

# Virtual Half Day Course

## EXPLORING CONTROL SYSTEMS: A COMPREHENSIVE GUIDE FOR ENGINEERING STUDENTS AND ENGINEERS

Organised by:  
Engineering Education Technical Division, IEM

DATE: 27 JULY 2024, SATURDAY  
(RESCHEDULED FROM 11 MAY 2024)

TIME: 9AM - 1PM

### SPEAKER:

Ir. Ts. SUKHAIRUL NIZAM BIN ABDUL RAZAK

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**CLOSING DATE:  
20 JULY 2024**



	<b>ONLINE</b> (Log-in for registration & payment: <a href="http://www.myiem.org.my/member/login.aspx">www.myiem.org.my/member/login.aspx</a> )	<b>NORMAL FEE</b> (by fax & email) Payment by cash, credit card and bank-in
IEM Student Member	40.00	50.00
IEM Graduate Member	75.00	90.00
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Non-IEM Member	240.00	300.00

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# COURSE SYNOPSIS

Join us for a virtual half-day workshop dedicated to "Exploring Control Systems: A Comprehensive Guide for Engineering Students and Engineers." This workshop offers a deep dive into the intricate world of control systems, providing invaluable insights and practical knowledge essential for both aspiring engineers and seasoned professionals.

During this workshop, participants will embark on an illuminating journey through the following key areas:

## 1. Introduction to Control Systems

- Understanding the Essence of Control Systems in Engineering
- Brief Historical Overview and Evolution of Control Systems
- Importance and Applications Across Various Industries

## 2. Development of Automatic Control

- Evolution from Manual to Automatic Control Systems
- Milestones and Key Innovations in the Field
- Impact of Technological Advancements on Control System Development

## 3. Basic Concepts of Automatic Control

- Fundamentals of Feedback Control Systems
- Components and Elements of Control Systems
- Feedback Loops and Control Algorithms

## 4. Control System Composition

- Components and Subsystems of Control Systems
- Sensors, Actuators, Controllers, and Processors
- Integration of Hardware and Software Components

## 5. Classification of Automatic Control Systems

- Classification Based on Control Objectives and Functions
- Continuous-Time vs. Discrete-Time Control Systems
- Open-Loop vs. Closed-Loop Control Systems

## 6. General Requirements for Control Systems

- Performance Metrics and Specifications
- Stability, Robustness, and Transient Response
- Considerations for Design, Implementation, and Maintenance

### **Cancellation Policy**

No cancellation will be accepted prior to the date of the event. However, replacement or substitute may be made at any time with 7 days prior notification and substitute will be charged according to membership status.

### **Personal Data Protection Act**

I have read and understood the IEM's Personal Data Protection Notice published on IEM's website at <http://www.myiem.org.my> and I agree to IEM's use and processing of my personal data as set out in the said notice.

Led by industry experts and seasoned professionals, this workshop promises to equip attendees with the knowledge, skills, and tools necessary to navigate the complex landscape of control systems engineering effectively.

Don't miss this opportunity to expand your expertise and take your understanding of control systems to new heights. Join us for an enlightening and enriching experience that will empower you to tackle real-world challenges with confidence and proficiency.

This comprehensive topic aims to provide engineering students and professionals with a solid foundation in control systems, covering introductory concepts, historical development, system composition, classification, and general requirements. By delving into these chapters, participants will gain insights into the principles, theories, and practical applications of control systems across various engineering disciplines.

## WHO WILL BENEFIT WITH THIS WEBINAR

- Engineering students or graduates looking to learn more about Control System.
- Anyone interested in Control System.

## SPEAKER'S PROFILE

**Ir. Ts. Sukhairul Nizam Abdul Razak** received an early education at SMK Methodist ACS Klang Selangor, UTM Skudai in Bachelor of Mechanical (Aeronautical) Engineering and MBA from Charles Sturt University Australia. Registered as Asean Chartered Professional Engineer (ACPE), Professional Mechanical Engineer with practicing certificate (PEPC) since year 2016 with Board of Engineers Malaysia and registered as Professional Technologist with MBOT since year 2020. Started career at Proton's Manufacturing since 1995 as RND's body design engineer follow with other positions in various departments in Proton Edar for nearly 18 years such as a Car Body Design Engineer, Branch Sales Manager, Manager Sales Standard, Manager Warranty Operations, Manager Equipment Tools & Calibration, Head of Division Office and worked with Accenture Malaysia for Daimler Group's project. He was a Regional Director for Leanmax Pro Sdn Bhd, was a Senior Lecturer for City University Malaysia, currently appointed as Programme Coordinator for First City University College and as Director for Enviroklar Tech Sdn Bhd. Ir Ts Sukhairul Nizam has experienced designed, developed automotive components as well managed anti-corrosion and painting development, aerodynamic development, and crash test development for the national car company. Ir Ts Sukhairul Nizam is also specialised in automotive sales training or coaching and managing product recall for automotive industry. Entrepreneurship is one of his subject teaching students for degree in Mechanical Engineering.

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**REGISTRATION FORM**  
**VIRTUAL HALF DAY COURSE ON**  
**EXPLORING CONTROL SYSTEMS:**  
**A COMPREHENSIVE GUIDE FOR ENGINEERING STUDENTS AND ENGINEERS**  
**27 JULY 2024**

*(rescheduled from 11 MAY 2024)*

**Closing Date : 20 JULY 2024**

No	Name(s)	Email Address	IEM Membership No.	Grade	Fee (RM)
<b>SUB TOTAL</b>					
<b>+SST 8%</b>					
<b>Total Payable</b>					

**PAYMENT DETAILS :**

Cash RM \_\_\_\_\_

Cheque no. \_\_\_\_\_ for the amount of RM \_\_\_\_\_ (non-refundable) .

**FULL PAYMENT must be settled before commencement of the course**, otherwise participants will not be allowed to enter the hall. If a place is reserved and the intended participant fails to attend the course, the fee is to be settled in full. If the participant failed to attend the course, the fee paid is non refundable. The Registration Fee includes lecture notes, refreshment and lunch.

For **ONLINE REGISTRATIONS**, please note that payment **MUST** be made **BEFORE the closing date**. If payment is not received within the stipulated time, the registration fee will be reverted to the normal registration fee.

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