

Accreditation for Quality Assurance of Engineering Education: Singapore's Experience after 16 years of the Washington Accord

Kai Sang Lock

Professor (Engineering), Singapore Institute of Technology, Singapore

Abstract

This paper examines the role of accreditation in quality assurance of engineering education, drawing from Singapore's experience after 16 years in the Washington Accord. The presentation will cover an overview of engineering education in Singapore, accreditation activities before the Washington Accord, reflection on 16 years of association with the Washington Accord, impact of the outcome-based accreditation framework in quality assurance of engineering education, overcoming challenges, and an overview of the international scene.



Dr. Lock is a professor (engineering) at the Singapore Institute of Technology (SIT), the fifth new government-funded university in Singapore. He is a past president of the Institution of Engineers Singapore (IES). He served as chairman of the Engineering Accreditation Board, IES, from 2002 to 2009, leading IES to become a signatory of the Washington Accord in 2006. He still actively contributes as a program evaluator and team chair for accreditation evaluation of engineering programs. He is presently a mentor to the BAETE and BPERB, after having successfully mentored the engineering accreditation board in India and Pakistan to gain full-signatory status in the Washington Accord. He served as a Washington Accord review team member and team chair for review visits to South Africa, South Korea, the USA, China, and the UK. He has served as a board member of the Professional Engineers Board, Singapore for over 12 years and was chairman of its examination committee responsible for the implementation of the examination system for qualifying

professional engineers in Singapore. He is a Fellow of the Academy of Engineering Singapore, an Honorary Fellow of the Institution of Engineers, Singapore, and an Honorary Fellow of the ASEAN Federation of Engineering Organizations. He received both his BSc (1975) and PhD (1979) degrees in electrical engineering from the University of Strathclyde, UK. He was a faculty member in the Department of Electrical Engineering, National University of Singapore for 17 years before he left to set up his consulting practice in 1997. He returned to academia as a professor in 2016, after 20 years in the industry.