



PE WSQ Course in Productivity Improvement through Energy Usage Pattern Monitoring & Analysis (48 hours)

Productivity is about having access to critical information anywhere, any time, for effective decision making. With IT connectivity and advanced statistical techniques on energy usage patterns, operations data of factories, facilities, or equipment can now be used to uncover many productivity issues not identifiable by conventional means, and almost instantly. This course will equip participants with new skills to gather, analyse, visualise and act on the above operation data timely. Besides, as many equipment and processes are typically over-spec in terms of energy usage, the same course will also enable participants to identify energy hot spots in their operations or facilities.

Uniqueness of the Programme

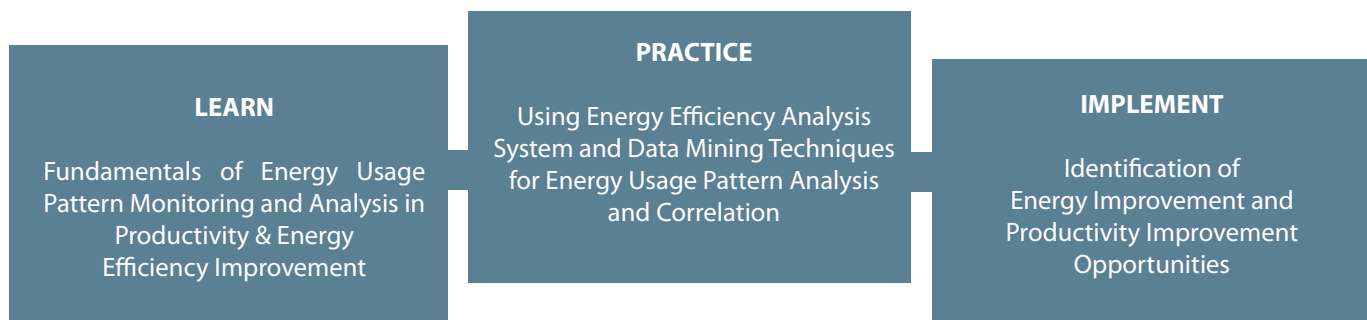
- Hands-on sessions with actual industry cases
- Address productivity and energy issues during lectures
- Develop company's own action plan

Who Should Attend

This course is designed to impart strategic energy management skills to energy managers, production managers, facilities managers, production supervisors, and technicians etc.

What You Will Learn

The course will equip participants with effective practical tools and techniques, based on energy data monitoring and analytics. Participants are taught to focus on:



When & Where

Please visit our website at KTO.SIMTech.a-star.edu.sg for the updated course schedules.

Commencement Dates for 2018 batches

- Batch 5: 16 April 2018

Training Venues

(Classroom training is held at either of the following venues for each batch.)

Singapore Institute of Manufacturing Technology
73 Nanyang Drive, Singapore 637662

IES Academy
Devan Nair Institute for Employment and Employability (e2i)
80 Jurong East Street 21 #04-10, Singapore 609607

About the Course Leaders



Dr Zhao Yi Zhi is a Senior Research Engineer from SIMTech with a PhD in Computer Engineering. With more than 20 years of industrial R&D experience, he helped to develop a software system that won the IES Prestigious Engineering Achievement Award, and successfully licensed several other systems to local companies, including the Energy Efficiency Monitoring and Analysis System (E²MAS). He has published over 30 journal and conference papers. His current research focus is on energy-aware execution control for energy-efficient manufacturing, EE analysis and management systems. Dr Zhao is an IEEE member.



Dr Li Xiang is a Senior Scientist and Team Lead in SIMTech. She has more than 20 years of experience in research on computational intelligence, data mining, and statistical analyses such as neural networks, fuzzy logic systems, unsupervised data clustering, and regression modelling. Her research expertise includes data mining and knowledge discovery, decision support systems, in-situ process monitoring and quality control. She is a member of the IEEE.



Dr Song Bin is a Senior Scientist from SIMTech's Sustainability and Lifecycle Management team under the Planning and Operations Management Group. His current R&D focus is on methodologies and tools for advancing sustainability in manufacturing operations that include closed-loop manufacturing, carbon footprint management, and manufacturing energy efficiency. He has over 20 years of R&D experience in product lifecycle management and life cycle engineering. During this period, he has initiated and successfully led many research and industry funded projects, ranging from million-dollar projects by government agencies and multi-national companies (MNCs), as well as smaller projects with small and medium-sized enterprises (SMEs).

Course Fee and Funding

- The full course fee for this module is S\$4,000 before course fee funding & GST.
- All Singaporeans and Permanent Residents aged 21 years and above can enjoy course fee funding of up to **70%** of the course fee.
- Singaporean or Permanent Resident employees fully sponsored by SMEs can enjoy course fee funding support of up to **90%** of the course fee under the **Enhanced Training Support for Small & Medium Enterprises (SMEs)** scheme, subjected to eligibility criteria.
- Singaporeans aged 40 years and above can enjoy course fee funding of up to **90%** of the course fee under the **SkillsFuture Mid-career Enhanced Subsidy (MCES)**.
- Singaporeans aged 35 years and above with earnings not more than S\$2,000 per month can enjoy course fee funding for **95%** of the course fee under the **Workfare Training Support (WTS)** scheme.
- Singaporeans aged 25 years old and above are eligible for **SkillsFuture Credit** which can be used to offset course fees.

For more information about the course fee funding, please visit www.ssg.gov.sg