

Fees:

Fees for training course :
20,000/- taka only

Payment Details:

The account details of MRC for Payment:

Account name: Materials Research Center

Account No: 4404002000802

Sonali Bank Limited

BUET branch, Dhaka



Date & Time

12 - 16 August, 2025



Course for Welding Coordinators

Course Overview

This 5 (five) day training program for Welding Coordinators is designed to provide participants with a comprehensive understanding of welding coordination, including the management of welding processes, quality control, safety regulations, and compliance with international standards.

The course combines both theoretical knowledge and practical applications, helping participants become effective Welding Coordinators in various industrial settings.

Contact Information:



**MATERIALS
RESEARCH CENTER**



Old Academic Building (OAB),
BUET, Dhaka-1000



01733-892419



Training Course for **Welding** Coordinators

Organised by:



**MATERIALS
RESEARCH CENTER**

OAB, BUET, Dhaka-1000

In association with-



GLOBAL TALENT CATALYST

&

**Bangladesh Welding
Development Society (BWDS)**

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your workforce
with us.**



Training Course for Welding Coordinators

Course Objectives

By the end of this training, participants will:

- Understand the key responsibilities and roles of a Welding Coordinator.
- Learn how to create, review, and manage Welding Procedure Specifications (WPS) and Procedure Qualification Records (PQR).
- Gain skills in managing welding teams, overseeing welding processes, and ensuring quality standards are met.
- Implement safety protocols and ensure compliance with health, safety, and environmental standards.

Stakeholders (Who Should Attend)

Personnel involved in welding activities in industries such as oil & gas, shipbuilding, construction, aerospace, automotive, and manufacturing such as Welding Engineers, Production Supervisors, Quality Assurance (QA) and Quality Control (QC) personnel, Workshop Managers, Maintenance Engineers.



Course Content (Theory and Practical)

1. Introduction to Welding Coordination and Standards

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| Theory | <ul style="list-style-type: none">• The role of Welding Coordinators in industrial projects.• Overview of welding processes (MIG, TIG, SMAW, FCAW, SAW).• Introduction to international welding standards (ISO 14731, AWS D1.1, ASME Section IX). |
| Practical | <ul style="list-style-type: none">• Familiarization with welding equipment.• Hands-on demonstration of welding techniques and processes. |

2. Welding Procedure Specifications (WPS) and Procedure Qualification Records (PQR)

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| Theory | <ul style="list-style-type: none">• Developing and qualifying WPS and PQR based on international standards.• Essential variables and parameters that affect welding procedures.• Material selection, joint design, and filler materials. |
| Practical | <ul style="list-style-type: none">• Creating sample WPS and PQR.• Reviewing real-world WPS and PQR documentation for compliance. |

3. Welding Metallurgy and Material Properties

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| Theory | <ul style="list-style-type: none">• Basic principles of welding metallurgy and how it impacts weld quality.• Effects of heat input, cooling rates, and alloy selection.• Common welding defects caused by metallurgical issues (cracking, porosity, inclusions). |
| Practical | <ul style="list-style-type: none">• Metallurgical testing (hardness tests, tensile tests).• Identifying weld defects through visual inspection and destructive testing. |

4. Quality Control and Non-Destructive Testing (NDT)

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| Theory | <ul style="list-style-type: none">• Introduction to welding quality control principles.• Overview of Non-Destructive Testing (NDT) methods (Ultrasonic Testing, Radiographic Testing, Magnetic Particle Testing, Dye Penetrant Testing).• Importance of documentation, traceability, and weld mapping. |
| Practical | <ul style="list-style-type: none">• Conducting visual inspections of welds.• Hands-on demonstration of NDT methods and techniques. |

5. Health, Safety, and Environmental Compliance in Welding

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| Theory | <ul style="list-style-type: none">• Overview of welding safety standards (ISO 3834, OSHA).• Health risks in welding (fumes, UV radiation, noise) and how to mitigate them.• Environmental considerations in welding (waste disposal, fume extraction, energy efficiency). |
| Practical | <ul style="list-style-type: none">• Demonstration of safe welding practices (PPE, hazard identification, and risk management).• Conducting a mock safety inspection in a welding environment. |

6. Team Management, Workflow Coordination, and Troubleshooting

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| Theory | <ul style="list-style-type: none">• Managing and coordinating welding teams to ensure productivity and efficiency.• Strategies for improving workflow and minimizing production downtime.• Troubleshooting common welding issues (distortion, lack of fusion, excessive spatter). |
| Practical | <ul style="list-style-type: none">• Group activities to simulate team coordination and task management.• Real-life case studies focusing on problem-solving and troubleshooting in welding coordination. |

Assessment and Certification

Written Test: To assess theoretical understanding of welding standards, WPS/PQR, and safety protocols.

Practical Assessment: Participants will be evaluated on their ability to inspect welds and troubleshoot welding issues.

Certification: Upon successful completion of the course and assessments, participants will be awarded a **"Welding Coordinator" certificate** that acknowledges their competence in welding coordination, enabling them to coordinate welding activities in line with international best practices and industry standards.