



INSTITUTE OF MATERIAL, MALAYSIA

IMM Corrosion Certification Scheme

Certified Corrosion Monitoring Practitioner Level 1

Code: CMP1

HRDF claimable

This certification program will assess candidates who either have some experience, or have undergone training, in corrosion monitoring covering corrosion inhibition monitoring and cathodic protection monitoring.

Reference standards (reference used shall refer to the latest published document):

- ASTM E-797 Standard Practice for Measuring Thickness by Manual Ultrasonic Pulse-Echo Contact Method
- ASTM G96-90 Standard Guide for Online Monitoring of Corrosion in Plant Equipment (Electrical and Electrochemical Methods)
- IMM CM01: Corrosion Monitoring, Competency Levels of Corrosion Monitoring Persons: Basis for Certification Scheme
- ISO 15589-1: Petroleum, Petrochemical and Natural Gas Industries - Cathodic Protection of Pipeline Systems - Part 1: On-land Pipelines
- ISO 15589-2: Petroleum, Petrochemical and Natural Gas Industries - Cathodic Protection of Pipeline Transportation Systems - Part 2: Offshore Pipelines
- NACE 3T199 Techniques for Monitoring Corrosion and Related Parameters in Field Applications
- NACE SP0775 Preparation, Installation, Analysis and Interpretation of Corrosion Coupons in Oilfield Operations

Who should apply

This certification program is intended for all school-leavers, technicians, scientists, engineers, metallurgists, inspectors and inspection supervisors interested in corrosion monitoring and inspection and who wish to pursue a career as an IMM Certified Corrosion Monitoring Practitioner.

Objectives

This program will enable candidates to be assessed on their understanding of the key-points on corrosion inhibition and cathodic protection monitoring and process corrosion monitoring; to retrieve and change-out of coupons and probes; to carry out measurement and interpretation of corrosion rates; to use retrieval tools, service valves, back-pressure pumps and surge tubes; to conduct the cathodic protection monitoring and inspection techniques.

Examination topics

- Fundamental of corrosion
- Forms of corrosion
- Corrosion inhibition & preservation
- Corrosion control techniques (includes coatings)
- Corrosion monitoring techniques
- Corrosion monitoring probes & coupons
- Equipment installation & retrieval process
- Key points monitoring
- Ultrasonic thickness measurement - effectiveness and usage
- Cathodic protection principles
- Cathodic protection inspection techniques and surveys
- Standards and Codes of Practice

- Health, Safety & Environment considerations in corrosion monitoring activities
- Ethnic and Professional Conduct
- Interpersonal skills

Examination format

This open-book examination consist of 100 multiple choice questions

Examination duration

2 hours 30 minutes

Examination fee

As specified on the IMM website.

Candidate's criteria

Candidate should have

- Minimum academic qualification - SPM or equivalent* OR
- Attended relevant academic Corrosion Monitoring Practitioner dedicated to the IMM Corrosion Monitoring Practitioner Level 1 Certification with at least 6 months of field experience in Corrosion Monitoring work-scope from employer

NOTE: The applicant must pass the Eye Acuity Examination, with or without corrective lenses, to prove near vision acuity on Jaeger J2 at 12" or greater (≥ 30.5 cm). All applicants shall take a colour perception test.

*Candidate fulfills the minimum academic qualification but without field experience in Corrosion Monitoring work-scope is considered as a candidate without experience.

Pre-requisite training

A candidate without experience is required to attend IMM approved/recognized training course which prepares and provides comprehensive guidance and practices aligned to the topics covered in the examination.

A candidate with experience is encouraged to attend IMM approved/recognized training course.

Criteria for certification

Pass the examination with a minimum total mark of 70%

Certificate awarded

IMM Certified Corrosion Monitoring Practitioner Level 1.

Validity period of certificate

5 years

Re-sit of examination

A candidate who had failed in one or more of the examination parts can apply to re-sit for the failed component(s) of the examination within a year from the date of the first examination. The candidate shall have to pay the full examination fee for the re-sit and without the need to attend any pre-requisite training course.

Information on re-certification

6 months prior to the expiry of certification (at the end of the 5th year of certification), the candidate can apply for re-certification for another 5 years by

- providing proof to IMM that he/she has been employed in a related profession; and
- attending the relevant Refresher Course for certification (if any).

Prior to the expiry of the 5-year re-certification (at the end of the 10th year of certification), the candidate can continue to be certified for a further 5-year period by

- providing proof to IMM that he/she has been employed in a related profession; and
- attending the relevant Refresher Course for certification (if any).

The candidate must re-sit the certification examination if he/she has been out of the profession for more than 18 months continuously during the 5-year certification or re-certification period.