



**Microelectronic Processing  
and  
Fabrication Technologies**

Training Programme  
by  
Faculty of Engineering  
Multimedia University

## Overview

This course provides an overview of the state-of-the-art microelectronic processing and fabrication technologies, including wafer preparation, film deposition, doping and device patterning techniques and processes, which are important for fresh graduates and engineers embarking on microelectronic technologies in semiconductor and microelectronic industries.

## Objectives

Upon completion of this course, the attendees are able to:

- Comprehend the concepts of microelectronic fabrication processes including wafer preparation, film deposition, doping, and device patterning processes and techniques.
- Analyze the importance of microelectronic fabrication processes on the microelectronic material and device properties.
- Design a simple fabrication process flow for micro-nanoelectronic devices.

## Target Audience

Operators, undergraduate or postgraduate students, researchers, engineers, vendors, either new to, or already working in, semiconductor/microelectronic foundries and/or packaging & assembly industries.

## Prerequisite

Familiarity with basic semiconductor materials and general engineering terminology is assumed.

## Training Methodology

Virtual Classroom

## Course Duration

2 days

## Content/Outline

### Microelectronic fabrication processes and techniques

- Wafer Preparations
- Chemical Vapor Deposition Techniques
- Physical Vapor Deposition Techniques
- Diffusion Doping Technique
- Ion Implantation Doping Technique
- Photolithography Technique
- Etching Technique

## Course Instructor

### Ir. Dr. Chan Kah Yoong

Ir. Dr. Chan Kah Yoong is currently an Associate Professor in Micro/Nano Engineering Technology at the Faculty of Engineering, Multimedia University in Malaysia. He is a HRDF certified trainer and specializes in Micro and Nanofabrication, Thin Film Electronic Materials and Devices, Smart Electronics, and Internet of Nanothings. He has conducted multiple corporate training in the above areas to the semiconductor/microelectronic industries. His current research interests include metallization materials, semi-transparent solar cells, transparent electronics, smart/intelligent windows, thin-film devices such as sensors and transistors, with particular interests in device fabrication, characterization and analysis.

## Administrative Details

### Programme Logistics

Duration: 2 days

Date:

Please refer to the updated dates at <https://www.mmu.edu.my/foe/short-courses/>

Registration deadline:

Please refer to the updated dates at <https://www.mmu.edu.my/foe/short-courses/>

### Your Investment

	Condition	Price per Pax
Regular Fee	Students / MMU Alumni	RM500
	Public	RM800
	Public (Group >5 pax)	RM600
Early Bird Fee	Students / MMU Alumni	RM300
	Public	RM600
	Public (Group >5 pax)	N/A

## Method of Payment

### Local Participants:

Please make payment via bank transfer only. Account details is as below:

Account name: Unitele Multimedia Sdn Bhd



Account number: 86-0090180-2

Bank: CIMB Islamic Bank Berhad

Payment must be made by the registration deadline.

### International Participants:

Please make payment via Flywire, as shown in the image below.

Type of Payment	Method	Details
International Payment / Payment outside Malaysia	Online payment with Flywire  	<ul style="list-style-type: none"> <li>To get started, go to <a href="http://mmulanding.flywire.com">mmulanding.flywire.com</a>; or scan the QR code to begin the payment process:</li> </ul> <div style="text-align: center;">   <b>SCAN ME</b> </div> <ul style="list-style-type: none"> <li>Choose Conference for Non-students related</li> <li>Minimum payment RM 50</li> </ul>

### Refund and Cancellation

Any refunds will be processed in 60 days. Should there be any cancellation, it may be due to the organizer not getting the minimum participants or the participant failing to attend the workshop due to unavoidable reason.

### Disclaimer

Faculty of Engineering, Multimedia University reserves the right to change the instructors, date and to vary/cancel the programme should unavoidable circumstances arise. All effort will be taken to inform participants of the changes. Upon submission of the registration form, you are deemed to have read and accepted the terms.

### **Enquiries**

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## Registration Form

To register, please visit this link: <https://forms.gle/ZKnvftLQaLr3Bvui7>