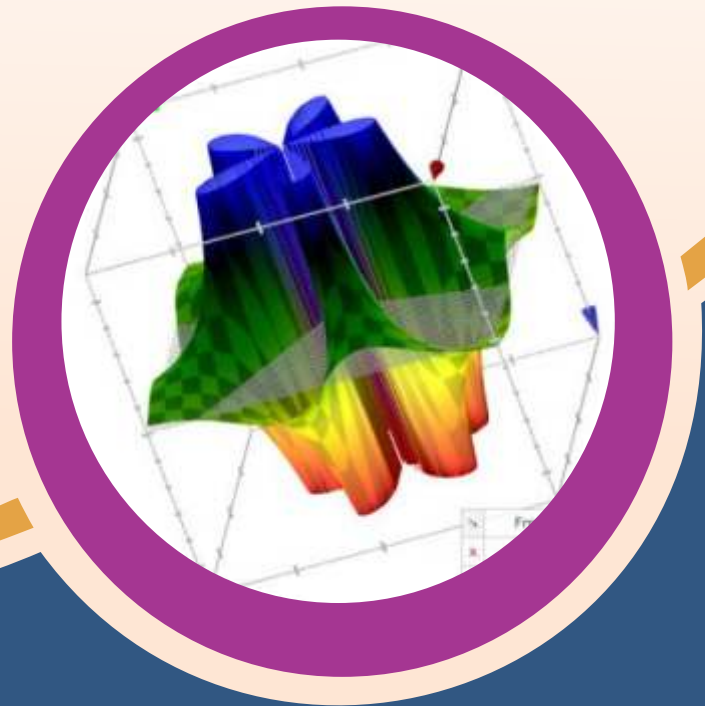




DEPARTMENT OF MATHEMATICS & STATISTICS

Faculty of Engineering and Applied Sciences



Venue:

Riphah International University
I-14 Campus, Adjacent to Hajj Complex,
Islamabad

Please send your nominations through email,
SMS or telephone call stating Full Name,
Cell Number, e-mail ID, Name of
Organization/University, Designation
Or Get registered on-line:
basicsciences.riphah.edu.pk

Address for Correspondence

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Workshop on MAPLE Programming and its Applications in Computing

From July 28, 2017 to July 30, 2017

MAPLE works just like a high-level language and also provides an interactive environment for numerical computing. The MAPLE tools and built-in math functions enable the users to explore multiple approaches and reach a solution faster than with spread sheets or traditional programming languages.

The workshop is designed to provide basic training of MAPLE programming. It will be useful especially to those participants who are beginner with MAPLE. The workshop consists of Four Modules and will cover the following topics.

Module-I: Introduction and Worksheet Mode

Module-II: Basic Components and Problem Solving in Maple

Module-III: Maple Programming

Module-IV: Plotting and Animation

Who can participate?

- University Faculty Members
- MS/M.Phil and PhD Students
- Persons with knowledge in Scientific Computing and aptitude towards programming.

Workshop Dates:

July 28, 2017 (2:30 pm to 6:30 pm)

July 29, 2017 (3:00 pm to 6:00 pm)

July 30, 2017 (9:00 am to 12:00 noon)
(2:30 pm to 5:30 pm)

Seats

Limited Seats
(First come, first serve bases)

Workshop Fee

Rs: 1500 per person
Special Discount for Students: Rs: 1000/-

Mode of Payment

Cheque/Draft in favour of
Riphah International University,
Islamabad or in Cash at Registration Desk

Benefits to Participants

- Training material on CD, Writing Pad, Ball Point, Clear Bag
- Refreshments
- Certificates

Note: The participants from out stations have to arrange their Boarding/Lodging themselves

Schedule of Lectures

Sr.No.	Topic	Date	Time
01	Registration, Inaugural Ceremony MATLAB Module-I	July 28,2017 Friday	02:30 pm-03:30pm 03:00 pm-06:30pm
02	MATLAB Module -II	July 29,2017 Saturday	03:00 pm-06:00pm
03	MATLAB Module -III Lunch & Prayer MATLAB Module -IV Closing Ceremony, Distribution of Certificates	July 30,2017 Sunday	09:00am -12:00pm 12:00pm-02:00pm 02:00pm-04:30pm 04:30pm-05:30pm

Contents /Course Layout

PRE-REQUISITE

- Basic familiarity with programming
- Basic linear algebra, Differential equations, etc.

Module-I

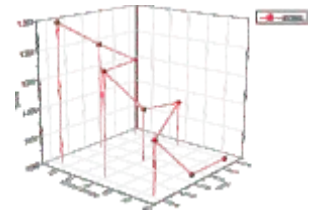
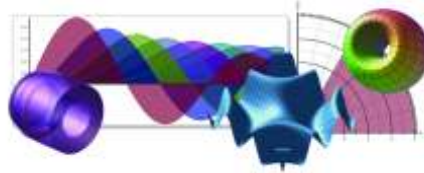
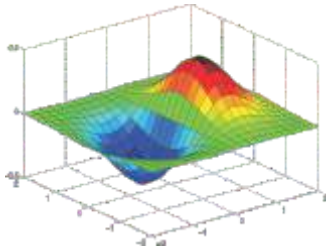
Introduction and Worksheet Mode

- Introduction to Maple
- Input Prompt
 - Commands
 - Palettes
 - Content Menus
- Assistants and Tutors
- Task Templates
- Symbolic and Numeric Computation

Module-II

Basic Components and Problem Solving in Maple

- Integer Operations
- Solving Equations
- Units, Scientific Constants and Uncertainty
- Restricting the Domain
- Problem Solving in Maple
 - Algebra
 - Linear Algebra
 - Calculus
 - Optimization
- Statistics



Module-III

Maple Programming

- **Maple Expressions**
 - Creating and Using Data Structures
 - Working with Maple Expressions
- **Maple Programming**
 - Flow Control
 - Iterative Commands
 - Procedures
 - Programming in Documents

Module-IV

Plotting and Animation

- Creating Plots
- Customizing Plots
- Analyzing Plots
- Representing Data
- Creating Animations
- Playing Animations
- Customizing Animations
- Exporting
- Code for Color Plates

Registration

Registration Last Date:

July 25, 2017

Venue

**Riphah International University, I-14 Campus,
Adjacent to Hajj Complex, Islamabad**

Please send your nominations through email, SMS or telephone call stating Full Name, Cell Number, e-mail ID, Name of Organization/University, Designation Or Get registered on-line: basicsciences.riphah.edu.pk

For more information please contact

Organizing Committee:

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