[Value Added Course on MATLAB]

Course Offered
By
Department of Mathematics :: Periyar University
Salem-636011

Objective:

This course provides basic fundamentals on MATLAB, primarily for numerical computing. To learn the characteristics of script files, functions and function files, two-dimensional plots and three-dimensional plots. To enhance the programming skills with the help of MATLAB and its features which allow to learn and apply specialized technologies.

Course Covered

- Introduction to MATLAB
- Basic commands in MATLAB
- Basic mathematical commands in MATLAB
- Built-in-Math functions
- Matrix Operations
- Programming scripts
- Graphics Fundamentals
- Help and documentations

MATLAB

Course Code 19UPMATVA01	Value Added Course MATLAB	Course Duration : 30 Hrs

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Syllabus:

Starting with Matlab - Creating arrays - Mathematical operations with arrays. Script files - Functions and function files. Two-dimensional plots - Three-dimensional plots. Programming in MATLAB. Polynomials, Curve fitting and interpolation - Applications in numerical analysis.

Text Book:

"MATLAB An Introduction with Application" by A. Gilat, John Wiley & Sons, Singapore, 2004.

Course Outcome:

After the successful of the course, students will be able to

CO1	Learning the basics windows in MATLAB and mathematical operations with arrays	K1
CO2	Creating scripts e functions file in MATLAB	K5
CO3	Understanding the various type of 2D&3D plots and animations	K2
CO4	Study the various type of loops in MATLAB	K3
CO5	Applications to numerical analysis like solving algebraic equation, curve fitting and interpolation	K5

Mapping:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1					✓	✓
CO2					✓	✓
CO3					✓	✓
CO4					✓	✓
CO5	✓	✓	✓		✓	✓

Dr. M. Sambath
Assistant Professor
Department of Mathematics
Periyar University
Salem – 636 011.

Dr. C. SELVARAJ
Professor and Head
Department of Mathematics
Periyar University
Salem - 636 011, Tamil Nadu.