



Industrial Optimization - A Hands On Training

Training Programme
by
Faculty of Engineering
Multimedia University

10 – 11 December 2020
Faculty of Engineering

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

2 days.

Content/Outline

Day 1:

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

Day 2:

- 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: 2 days

Date: 10 - 11 December 2020

Venue: Faculty of Engineering, Multimedia University

Registration Deadline: 26 November 2020

Your Investment

Condition		Price per Pax
Regular Fee (After 5 Nov)	MMU Students / Alumni	RM700
	Public	RM1,200
	Public (Group >5 pax)	RM1,000
Early Bird Fee (Before 5 Nov)	MMU Students / Alumni	RM500
	Public	RM1,000
	Public (Group >5 pax)	N/A

Method of Payment

Please make payment via bank transfer only. Account details is as below:

Account name: Unitele Multimedia Sdn Bhd

Account number: 86-0090180-2

Bank: CIMB Islamic Bank Berhad

Payment must be made by the registration deadline.

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

Dr. Katrina D. Dambul: katrina@mmu.edu.my

Registration Form

To register, please visit this link: <https://forms.gle/HtANvoN3Rz1S1hyQ9>