

# ECITB MECHANICAL JOINT INTEGRITY

Petracarbon (Thailand) Co., Ltd. is an ECITB (Engineering Construction Industry Training Board) approved training provider for delivering Mechanical Joint Integrity (MJI) training courses that is in line with industry standards and practices.

Petracarbon's ECITB approved Trainers have the technical and practical knowledge to deliver these MJI courses. Our in-house trainers have many years of experience in the Oil & Gas and Petrochemical refineries (both onshore & offshore), as well as Power & Energy industries, that requiring bolted joint technology. They are fully trained and competent in the use of mechanical and hydraulic tools to deliver both theory and practical training lessons.

## Delivery

This will be a classroom and workshop based with practical content of 60% and theoretical content of 40%.

## Certificate

ECITB Certificate of Training will be issued to delegate who has attended the 2.5 days of training and successfully passed the knowledge test.

## Target Audience

- ✓ Delegate who is an Engineer, Technician or Supervisor that involve in the use of hydraulic torque wrenches and bolted joints or in-charge of mechanical joint integrity in the workplace.
- ✓ Delegate must have a basic mechanical background preferably in pipe fitting, mechanical fitting or in engineering craftsman trade for this ECITB Mechanical Joint Integrity training.
- ✓ The course is delivered in English.

# Information

- ✓ Duration is 2.5 days.
- ✓ Training time: 8:00 am to 5:00 pm with breaks in between sessions.
- ✓ Venue at Petracarbon (Thailand) Co., Ltd.
- ✓ Location at our Rayong facility.
- ✓ For course fee and date availability, kindly contact our Course Administrator for details.
- ✓ Special requirement: Delegates are required to supply their own PPE.



## About the Course

This ECITB Mechanical Joint Integrity course is a combination of MJI 01, 10, 11, 18, 19 & 20 which focus on the skills in performing various techniques using a range of bolting tools and equipment based on ECITB's Training Standard. Delegates who attend this 2.5 days course will be able to learn isolation, dismantling techniques, inspection of components, alignment techniques, clamp connectors, as well as assembly and tightening techniques as per ASME PCC-1 requirements.

The program will start off with mechanical joint integrity first principle; with safety Induction pertaining to bolted joint connection. This includes all aspects of hazards, health and safety, guidance and practical exercises about safe use and good working practices before embarking on the rest of the MJI modules:

- ✓ MJI 01: Mechanical Joint Integrity First Principles
- ✓ MJI 10: Hand Torqued 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



## What delegates will learn?

- ✓ Understand the intended tasks in conforming to the related specifications, methods, processes, procedures and techniques.
- ✓ Dismantle of bolted joint connections by hand torque, hydraulic torqueing and hydraulic bolt tensioning.
- ✓ Removal and replacement of components of bolted joint connections by hand torque, hydraulic torqueing and hydraulic bolt tensioning.
- ✓ Assemble and secure of bolted joint connections by hand torque, hydraulic torqueing and hydraulic bolt tensioning.
- ✓ Verification on the mechanical joint integrity of the assembled connections.

This course will enable the workforce to work towards their competency with a structured set of tools including full training on all tightening disciplines, ECITB's Work based Task Assignments & Technical Testing.



### Petracarbon (Thailand) Co., Ltd.

39/3 Moo 4, Sai 36 Road T. Tabma, A Muang, Rayong 21000

**Overseas location:** Singapore, China, and other countries, please contact us.

### Contact Us Today

**Thailand Rayong** Vincent **HP** +66 92 214 9519  
Pennung **HP** +66 97 282 4429

**Singapore** Frankie **HP** +65 9685 7065

**China Shanghai** Richard **HP** +86 150 0175 9001

**Email** vincent@petracarbon.co.th

**Email** projects2@petracarbon.co.th

**Email** frankie@petracarbon.co.th

**Email** richard.lim@petracarbon.com.cn

**Google Map:** <https://maps.app.goo.gl/zjnFoQduvvRwuhZ88>