UNIVERSITI KUALA LUMPUR
MALAYSIAN SPANISH INSTITUTE

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Course Title: **MEASUREMENT SYSTEM ANALYSIS (MSA) THROUGH GAUGE REPEATABILITY AND REPRODUCIBILITY (GR&R)**	**Course Code :**	**MET 106**

Course Background/Summary :

In manufacturing environment, by its very nature, relies on measurements of products and processes to verify the quality and to quantify performance. Therefore, product evaluation and process improvement require accurate and precise measurement techniques. Understanding and managing measurement system error, generally called Measurement System Analysis (MSA) is an extremely important function in process improvement. MSA is a specially designed experiment that seeks to identify the components of variation in the measurement system. The selection of tools and techniques of MSA is usually determined by characteristics of the measurement system itself. For the purpose of this course, the Gauge Repeatability and Reproducibility (GR&R) which is based on the method recommended by the Automotive Industry Action Group (AIAG) will be used as a tool for MSA. It is a measure of the capability of a gauge or instrument to obtain the same measurement reading every time the measurement process is undertaken for the same characteristic or parameter.

Course Objectives:

At the end of this course, participants will be able to:

- Identify the components of variation in the measurement system
- Analyze the measurement system through the use of GR&R.

Target Audience:

- Technicians, Supervisors, Quality Practitioners, Quality Inspectors, Metrologists, Technologists, Engineers, Instructors, Trainers and Lecturers.

Course Duration	**Min : 3 days, Max : 5 days**
Course Contents :	

No	**TOPICS (Lecture)**
1	Measurement System Analysis (MSA)
2	Gauge Repeatability and Reproducibility (GR&R)

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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No	TOPICS (Practical Exercises)
1	Exercise 1: MSA through the use of GR&R 1
2	Exercise 2: MSA through the use of GR&R 2

COURSE STRUCTURE:

Theory :	100%

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