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#### **UNIVERSITI KUALA LUMPUR**

#### MALAYSIAN SPANISH INSTITUTE

(The contents and other related details in this form is used for publication purpose only. Training module will be given to participants upon registration)

Course Title: SMAW WELDING PROCESSES Course Code : MEC 104

## **Course Background/Summary:**

This course is designed to teach the participants the basic safety, principles, practices, and applications of SMAW. This course covers welding trade theory including safety, tool usage, equipment set up and standard terms and definitions. Basic welding and cutting techniques in the flat and horizontal position, and welding safety will be taught. The course also covers basic metallurgy and how to identify weld problems and defects. Participants will be given classroom theory and hands on instructed practical session in both processes.

#### **Course Objectives:**

- To be able to successfully weld two or more pieces of metal, using a variety of welding positions and different joint configurations using the SMAW welding processes.
- Develop skills in producing good welding quality using certain SMAW welding processes
- Inspect the welded part, according to quality requirement.

# **Target Audience:**

- Welding Apprentices, Welding Supervisors, Welding Instructors, Workshop Personnel
- Teaching staffs/instructors

Terms and Definition

Course Contents :

No TOPICS

1 Introduction to Shielded Metal Arc Welding (SMAW)

• Introduction: Safety & health in welding

• SMAW welding fundamentals

UniKL MSI can also customize existing short courses and develop new courses to meet your personal training needs and requirements. The course duration serves as a guideline for your reference.

Please forward enquiries to Centre for Advancement & Continuing Education (ACE), University Kuala Lumpur (Malaysian Spanish Institute), Kulim Hi-Tech Park, 09000 Kulim, Kedah or via fax to:04-4032539 or email to syazrah@unikl.edu.my or call 04-4035199 / 200 (ext:112 / 185)

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2	<ul><li>SMAW Equipment Requires</li><li>SMAW equipments</li><li>Power requirements</li><li>Welding variables</li></ul>	ments
3	<ul> <li>SMAW Consumable Electrode Type</li> <li>Rutile electrode</li> <li>Basic electrode</li> <li>Cellulosic electrode</li> <li>Classification of electrode</li> </ul>	
4	Practical Session: SMAW  • Butt and fillet weld (3mm and 10mm plates)  • Position – Flat  • Position – Horizontal	
COURSE STRUCTURE:		
Practical :		70%
Theory :		30%

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