In this course, the participants are strongly encouraged to bring along their industrial problems to solve during the class.

Process industries have a very complex nature. With the more stringent safety and environmental regulations, more expensive resources (e.g. chemicals, energies, water), and more competitors, every industry is on constant pursuit of optimum operations.

This course will introduce the participants how to formulate optimization problems in our daily processes, to know which solution techniques to use, and to be able to use simple yet powerful approach/method/software to optimize our processes. The course covers steady-state optimization which is applied broadly ranging from molecular scale to unit operations (e.g. process design and engineering), plant sites (e.g. resources minimization), and until enterprise level (e.g. supply chain management).

Upon completion of this course, participants will be able to:

♦ To introduce the skill to develop mathematical models and to formulate optimization problems in industrial processes
♦ To demonstrate systematic problem solving involving Linear Programming, Integer Programming, and Non-Linear Programming, using analytical techniques and computational tools

1. Overview and introduction of optimization in daily life and industrial examples
2. Principles of models building and introduction to optimization
3. Linear Programming (LP)
4. Integer Programming (IP)
5. Non-Linear Programming (NLP)
6. Practical sessions on optimization of industrial processes + Case Studies

DATE: 28-30th October 2019
TIME: 9.00am - 5.00pm
VENUE: Level 16, Menara 2, Menara Kembar Bank Rakyat, Jalan Travers, 50470 Kuala Lumpur.
COURSE TRAINERS

Zulfan Adi Putra, PDEng is a senior lecturer at the Chemical Engineering Department of Universiti Teknologi PETRONAS, Malaysia. His areas of teaching and research are process synthesis and design, process modeling and simulation, process optimization, pinch analysis, and process integration. For almost a decade before being a lecturer, he was a process engineer and a consultant for various chemical companies in The Netherlands such as Trespa International, AkzoNobel, SABIC,Momentive, SC Johnson, DSM, and Hexion. He has been involved in different phases of chemical lifecycle such as research and development, feasibility studies, conceptual design, basic engineering, plant modeling and optimization, troubleshooting, as well as techno-economic analysis.

Mr. Shahrul Azman Zainal Abidin, (CEng FIChemE) is a Custodian Engineer in the area of Process Simulation and Optimization at PETRONAS Group Technical Solutions. He graduated as a Chemical Engineer from California State University, Long Beach, USA in 1988 and received an MSc Gas Engineering degree from University of Technology Malaysia in 1996. He is a Fellow of IChemE and Senior Member of AIChE with twenty four years of experience in project & engineering management and specializing in process modelling and optimization of oil & gas facilities. Apart from developing PETRONAS owned process simulation software, iCON, he has developed and patented an Integrated Separation System Sep-iSYS for Slug handling, Sand, Inlet Heating and 3 Phase Separation technologies that are installed particularly suited for upstream oil & gas production facilities.

WHO SHOULD ATTEND?

- Plant Engineers
- Process (Design) Engineers
- Executives, Managers
- Post-graduate Students and Researchers

COURSE FEES

* RM 2,250 (Professionals)
* 10% Discount (UTP Alumni, PETRONAS & Group Registration)
* 20% Discount (Student)

Course fee is not inclusive of 6% SST.
Group registration is applicable for 3 pax and above from the same company.
The fees include refreshments and the course materials.
A certificate of attendance will be issued upon successful completion of the course.

CONTACT DETAILS

Course Coordinator:
Dr. Zulfan Adi Putra
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Course Registration:
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Email: farhan.zulkefly@utp.edu.my

HOW TO APPLY

Email to cape@utp.edu.my for registration by 14th October 2019.
Seats are limited. A seat will be confirmed once the payment / LOU is received. Confirmed participants will be informed via email.

cape.utp.edu.my