



ENGINEERING ANALYSIS FOR STEAM AND ICE ENGINEER COMPETENCY (PART A - Module A) & (PART B - Module B)

MODULE A (MA) : 16 - 18 April 2018 | 29 - 31 October 2018

MODULE B (MB) : 23 - 25 April 2018 | 13 - 15 November 2018

IBD UTM Kuala Lumpur, MALAYSIA

COURSE OBJECTIVES

- To upgrade the knowledge and skill in engineering theoretical analysis for steam engineers
- To prepare participants for the Steam Engineer Grade 1 and Grade 2, Part A written examination conducted by the Jabatan Keselamatan dan Kesihatan Pekerjaan (JKKP/DOSH).

COURSE CONTENT

MODULE A (MA)

Day 1

- Application of Scientific Calculator
- Introduction to engineering mathematics
- Basic trigonometric, algebra and calculus
- Forces, mass and impulse

Day 2

- Momentum, work and energy
- Laws of solid and liquid friction
- Vectors and forces diagram
- Equilibrium of simple frame structures and beams

Day 3

- Tensile and compression forces
- Stress and strain, and their relationship
- Hooke's Law, Young Modulus and Modulus of Elasticity
- Tensile testing of material

MODULE B (MB)

Day 1

- Thermal stress
- Theory of simple bending
- Thin cylinder and stresses
- Shear force, stress and strain

Day 2

- Bending moment and shear force diagrams
- Torsion of solid and hollow shaft
- Compression and expansion process of gas
- Ideal and practical gas cycles

Day 3

- The law of perfect gas
- Steam generation and its properties
- Application steam tables and charts
- Steam plant (Boilers and turbines)



WHO SHOULD ATTEND

- Personnel who are in the process of applying Steam and Internal Combustion Engine (ICE) Engineer Certificate, Grade 1 and Grade 2.
- Professionals who want to review, enhance or broaden their understanding and skill in engineering theoretical analysis and problem solving.





Assoc. Prof. Ir. YAHAYA RAMLI (MIEM, P.Eng)

Yahaya Ramli is an Associate Professor at the Department of Thermo-Fluid, Faculty of Mechanical Engineering, Universiti Teknologi Malaysia (UTM). His field of specialization is fluid mechanics and fluid power systems (hydraulic & pneumatic). Prior to join as an academicians, he has several year of practical experience in various technical and management level in palm oil, electronic and petroleum industries. He has involved in installation, operation and maintenance of boilers, steam turbines and generator set (I.C.E), pump and compressors while working in FELDA mill, Sobena Offshore Inc., and PETRONAS Gas. Graduated from MARA Institute of Technology (ITM) in Mechanical Engineering and obtained his MSc (Fluid Power Systems) from University of Bath, U.K.

He is a Professional Engineer (P.Eng) registered with the Board of Engineers, Malaysia (BEM) and a Cooperate Member (MIEM) of the Institute of Engineers, Malaysia (IEM). He is a registered trainer with the Pembangunan Sumber Manusia Berhad (PSMB). He has trained personnel from numerous international and local companies, and government departments including Qatar Petroleum (QP), SHELL (Singapore and P.Dickson), ESSO, Loadstar Private Limited (Sri Lanka), Singapore Public Utility Board (PUB), Khartoum Refinery (KRC) Sudan, Al-Kahfi (Saudi Arabia), Talisman Inc., PETRONAS, TITAN, Torrey-BASF, Optimal (Paka), MTBE (Gebeng), MECI (Prai), PROTON, PERODUA, Golden Hope Plantation, Tabung Haji Plantation, FELDA, IOI, Asiatic, Gold Coin, FMM, FLEXSYS (USA), TEXAS Instrumentation, MIMOS, Sime Darby Group, Sapura-Kencana, TNB, Sabah Electric, Kedah and Melaka Water Work, DBKL, IJN, SMC (Subang), Royal Malaysian Police (Marine), Royal Malaysian Army and Navy, North and West Port Bhd, Bintulu Port, MARA, UniKL, UTP, UTHM, UMP, UPM, Perlis Power Plant, Teknik Janakuasa (Malakof), PowerTek (Tanjung), MMHE, Johore Corp., Boustead Naval Shipyard (Lumut), Rapid K.L., and other petrochemical and electronic companies. Beside teaching and training activities, he has appointed as a consultant and technical advisor to several mechanical installation and recreational projects. Active in publication work, he has published several books and conference papers in field of mechanical and plant engineering. He has published several technical books including of Sistem Pencegahan Kebakaran (2011), Introduction to Compressed Air Systems (2010), Hidraulik dan Pneumatik (2005) and Fluid Power Systems (1996).

For more information, please contact

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A 6 day module on ENGINEERING ANALYSIS FOR STEAM AND ICE ENGINEER COMPETENCY (PART A)

IBD UTM Kuala Lumpur

Registration Fee (Fee is inclusive of lunch, refreshments and course materials. Accommodation is not included)

MODULE A (MA)	RM 1113.00
MODULE B (MB)	RM 1113.00
MODULE A + B (MAB)	RM 2226.00

Please tick (✓) where appropriate

☐ (MA) ☐ (MB) ☐ (MAB)

YES! I would like to register the following participants

Name 1

Job Title

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Job Title

COMPANY INFORMATION

Company

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Authorised Signatory (*This registration is invalid without signature from an authorised officer)

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Please kindly complete and return the reply form 3 weeks before the commencement date together with :

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Cancellation & Substitutions

A full refund will be promptly made for all written cancellations 2 weeks before the course. 50% refund will be made for written cancellations received 7 days before the course. A substitute may be made at any time.

Note

A) The organiser has the right to make any amendments that they deem to be in the best interest of the course and to cancel the course if insufficient registrations are received a week before course commencements date.

B) CERTIFICATE OF ATTENDANCE will be awarded at the end of the course.