

# Complex engineering problems – Washington Accord’s expectation

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**ABSTRACT:** The presentation will provide a general overview of Washington Accord’s graduate attributes and their relationships with regards to the expectations to solve complex engineering problems, and aspects of complex engineering activities to be considered within the curricula. These will be discussed in the context of the expected knowledge profiles of engineering curricula. This will include introduction to Washington Accord requirements, Graduate Attributes, Complex Engineering Problems, Complex Engineering Activities and Knowledge Profiles. Participants will be able to apply the knowledge to develop engineering curricula that would fulfill the Washington Accord’s expectation with regards to solving complex engineering problems.

## **ABOUT THE SPEAKER:**

Megat Johari MegatMohd Noor is a Fellow and President of the Malaysian Society for Engineering & Technology (MySET). He is a registered Professional Engineer with Practicing Certificate and a Board Member of the Board of Engineers Malaysia (BEM), where he chairs the BEM Examination & Qualification Committee (E&Q). He is also a Deputy Chair of BEM Engineering Technology Accreditation Council and past Chair of BEM Engineering Accreditation Council. He was responsible for the BEM accession to the full signatory status of the Washington, Sydney and Dublin Accords, the international benchmarks for engineering and engineering technology education at degree and diploma levels.

Megat Johari is the Vice President of the Federation of Engineering Institutions of Islamic Countries (FEIIC) and Chief Editor of the FEIIC International Journal of Engineering and Technology. He had served in various capacities; Deputy President and Secretary General of FEIIC, and Regional Director of FEIIC Kuala Lumpur Regional Office. Presently he is chairing the FEIIC Engineering Qualifications, Accreditation and Professional System (EQAPS) Commission. Megat Johari is also a Fellow and past Vice President of the Institution of Engineers Malaysia.

Megat Johari was a Professor and Founding Dean of Malaysia Japan International Institute of Technology (MJIT), Universiti-Teknologi Malaysia (UTM). He later served as Director of Quality and Risk Management Centre (QRiM) for the UTM Kuala Lumpur Campus. Prior to joining the MJIT, he had served as the Head of Quality Assurance at the Faculty of Engineering and Head of Civil Engineering Department at the Universiti Putra Malaysia (UPM). While serving at UPM, he was seconded to the Board of Engineers Malaysia in 2007 for four years, as a Director of the Accreditation Department.

Megat Johari was trained as lead auditor in quality, environment and laboratory management systems. He has conducted numerous training programmes on accreditation, outcome-based education and complex engineering problems, as well as, quality and environmental management systems both locally and internationally. He has published over 300 research and academic papers in the fields of environmental engineering and engineering education. He was engaged by the Ministry of Education Malaysia in developing the Malaysian Rating Assessment tools for higher education institutions; MyRA, MyQUEST, Polyrate, MySpekk and MyIBG.