

**VIRTUAL 2 DAY COURSE ON** 

# HAZARD IDENTIFICATION, RISK ASSESSMENT AND CONTROL (HIRAC) IN ENGINEERING PROJECT

BEM APPROVED FOR CPD: 13 REF NO: IEM23/HQ/430/C (w)

ORGANISED BY : PROJECT MANAGEMENT TECHNICAL DIVISION, IEM

#### **SPEAKER:**

ASSOC PROF DR ABD. RAHMAN ABDUL RAHIM
27 & 28 FEBRUARY 2024

(rescheduled from 26 & 27 SEPTEMBER 2023)

TUESDAY & WEDNESDAY 9.00AM - 5.00PM

|                      | ONLINE                              | NORMAL FEE (RM)                          |  |  |  |  |
|----------------------|-------------------------------------|--|--|--|--|--|
|                      | (Log-in for registration & payment: | (By fax & email)                         |  |  |  |  |
|                      | www.myiem.org.my/member/login.aspx) | Payment by cash, credit card and bank-in |  |  |  |  |
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## **SYNOPSIS**

Safety touches every aspect of organizational systems. Safety is not just reacting to accidents and emergencies but more importantly planning to prevent accident from happening. Safety is not just a support activity but a value adding one. By ensuring that there is no risk to employees and process equipment, optimum performance can be achieved. This course aims to provide employees with relevant tools and knowledge to prevent accident. All the subjects presented are most relevant to all engineering activities. Basic understanding of occupational hazards is the first step towards an effective accident prevention program.

The course will cover principles of accident prevention in engineering project including hazard recognition, unsafe act and unsafe condition as well as accident control steps. Occupational health includes identification of health hazards at the project site and level of control measures that can be taken. Hazard identification, risk assessment and control in project covers identification of hazard, risk assessment through job safety analysis (JSA) and control of risk through – elimination, substitution, engineering and administrative control. Machinery hazard discuss types of injuries, hazardous point of operation and types of machine guarding. Engineering and building construction hazard covers work on height, confined space and crane and material handling hazard. Electrical hazard describes electrical insulation failures, equipment failures, electrical explosions as well as circuit and equipment protection. OSH audit includes safety inspection and audit, audit checklist, workplace audit, safety procedures audit, workplace plan and writing audit report.

### **COURSE OBJECTIVE**

Upon completion of the course, participants will be able to:

- 1.Describe various types of accidents
- 2.Understand the roles of safety and health committee
- 3. Identify various hazards at the workplace
- 4. Analyze the risk involved
- 5. Recommend hazard control measures

#### **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.

# **COURSE SCHEDULE**

### DAY 1

| Time          | Content                                    |  |
|---------------|--|--|
| 08:45 - 09:00 | Registration                               |  |
| 09:00 - 09:30 | Review on Project Management               |  |
| 09:30 - 10:30 | Principles of Accident Prevention          |  |
| 10:30 - 10:45 | Refreshment                                |  |
| 10:45 - 12:00 | Occupational Health                        |  |
| 12:00 - 13:00 | Hazard Identification, Risk Assessment and |  |
|               | Control (HIRAC)                            |  |
| 13:00 - 14:00 | Lunch                                      |  |
| 14:00 - 15:30 | HIRAC (continue)                           |  |
| 15:30 - 15:45 | Refreshment                                |  |
| 15:45 - 17:00 | Machinery Hazard                           |  |
|               |  |  |

# **DAY 2**

| Time          | Content                                      |  |
|---------------|--|--|
| 08:45 - 09:00 | Log in / Registration                        |  |
| 09:00 - 10:30 | Engineering and Building Construction Hazard |  |
| 10:30 - 10:45 | Refreshments                                 |  |
| 10:45 - 13:00 | Engineering and Building Construction Hazard |  |
|               | (continue)                                   |  |
| 13:00 - 14:00 | Lunch  |  |
| 14:00 - 15:30 | Electrical Hazards                           |  |
| 15:30 - 15:45 | Refreshment                                  |  |
| 15:45 - 17:00 | OSH Audit                                    |  |
|               |  |  |

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# SPEAKER'S PROFILE

**Dr. Abd. Rahman Abdul Rahim** is an Associate Professor at Razak Faculty of Technology and Informatics, UTM Kuala Lumpur. He is also an associate lecturer at Meiji University, Tokyo, Japan. Prior to joining UTM he has worked with two multi-national corporations in the area of manufacturing. He graduated with a B.Sc. in Mechanical Engineering and B.Sc. in Engineering Management from University of Evansville USA in 1988. He obtained his MSc in Manufacturing Systems Engineering from Warwick University in 1991 and his PhD from Universiti Teknologi Malaysia in 2006. He also received a Certificate in Occupational Safety and Health in Manufacturing Industries from Worksafe Western Australia in 1998.

He has conducted training with various multi-national and local companies throughout Malaysia in the area of Operations and Production Management, Occupational Safety and Health, Emergency Response Plan, 5-S and Housekeeping, Project Management, Total Productive Maintenance, Poka Yoke, Quality Improvement, Statistical Process Control, ISO 14000, ISO 9000, HACCP, GMP, Production Planning and Control and Method and Time Study. He is also an invited speaker at Federation of Malaysian Manufacturers (FMM), National Institute of Occupational Safety and Health (NIOSH), Malaysian Institute of Human Resource Management (MIHRM), Incorporated Society of Planters, (ISP), ALAM, International Business School (IBS), Chemical Engineering Pilot Plant (CEPP), and Business and Advanced Technology Center (BATC), Institut Pembangunan Pengurusan Johor (IPPJ), Prestariang and Pusat Pembangunan Tenaga Industri Johor (Puspatri). He has also conducted training for Sudan Master Technology (SMT) in Khartoum in 2014. He was also an examiner and interviewer for Safety and Health Officer competency certificate (NIOSH).

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#### **REGISTRATION FORM**

# VIRTUAL 2 DAY COURSE ON HAZARD IDENTIFICATION, RISK ASSESSMENT AND CONTROL (HIRAC) IN ENGINEERING PROJECT 27 & 28 FEBRUARY 2024 (TUESDAY & WEDNESDAY)

(rescheduled from 26 & 27 SEPTEMBER 2023)

| Name(s)  |  | Email  | Membership<br>No.   | Grade  | Fee (RN          |
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Date

Signature & Stamp