

DATA FITTING – A Mathematical Modeling Approach with EXCEL

DATE: 21 MARCH (TUESDAY), VENUE: MULTI PURPOSE ROOM (BSG), BLOCK B, SQS

REGISTRATION DEADLINE: 16 MARCH 2017 (THURSDAY)

REGISTRATION FEE

Student	- RM 100
Govt. Staff	- RM 150
Others	- RM 200

REGISTRATION METHOD

1. Online registration at <http://bit.ly/praclab2017>
2. (For payment using bank transfer)
3. Submit registration form via fax/e-mail (COMPULSORY for payment using vote transfer)

PAYMENT METHOD

1. ONLINE BANKING
2. VOTE TRANSFER

CANCELLATION POLICY

All cancellations should be communicated in writing to SQS Statistical Consulting by email: scsq@uum.edu.my or by fax: **604-9286309**.

- Cancellations made before or on 16 March 2017: **no charge**.
- Cancellations made from 17 March to 20 March 2017: **50%** of the fees will **NOT** be refunded.
- Cancellations on 21 March 2017: the full fees will be **charged (NO REFUND)**.

OVERVIEW

This workshop will present several criteria for fitting curves to a collection of data points. Each criterion suggests a method for selecting the best curve from a given family so that according to the criterion the curve most accurately represents the data. The best curve can be used for data analysis. Later the participants will be guided through the steps needed to do curve fitting using Microsoft Excel.

GOALS

1. To learn how to create problems from data.
2. To develop appropriate models for dataset.
3. To choose the best model using goodness-fit test.
4. To analyse data and write good and meaningful report.

ABOUT THE TRAINER

Dr. Rahela Abdul Rahim obtained her doctoral degree in Information Technology (Maths) from Universiti Utara Malaysia (UUM). Currently, she is an associate professor at School of Quantitative Science, UUM. Among courses taught are Mathematical Modeling, Decision Analysis, Linear Algebra and Calculus. Her primary research interests are in Queuing Theory, Markov Chain and Mathematical Modeling.



TENTATIVE OF WORKSHOP

TIME	PROGRAMME
8:30 am — 8:45 am	Registration
8:45 am — 10:45 am	Introduction to Mathematical Modeling ⇒ Analytic Methods of Model Fitting - Chebyshev Approximation (A linear programming approach to model fitting)
10:45 am — 11:00 am	Break
11:00 am — 1:00 pm	Minimizing the sum of Absolute Deviation ⇒ Least Square Criterion - Fitting a straight line - Fitting a power curve ⇒ Transform Least Square Fit
1:00 pm — 2:30 pm	Break (Lunch not provided)
2:30 pm — 3:15 pm	Least Square Using Excel • Linear Least Square Fitting • Non-linear Least Square Fitting With Data Analysis Function & Linest Function
3:30 pm — 4:30 pm	Hands-on with Excel

CONTACT US:

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