

# Mechanical Joint Integrity (MJI) Scheme

- Created by industry in the UK for industry
- Fully audited by a UK Training Board
- Not just attendance training but assures an individual's competency through rigorous testing
- Identical to UK training and testing

## MJI 4-Stage Model

The ECITB uses a 4-stage model for its MJI training and to test individual competency.



### Stage 1 – Training (2.5 days)

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 Testing (1-2 days)

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)

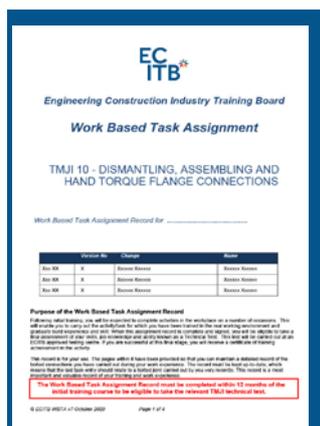
Within three years after testing, learners will resit the tests to confirm their skills, knowledge and abilities. If required, the individual can undertake the ECITB's e-learning First Principles course to refresh their theory knowledge before re-testing.

## International Competence: Engineering Construction (ICE) Scheme

ECITB's ICE is a widely recognised 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 MJI Level 3 ICE Card.



Certificate of Training



Work Based Assignment



Certificate of Competency

## What is ECITB Global?

ECITB Global is the international division of the Engineering Construction Industry Training Board, a UK-based leading skills organisation sponsored by the UK Government's Department for Education. Working with almost 200 licensed training providers worldwide, the ECITB delivers internationally recognised training and qualifications in key engineering construction industry skills and health and safety programmes.

## What is Mechanical Joint Integrity (MJI)?

It is the controlled and verified bolting of pipework, flanges and other assemblies to remove the risk of hydrocarbon and non-hydrocarbon release when working with mechanical joints associated with construction, maintenance and disassembly operations.

## What is the ECITB's MJI Scheme?

The MJI Scheme was developed by the ECITB and industry experts in 2011 to address hydrocarbon release issues to both increase levels of competency and reduce accidents.

The scheme, which has been adopted by many oil and gas operators and contracting companies, reflects industry 'good practice' for the training and competence of workers in relation to mechanical joint operations. The objective is to develop the knowledge and skills required to dismantle, prepare, secure and reassemble mechanical joint connections.

All our MJI training and testing is derived from a set of the ECITB's exacting standards. These are:

- MJI-01 Mechanical Joint Integrity First Principles
- MJI-10 Hand Torqued Flange Bolted Connections
- MJI-11 Hand Torqued Clamp Connectors
- MJI-18 Hydraulically Tensioned Bolted Connections
- MJI-19 Hydraulically Torqued Bolted Connections
- MJI-20 Hydraulically Torqued Clamp Connectors
- MJI-21 Hydraulically Tensioned Subsea Bolted Connections
- MJI-22 Hydraulically Torqued Subsea Bolted Connections
- MJI-23 Powered Torque Gun Bolted Connections
- MJI-WT02-33 Torque and Tension Wind Turbine Bolted Connections

Each of these standards are also available as individual courses.

## Who is the scheme for?

Anybody who is involved with MJI activities. New entrants or inexperienced workers would follow a training, work experience and testing route, whereas experienced workers may opt for a test-only route to demonstrate their competency.

## What industry says about the MJI Scheme

"The flexible delivery options and a four-stage route to competence model provides learners with industry recognised certification, and employers with the assurance that all ECITB MJI-certified personnel have completed approved training courses and technical tests via an ECITB licensed training provider."

**Hydratight Ltd, Singapore**

"The ECITB's MJI scheme has been invaluable in upskilling our workforce in industrial maintenance; ensuring safety, precision, and efficiency in every task."

**CR3 Thailand**



MJI training at BJ Services (M) Sdn Bhd



In the past there was no certification for bolting or flange management training. Having that ECITB MJI certification in place has helped grow our business as we have a value-added service that we offer the owner-operator for these turnarounds. By having a certified training programme in place, which is so recognisable in our industry, we have competent people which increases our efficiency offshore and prevents any safety and quality issues."

**BJ Services (M) Sdn Bhd / Baker Hughes, Malaysia**

"The comprehensive training provided under the ECITB MJI scheme has not only elevated the skillset of our workforce but has also instilled a culture of safety, precision, and excellence in our operations, positively impacting both our organisation and, by extension, the experiences of our valued clients."

**Technology of Petroleum Services (TPS), Saudi Arabia**

"ECITB certification has enhanced our credibility as the leading trusted bolting partner and has created opportunity for our workforce on a global scale through their capability enhancement."

**ABS Group, India**

### How do I get started?

Whether you are an employer, training provider or individual learner, more information is available on our ECITB Global website, including links to 'Contact Us'.

[www.ecitb.com/mechanical-joint-integrity-training](http://www.ecitb.com/mechanical-joint-integrity-training)

[www.ecitb.com/find-a-training-provider](http://www.ecitb.com/find-a-training-provider)

