

Qualification & Certificate

Course 1. Bolting Assembler (Leader, Technician) Torque Equipment

(Manual Torque & Hydraulic Torque and Flange Assembly / Disassembly)

- a) Fundamental understanding in Course 2 – Course 4.
- b) Pass examination of Course 5 by 90% of 60 multiple choice questions.
- c) Perform and understanding of bolting work sheet with supervisor.

Course 2. Bolting Inspector (QC) & Supervisor Torque Equipment

(Manual Torque & Hydraulic Torque and Flange Assembly / Disassembly)

- a) Fundamental understanding in Module 1 – Module 4 and lead to the Bolting Assembler
- b) Torque calculation base on flange, gasket and fasteners properties.
- c) Pass examination of Module 5 by 90% of 75 multiple choice questions.
- d) Perform and understanding of Module 6 without Supervisor.

Course 3. Bolting Assembler (Leader, Technician) Torque Equipment

(Manual Torque, Hydraulic Torque, Hydraulic Tension and Flange Assembly / Disassembly)

- a) Fundamental understanding in Module 1 – Module 4.
- b) Pass examination of Module 5 by 90% of 60 multiple choice questions.
- c) Perform and understanding of Module 6 with Supervisor.

Course 4. Bolting Inspector (QC) / Supervisor Torque Equipment

(Manual Torque, Hydraulic Torque, Hydraulic Tension and Flange Assembly / Disassembly)

- a) Fundamental understanding in Module 1 – Module 4 and lead to the Bolting Assembler
- b) Torque & Tension calculation base on flange, gasket and fasteners properties.
- c) Pass examination of Module 5 by 90% of 75 multiple choice questions.
- d) Perform and understanding of Module 6 without Supervisor



**ALPHA
INDUSTRIAL
SERVICES**

Services | Engineering | Solutions | Reliability

AIS Academy Training Center

Elevate maximum safety and operational efficiency in the petrochemical, oil & gas industries with comprehensive, leak-free Mechanical Joint Integrity (MJ) training, to globally recognized ECITB & ASME standards.

Course : ECITB

(Engineering Construction Industry Training Board)

- Mechanical Joint Integrity (MJ)



Course : ASME

(American Society of Mechanical Engineers)

- Joint Integrity and Flange Management per ASME PCC-1-2022

OUR SERVICE

- On-Site Bolting Service (Torque / Tension)
- Online Leak Sealing / Pipe Wrapping Service
- Pipe / Flange On-Site Machining
- Pipe / Flange Cold Cutting & Beveling

CONTACT US

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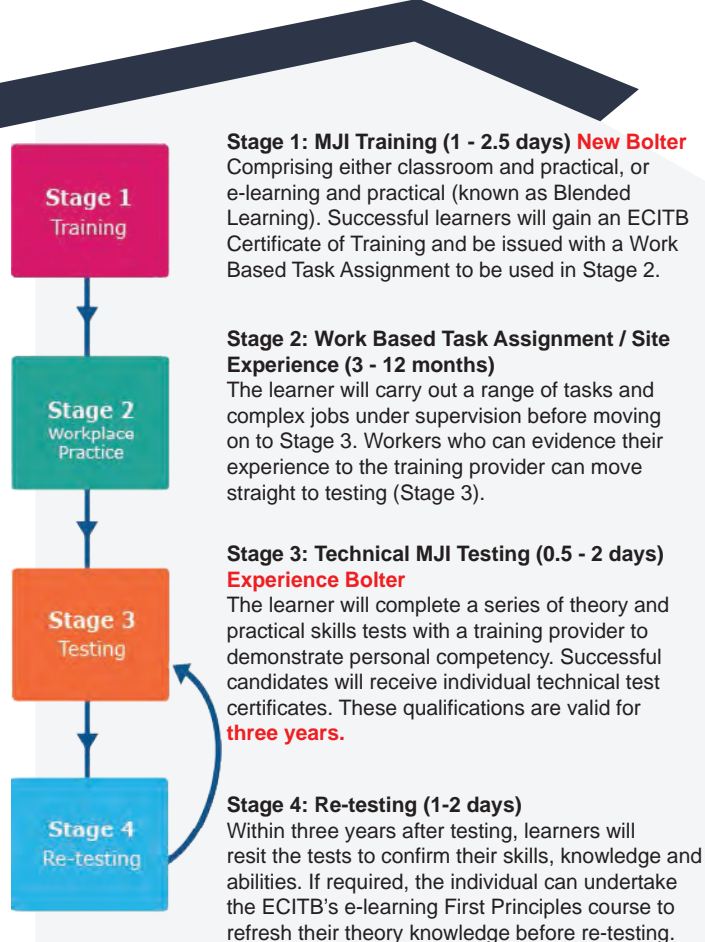
Course : ECITB

