Using IE Tools in Developing and Accrediting Engineering Programs

Several Industrial Engineering (IE) tools and methods can be utilized in Engineering Education. This mainly stems from the fact that IE is about developing and maintaining effective and robust systems that provide high quality products and services. These systems can production or service (for example, an education system or an academic program). This presentation focuses on utilizing three IE tools for engineering programs development, accreditation, and quality assurance: a System Engineering (SE) approach for developing a Master of Systems Engineering (MSE) program, Quality Function Deployment (QFD) for program accreditation, and Analytical Hierarchy Process (AHP) for the program’s quality assessment and assurance.

Biography

Raid Al-Aomar is a professor of Industrial Engineering and the director of Master of Engineering Management (MEM) program at Abu Dhabi University in the UAE. He holds a PhD in Industrial Engineering/Operations Research from Wayne State University in Detroit, USA. He has over 15 years of experience at companies and universities in Jordan, USA, and UAE with about 50 publications in the field of Industrial Engineering. He is also a professional trainer and a consultant on deploying Lean Six Sigma systems, Supply Chain, & Quality Management. He worked on many projects with the Auto Industry in Detroit and the industrial estates in Jordan and delivered many training courses to professionals in private and public companies in KSA, Bahrain, and the UAE. He is a co-author of "Simulation-based Lean Six Sigma and Design for Six Sigma" book from John Wiley. Dr. Al-Aomar’s research interests include Simulation-based Optimization, Operations Management, and Lean Six Sigma Systems.

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