



Reliability Testing and Analysis in Industrial Application Training

 **MIMOS Berhad**
Technology Park Malaysia

▶ To provide the basic fundamental concept of reliability testing including history, definition, why and when to perform the testing. The subject also explains the common and appropriate method in defining reliability goals and typical product failure behavior. This course will cover reliability testing methodologies for semiconductor devices and electronic products referring to International Test Standard.

In addition, Failure Mode and Effect Analysis (FMEA) and application of Quality Tools used for trouble shooting will be discussed in detail.

Hands-on practice on how to set-up the testing profile, the dos and don'ts and expectation test outcomes that need to be focused will also be covered.



HRDF
MALAYSIA
Claimable under HRDF
Scheme-SBL

LEARNING OUTCOMES

Upon completion, the participants would be:

- Understand the general concept of Reliability Testing
- Understand the need for testing.
- Know how to define and set-up reliability goal
- Understand the typical product failure
- Develop FMEA
- Understand reliability testing methodologies for semiconductor device
- Understand the Environmental Testing (Electrical/ Mechanical/ Climatic) for semiconductor and product level
- How to use quality tools and techniques for trouble-shooting purposes in determining defect root-cause

METHODOLOGY

- This Course will utilise a combination of lectures, discussions ,practice sessions and group discussions
- Instructor ced Classroom training
- Throughout the course, hands-on labs help participants build their knowledge and apply the concepts being discussed

TARGET GROUP

- QA executives
- QA engineers
- Process engineers
- Product engineers
- Design engineers.

DAY 1

Introduction to reliability

- General concept of Reliability
- Importance of Testing
- Defining Reliability Goal
- Bathtub Curve
- Reliability Test Strategy
- Reliability Test and Qualification for Semiconductor

DAY 2

Reliability Test Strategy

- Failure Mode and Effect Analysis (FMEA)

Reliability Test Strategy

- Environmental Test for Product /System Level
- (Climatic and Mechanical)
- Accelerated Life Test

DEMO - Test equipment set-up and run

DAY 3

Reliability Test Strategy

- Reliability Life Data Analysis

DEMO - Test equipment set-up and run

Basic Root-Cause Analysis

- Trouble-shooting tools

Assessment and discussion

INSTRUCTOR PROFILE



Lee Kah Yaw has 18 years of experience in Electronics/Semiconductors industries and over 5 years in Applied Research & Development field where he has held various positions including Engineer, Lead Engineer, Staff and Senior Staff Engineer of Quality. Lee holds a Diploma in Electronics Engineering from TAR College, Malaysia and Master of Science in Manufacturing System Engineering from University of Hertfordshire, UK. In the last 10 years of his career, Lee is devoted to delivering Six Sigma breakthrough improvement and championing Six Sigma deployment program in manufacturing and product development. He first became full time Six Sigma Certified Black Belt in Flextronics who led and completed 3 assigned projects successfully with cumulative saving close to USD 1 million. He then joined NXP Semiconductor as Senior Statistical Specialist who was responsible for deployment of local/external Six Sigma program and statistical support in critical problem solving for operation excellence. His Six Sigma Master Black Belt Certification was obtained in MIMOS Berhad where he continued to lead local Six Sigma program with key focus in transforming researchers/engineers to become statistical thinker in problem solving. He has coached more than 70 Green Belt/Black Belt projects in which more than 70% of them accomplished with meeting project goal. He has practiced, designed, developed training curriculum and taught Six Sigma problem solving methodology & tools (Quality/Statistical). In addition, more than 100 classes/workshops had been delivered successfully with satisfactory response from participants.



Nik Ahmad Nik Muhammad Arifin holds a Bachelor of Engineering (Electrical & Computing) from Chisholm Institute of Technology, Melbourne, Australia. He was instrumental in setting up the Reliability Lab at MIMOS. He selected and acquired reliability testing equipment from all over the world to get the best-in-class reliability test systems. He had expanded the lab function to perform various strategic reliability testing for electrical and electronic products from multinational corporations and large domestic companies which cover automotive, electrical and semiconductor sectors. He was also instrumental in getting the Lab to be accredited with MS ISO/IEC 17025 accreditation from Standard Malaysia. He had 24 years of experiences in conducting reliability testing for semiconductor and consumer products that had been designed worldwide according to the reliability testing international standards including Military, Automotive, JIS and JEDEC. In addition, Nik Ahmad had been providing reliability technical training for multinational corporations to set up their reliability testing lab worldwide.

