Industrial Optimization -

A Hands On Training

Training Programme
by
Faculty of Engineering
Multimedia University

Overview

A key element of engineering, industry and management problems is to identify the best course of action (minimize the costs, find the optimal manpower allocation, choose the best production that optimize the use of resources, and so on). Since these problems often have too many alternative solutions, you will learn how optimization can help you identify the best option. A prominent feature of this training is the mixture of optimization theory and methods, case study and hands-on practice of mathematical optimization tools. What is exciting about this training is that you won't need advanced mathematical knowledge to follow the course and to benefit from it.

Objective

At the end of the session, participants will be able to:

1. Construct the optimization model for decision making

2. Use the spreadsheet tools to solve the optimization model

3. Interpret the results obtained

Target Audience

This training is aimed at industrial/managerial personnel who would like to employ a structured, mathematical approach to problem solving and decision making, identifying the best option among many possible alternatives.

Prerequisite

Basic experience with spreadsheets.

Training Methodology

Classroom, case studies, hands-on lab work and exercises.

Course Duration

1 day.

Content/Outline

Introduction to Optimization
Optimization Problem Formulation
Spreadsheets for Solving Optimization Problems
Sensitivity Analysis

Case Study
- Production and Inventory Control
- Manpower Planning

Hands on Session:
- Scheduling Problem
- Resource Allocation Problem
- Transportation Problem (if time allows)

Course Instructors

Dr. Tan Wooi Nee

Tan Wooi-Nee received a Sc. Comp. & Ed.(Hons), M.Sc in Mathematics and a Ph.D. degree in Mathematics from the Technology University of Malaysia. Her research interests include mathematical modelling of dynamical systems, optimization in applied engineering problems and image processing. She is currently attached with the Faculty of Engineering in Multimedia University as a lecturer. She has had experiences in developing the optimization model related to smart grid, demand side management and telecommunication network.

Administrative Details

Programme Logistics

Duration: 1 day.

Dates, registration deadline and registration form:
Please refer to: https://www.mmu.edu.my/foe/short-courses/

Your Investment

Condition		Price per Pax
Regular Fee	MMU Students / Alumni	RM350
	Public	RM600
	Public (Group >5 pax)	RM500
	IEM/IEEE Members	RM500
Early Bird Fee	MMU Students / Alumni	RM250
	Public	RM500
	Public (Group >5 pax)	N/A
	IEM/IEEE Members	RM400

Method of Payment

Please refer to the next page.

Type of Payment	Method	Details
Local Transaction / Payment within Malaysia	Online Payment with JomPay	- To get started, login to any preferred internet banking. - Look for JomPay to begin the payment process. - Enter Ref 1 & Ref 2. **Biller Code : 22202** **Ref-1 :** \<Participant IC/Passport\> **Ref-2 :** *Event Name** JomPAY online at Internet and Mobile Banking with your Current, Savings or Credit Card account ** Ref. 2: FOEIndustrial*
		- To get started, go to **MMU website (https://www.mmu.edu.my/)** > **Admission** > **Financial Info** > **Payment Channel > Non Student** ; • E-Payment To begin the payment process, please click Student or Non Students VISA mastercard ◇FPX Student | Non-Student or scan the QR code below to begin the process: SCAN ME - Choose Category: **Public Training** - Workshop Name - Choose Your Participant Type: ✓ STUDEN (MMU, IEEE, IEM, Other Higher Learning Institution) ✓ PUBLIC ✓ GROUP (Group > 5 Pax) ✓ IEEE/M (IEEE/IEM Members)

Type of Payment	Method	Details
International Payment / Payment outside Malaysia	Online payment with Flywire **flywire**	• To get started, go to mmulanding.flywire.com; or scan the QR code to begin the payment process: **SCAN ME** • Choose Conference for Non-students related

Note:

Please submit the proof of payment to organizer for clearance updating purposes within 2 working days.

Refund and Cancellation

Any refunds will be processed in 60 days. Should there be any cancellation, it may be due to the organizer not getting the minimum participants or the participant fail to attend the workshop due to unavoidable reason.

Disclaimer

Faculty of Engineering, Multimedia University reserves the right to change the instructors, date and to vary/cancel the programme should unavoidable circumstances arise. All effort will be taken to inform participants of the changes. Upon submission of the registration form, you are deemed to have read and accepted the terms.

Enquiries

Dr. Zubaida Yusoff: zubaida@mmu.edu.my
Ms. Sherry Dalilla Abd. Rahim: dalilla.rahim@mmu.edu.my