



London TDM

# Engineering and Technical Skills Training Courses

**Course Venue:** United Arab Emirates - Dubai

**Course Date:** From 05 April 2026 To 09 April 2026

**Course Place:** Downtown Dubai

**Course Fees:** 5,000 USD

## Introduction

This 5-day course on "Welding Technology and Inspection" is designed for professionals seeking to enhance their knowledge and skills in modern welding techniques and inspection processes. This comprehensive program covers fundamental welding concepts, advanced techniques, and the latest inspection standards, ensuring participants are well-equipped to meet industry demands.

## Objectives

- Understand the principles and applications of various welding technologies.
- Gain expertise in advanced welding techniques and best practices.
- Learn the latest industry safety standards and inspection methods.
- Develop skills to evaluate and improve welding quality.
- Prepare for relevant welding certifications and compliance requirements.

## Course Outlines

### Day 1: Introduction to Welding Technology

- Overview of welding processes and technologies.
- Introduction to welding equipment and materials.
- Basics of welding metallurgy.
- Safety practices in welding operations.
- Standards and codes in welding.

### Day 2: Advanced Welding Techniques

- Gas Metal Arc Welding (GMAW) techniques.
- Tungsten Inert Gas (TIG) welding methods.
- Submerged Arc Welding (SAW) applications.
- Automation in welding: robotics and mechanized systems.
- Joining dissimilar materials: challenges and solutions.

### Day 3: Welding Inspection Methods

- Visual inspection techniques and tools.
- Non-destructive testing (NDT) methods.
- Ultrasonic Testing (UT) in welding inspection.
- Radiographic Testing (RT) principles.
- Interpreting inspection results and reports.

### Day 4: Welding Quality Control and Assurance

- Key concepts in welding quality management.
- Developing and implementing quality control plans.
- Assessing weld defects and corrective actions.
- Statistical process control in welding.
- Enhancing weld quality through process optimization.

## **Day 5: Welding Certification and Standards**

- Overview of welding certifications and qualifications.
- Preparing for certification exams and testing.
- Understanding and applying welding standards and codes.
- Case studies on compliance and best practices.
- Future trends in welding technology and certification pathways.