

WHAT SKILLS DOES INSTRUMENT & CONTROL INVOLVE?

Instrument & Control involves fault diagnosis, routine servicing, repair and maintenance of complex plant, machinery and components used in the Engineering Construction Industry.

ECITB HAVE TWO OPTIONS AVAILABLE TO TRAIN INSTRUMENT & CONTROL LEARNERS –

- Option 1** Off-the-job training in an approved training centre using Off-the-Job Training Units and then returning to site for work experience using the On-the-Job Performance Units.
- Option 2** You deliver on-the-job training at your site using On-the-Job Training Units and On-the-Job Performance Units to gain work experience.

OFF-THE-JOB TRAINING UNITS

CO1	Contribute to effective working relationships
CO2	Work safely, minimize and comply with emergency procedures
CO3	Identify and deal with hazards in the work environment
MPS Inst 1	Position and install instrument plant and equipment
MPS Inst 2	Dismantle instrument and control systems
MPS Inst 3	Carry out planned maintenance procedures on instrument and control systems
MPS Inst 4	Adjust instrument and control systems to meet operating requirements
MPS Inst 5	Remove components from instrument and control systems
MPS Inst 6	Replace components in instrument and control systems
MPS Inst 7	Monitor the performance and condition of instrument and control systems
MPS Inst 8	Assess the performance and condition of instrument and control systems
MPS Inst 9	Assemble components of instrument and control systems
MPS Inst 10	Restore components from instrument and control systems to operational condition by repair
MPS Inst 11	Prepare work areas for maintaining instrument and control systems
MPS Inst 12	Prepare materials for the maintenance of instrument and control systems
MPS Inst 13	Prepare equipment required for maintaining instrument and control systems
MPS Inst 14	Reinstate the work area after completing the maintenance of instrument and control systems
MPS Inst 15	Handover plant and equipment
MPS Inst 16	Determine the feasibility of repair of components from instrument and control systems
MPS Inst 17	Test and monitor the performance and condition of instrument and control systems
MPS Inst 18	Analyse the test results relating to the tested instrument and control systems
MPS Inst 19	Establish that an engineering maintenance process has been completed to specification

ECITB recommend that a new Instrument & Control learner in the Off-the-Job Training Centre undertake all Off-the-Job Training Units.

ON-THE-JOB TRAINING AND PERFORMANCE UNITS

Ml001	Ml002	Ml003	Ml004	Ml005	Ml006	Ml007	Ml008
Ml009	Ml010	Ml011	Ml012	Ml013	Ml014	Ml015	

The On-the-Job Units are shown overleaf mapped against the N/SVQ Units to outline which On-the-Job Units can contribute to the achievement of the Instrument & Control N/SVQ Level 3.

FUNDING DETAILS (ECITB financial assistance to levy paying companies)

The following grants are available for learners who have not yet attained craft status (N/SVQ level 3):

N/SVQ completion grant	£1,000
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EXISTING CRAFTSPERSONS

Any of the On-the-Job Performance units may be used for skill enhancement of existing craftspersons. Under such circumstances a grant of £200 per unit will be paid for up to any 5 satisfactorily completed units.

ON-THE-JOB PERFORMANCE UNITS MI UNIT TO MPS INST N/SVQ UNIT MAPPING TO SHOW WHICH MI UNITS CAN CONTRIBUTE EVIDENCE TO SUPPORT THE N/SVQ IN INSTRUMENT & CONTROL

N/SVQ MPS INST UNIT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
TECSkills On-the-Job Unit																			
MI 001 Maintaining Instrument Pressure Measurement Systems	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MI 002 Maintaining Instrument Level Measurement Systems	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MI 003 Maintaining Instrument Flow Measurement Systems	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MI 004 Maintaining Instrument Temperature Measurement System	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MI 005 Maintaining Fire and Gas Detection System	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	✓
MI 006 Maintaining Process System Control Valve Assemblies	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MI 007 Maintaining Pneumatic Process Controllers and Associated Input, Output Components	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	✓
MI 008 Maintaining Programmable Logic Controller Systems	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	✓		✓		✓	✓	✓
MI 009 Maintaining Distribution Control Systems	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	✓		✓		✓	✓	✓
MI 010 Maintaining Fluid Metering Systems	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	✓
MI 011 Maintaining Logic Control Systems	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	✓		✓		✓	✓	✓
MI 012 Maintaining Analysers	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MI 013 Maintaining Fluid Powered Systems	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MI 014 Maintaining Protection Methods for Instrumentation in Hazardous Areas	✓	✓	✓		✓	✓			✓		✓	✓	✓	✓	✓				✓
MI 015 Maintaining Electronic Process Controllers and Associated Input, Output Components	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	✓

Common Units CO1, CO2 and CO3 only have Off-the-Job Units, which are mandatory units for the N/SVQ Mechanical Level 3.

NVQ Level 3 Requirement is made up of 15 NVQ Units (11 Mandatory Units and 4 Technical Option Units)

Mandatory Units CO 1, 2, 3, MPS Inst 1, 2, 3, 4, 5, 6, 7, 8.

Technical Option Units Candidates must achieve any FOUR units of which THREE must be selected from SET A and ONE from SET B.

SET A MPS Inst 9, 10, 11, 12, 13, 14, 15.

SET B MPS Inst 16, 17, 18, 19.