

Numerical Computation and Visualization with SCILAB



A 2-Day Course in Understanding SCILAB

ABOUT THE COURSE

SCILAB is an open source scientific software package for numerical computations providing a powerful open computing environment for engineering and scientific applications that similar to the commercial product MATLAB. This workshop provides a preliminary approach on the key features and capabilities of SCILAB to participants so that they can use SCILAB as the ultimate technical computing tool for their teaching and research.

This is a 2 full days foundation course to provide participants with a platform to learn Scilab quickly and successfully. Therefore, the participants are equipped with the knowledge of Scilab to address and solve real engineering & science issues, similar to the commercial software MATLAB.

WHO SHOULD ATTEND

Researchers, Lecturers, Scientists, Engineers and Managers that are not familiar but yet interested in using SCILAB for their teaching and R&D work. This hands-on workshop with case studies is designed mainly for beginners and users who are interested in learning a technical computing software that is similar to of MATLAB®. We encourage participants to bring own computer/laptop for own use.

COURSE OUTLINE:

DAY 1

Getting Started with Scilab

- What is Scilab and its benefits
- Starting Scilab Interface
- Scilab Work Directory
- Important Menus within Scilab
- Getting and Using Help

Basic Operations and Input/Output with Scilab

- Expressions in Scilab
- General Objects in Scilab
- Input/Output in Scilab environment
- Variable Handling and Management
- Command History & General Commands
- Case Study

Working with Arrays

- Creating and Manipulating Arrays
- Array Accessing and Addressing
- Arithmetic Operations with Arrays
- Systems of Linear Equations
- Built-in Scilab Functions for Analyzing Arrays
- Case Study

DAY 2

Basic Programming

- SciPad Editor
- Creating Script File (*.sce)
- Creating Function File (*.sci)
- Comparison between Script Files & Function Files
- Online / Inline Function
- Handling Strings in Programming
- Scilab Program Generation
- Case Study

Plotting and Visualization

- 2-D Plotting
- Labeling and Annotating Graphs
- Types of 2-D Plots
- Function Plotting
- Surface Plot (3-D)
- Scilab Demonstrations
- Case Study



REGISTRATION FORM

Fax to 03-89216745 Email to: rabiahivi@ukm.edu.my

Name: Dr/Mr/Mrs/Ms _____

(Please provide full name. A Certificate of Participation will be issued based on this name)

Job Designation: _____

Department: _____

Organization/Company: _____

Mailing Address: _____

Postcode: _____

Email: _____ Mobile No: _____

Office Telephone: _____ Office Fax: _____

Organized by:

TERMS & CONDITIONS Upon submission of the Registration Form, an Invoice with bank details will be issued to request for payment. Course fees must be prepaid by depositing fee into our bank account (CIMB: 1215-0001187-10-1) or by issuance of a Local Order or Guarantee Letter by your Organization. All cheques must be made payable to BENDAHARI UKM and crossed 'A/C Payee Only'. A confirmation notification with details of the course will be issued to all participants at a nearer date. You will be eligible for a full refund if a notice of cancellation is sent 4 weeks prior to the commencement of the course to the Organizer. For cancellation of less than 4 weeks, no refund will be made; however a substitute is permitted. Confirmed participant who fail to attend the course is liable to pay the course fee in FULL. While changes in course date, venue, time, trainers and fees can occur from time to time, the Organizer reserves the right to reschedule / cancel the course and/or amend any of information in this brochure at the Organizer's absolute discretion. In any circumstances, the Organizer's liability is limited only to the refund of paid course fee. Course fee is inclusive of participation at the course and refreshments.

Course Title:

Numerical Computation & Visualisation with SCILAB –2 Days

Course Date: 19 – 20 May 2015

Course Fee: RM800 per participant
10% discount for registration of **three (3)** or more participant from the same company.

Method of Payment: Local Order No: _____
Guarantee Letter
Cheque No: _____ / Cash Deposit
* Please email documents for record purposes

I hereby confirm my registration fee of RM _____ and declare that I have read and understood the above terms and conditions.

SIGN HERE

Stamp Here

Authorized Signature
Name:

Organization Stamp
Date: