



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

Classroom and Tutorial Exercises.

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

Dates, registration deadline and registration form:






Please refer to: <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
	IEEE/IEM Member	RM700
Early Bird Fee	Students / MMU Alumni	RM300
	Public	RM600
	Public (Group >5 pax)	N/A
	IEEE/IEM Member	RM500

Method of Payment

Please refer to the next page.

Type of Payment	Method	Details
Local Transaction / Payment within Malaysia	Online Payment with JomPay	<ul style="list-style-type: none"> To get started, login to any preferred internet banking. Look for JomPay to begin the payment process. Enter Ref 1 & Ref 2. <div style="border: 1px solid black; padding: 5px; margin: 10px 0;">  <p>Billar Code : 22202 Ref-1 : <Participant IC/Passport> Ref-2 : Event Name*</p> </div> <p>JomPAY online at Internet and Mobile Banking with your Current, Savings or Credit Card account</p> <p>*Ref. 2: FOEMicroelectronic</p>
		<ul style="list-style-type: none"> To get started, go to MMU website (https://www.mmu.edu.my/) > Admission > Financial Info > Payment Channel > Non Student ; <div style="border: 1px solid gray; padding: 5px; margin: 10px 0;"> <p>E-Payment To begin the payment process, please click Student or Non Students</p> <p>  </p> <p>Student Non-Student</p> </div> <p>or scan the QR code below to begin the process:</p> <div style="text-align: center; margin: 10px 0;">  <div style="background-color: black; color: white; padding: 5px; display: inline-block; border-radius: 10px;">SCAN ME</div> </div> <ul style="list-style-type: none"> Choose Category: Public Training Workshop Name Choose Your Participant Type: <ul style="list-style-type: none"> ✓ STUDEN (MMU, IEEE, IEM, Other Higher Learning Institution) ✓ PUBLIC ✓ GROUP (Group > 5 Pax) ✓ IEEE/M (IEEE/IEM Members)

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

Note:

Please submit the proof of payment to organizer for clearance updating purposes within 2 working days.

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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