INSTRUCTOR PROFILE



Azmir Aladin holds a Bachelor's Degree in Mechanical Engineering from University of Hartford, Connecticut, USA. He was one of the pioneers in setting up MIMOS first Reliability Lab in 2009 and was responsible for commissioning all reliability test equipment prior to release. He developed Reliability Program for MIMOS Industrial Electronics Technology (IET) newly designed platform and product qualification such as outdoor and vehicular telecommunication devices, netbook, agriculture sensors etc. as well as external clients on medical devices, automotive electronic equipment, printed label etc. A holder of practitioner Six Sigma Green Belt, he is the Technical Manager for ISO17025 accredited testing laboratory and MIMOS ISO17025 internal assessor. With over 18 years' experience in semiconductor and electronic product in the field of manufacturing, process improvement, applied R&D and reliability testing, Azmir is recognised by Korea Reliability Analysis Center (KRAC) as a Certified Reliability Engineer. In addition, he is responsible for conducting annual reliability testing strategy training to all MIMOS Researcher and Development Engineers and handling competency assessment of new Test Engineers. He is also one of the trainers for 1MGRIP Training Program under 5-days Product Reliability Testing Training.

MIMOS HAS MORE THAN 20 TECHNOLOGY TRAININGS

For further information on these technology trainings, do visit us at www.mimos.my/tech or contact training.dev@mimos.my



© 2017 MIMOS Berhad. All rights reserved. All the intellectual properties appearing in this page are the properties of their respective owners. Any rights not expressly granted herein are reserved. Any reproduction, modification, distribution or republishing materials without prior written consent is prohibited.

REGISTRATION FORM Reliability Testing and Analysis in Industrial Application Training • MIMOS @ Technology Park Malaysia 13 - 14 April 2020 (early bird 31 March 2020), 10 - 12 August 2020 (early bird 31 July 2020)

Please complete this form and fax or email to us

COURSE FEE	Fee per participant	Fee inclusive SST	 <small>HRDF MALAYSIA</small> <small>Claimable under HRDF Scheme-SBL</small>
<input type="checkbox"/> Early Bird Registration (date as above)	RM3,000.00	RM3,180.00	
<input type="checkbox"/> Standard Registration	RM3,200.00	RM3,392.00	
<input type="checkbox"/> Group Discount (3 participants above)	RM2,800.00	RM2,968.00	
<input type="checkbox"/> Universities & Colleges	RM2,700.00	RM2,862.00	

No	PARTICIPANT DETAILS	CONTACT INFORMATION	MEAL PREFERENCE
1	Name: Designation:	Email: Mobile No.:	<input type="checkbox"/> Vegetarian <input type="checkbox"/> Non-Vegetarian
2	Name: Designation:	Email: Mobile No.:	<input type="checkbox"/> Vegetarian <input type="checkbox"/> Non-Vegetarian
3	Name: Designation:	Email: Mobile No.:	<input type="checkbox"/> Vegetarian <input type="checkbox"/> Non-Vegetarian
4	Name: Designation:	Email: Mobile No.:	<input type="checkbox"/> Vegetarian <input type="checkbox"/> Non-Vegetarian
5	Name: Designation:	Email: Mobile No.:	<input type="checkbox"/> Vegetarian <input type="checkbox"/> Non-Vegetarian

Preferred date of training : 13 - 14 April 2020 10 - 12 July 2020

Organisation :

Postal Address :

Tel : Fax :

Contact Person : Position :

Email :

Signature and Company Stamp:

AUTHORISATION

*I understand and agree to MIMOS Berhad terms and conditions
(Signatory must be authorised to sign on behalf of the Organisation)*

Name of the Authorised Person :

Position : Date :

Terms & Conditions:

1. Upon received of this registration form (MIMOS), we will invoice to the contact-person for payment processing.
2. Payment is required within 30 days upon receipt of the invoice. All payment must be received 7 working days prior to the training date. The fee shall include luncheon, coffee/tea breaks and training materials.
3. Cancellation or postponement - Any cancellation must be made in writing and to reach us no later than 10 working days prior to the training date. If written notice is received in less than 10 working days, 100% of total fees is chargeable. A substitute delegate with similar background and competencies, is always welcome at no additional charge.
4. Our instructor(s) and topics are confirmed at the time of this print. However, circumstances beyond the control of the organizers' may occur and MIMOS Berhad reserves the rights to alter or modify the advertised speakers/ topics if necessary.

To register & more information:

Business Development (MSSB), MIMOS Berhad

Call : +603-8995 5000 ext. 55279 (Fara), 55642 (Amy)

Email : faradaya.machmud@mimos.my, letchumy@mimos.my