Mechanical Joint Integrity (MJ)



ECITB Global is the international division of the Engineering Construction Industry Training Board, a UK-based leading skills organization sponsored by the UK Government's Department for

Education. Working with almost 200 licensed training providers worldwide, the ECITB delivers internationally recognized training and qualifications in key engineering construction industry skills and health and safety programmes.



Stage 1: MJ Training (1 - 2.5 days) New Bolter
Comprising either classroom and practical, or e-learning and practical (known as Blended Learning). Successful learners will gain an ECITB Certificate of Training and be issued with a Work Based Task Assignment to be used in Stage 2.

Stage 2: Work Based Task Assignment / Site Experience (3 - 12 months)
The learner will carry out a range of tasks and complex jobs under supervision before moving on to Stage 3. Workers who can evidence their experience to the training provider can move straight to testing (Stage 3).

Stage 3: Technical MJ Testing (0.5 - 2 days) Experience Bolter
The learner will complete a series of theory and practical skills tests with a training provider to demonstrate personal competency. Successful candidates will receive individual technical test certificates. These qualifications are valid for **three years**.

Stage 4: Re-testing (1-2 days)
Within three years after testing, learners will resit the tests to confirm their skills, knowledge and abilities. If required, the individual can undertake the ECITB's e-learning First Principles course to refresh their theory knowledge before re-testing.

Course Conclusion

MJI-01 Mechanical Joint Integrity First Principles

MJI-10 Hand Torqued Flange Bolted Connections Techniques

MJI-11 Hand Torqued Clamp Connections Techniques

MJI-18 Hydraulically Tensioned Bolted Connections Techniques

MJI-19 Hydraulically Torqued Bolted Connections Techniques

MJI-20 Hydraulically Torqued Clamp Connections Techniques

MJI Training Course Stage 1

MJI-01/10/11 (1 day)

Hand Torque Bolted Connection Techniques

MJI-01/10/11/19/20 (1.5 day)

Hand and Hydraulically Torqued Bolted Connection Techniques

MJI-01/19/20 (1 day)

Hydraulically Torqued Bolted Connection Techniques

MJI-01/18 (1 day)

Hydraulically Tension Bolted Connection Techniques

MJI-01/10/11/18/19/20 (2.5 day)

Hand, Hydraulically Torque and Tension Bolted Connection Techniques

MJI Training Course Stage 3

MJI-10 (0.5 day)

Dismantle, Assemble and Hand Torque Flanged Joints

MJI-11 (0.5 day)

Dismantle, Assemble and Hand Torque Clamp Connectors

MJI-18 (0.5 day)

Dismantle, Assemble and Tensioning Bolted Connections

MJI-19 (0.5 day)

Dismantle, Assemble and Hydraulically Torque Flanged Joints

MJI-20 (0.5 day)

Dismantle, Assemble and Hydraulically Torque Clamp Connector Joints

International Competence: Engineering Construction (ICE) Scheme:

ECITB's ICE is a widely recognized engineering construction industry scheme. ICE cards are issued to individuals and demonstrate their competency in a variety of trades and disciplines and are awarded at Levels 1-4. The ICE Card provides employers with assurance of an individual's skills and are fully audited by the ECITB. Individuals who successfully complete Technical Tests in MJI10,18 and 19 qualify for an ECITB TMJI Level 3 ICE Card.

Course : ASME

Joint Integrity and Flange Management per ASME PCC-1-2022

Bolter will learn to inspect, assemble, disassemble and tighten bolted joints in an effective with safety procedure and demonstrate capabilities to become a Bolting Specialist per ASME PCC-1 : 2022

Course Conclusion

Module 1: Describe of ASME PCC-1: 2022

Module 2: Flange Fastener and Gaskets

Module 3: Torque, Tension, Bolt Loosening, Corrosion, Galling, and Seizing

Module 4: Planning, Safety, Torque, Tension Tools

Module 5: Final Examination

Module 6: Hand On