi path functionality
Simple passover
Part transfer
Spindle Syncronise
Balance turning
Unloading parts
Various examples
Soft push torque functions