



Late Shri. Vishnu Waman Thakur Charitable Trust's

VIVA Institute of Technology

Approved by AICTE, New Delhi, DTE, Government of Maharashtra, Affiliated to University of Mumbai
At- Shirgaon, Post-Virar (E.), Tal-Vasai, Dist-Palghar – 401 305.

Tel.: 777 000 2544 • Website : www.viva-technology.org

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CIVIL ENGINEERING DEPARTMENT

Name of the Course: MATLAB

AY: 2018-19

Course Duration: 30 hrs

Resource person: Ms. Chitra Takle

Schedule

Date	Pre-Lunch (9am-12pm)	Post-Lunch (1pm-4pm)
02/07/2018	Session 1	Hands on
03/07/2018	Session 2	Hands on
04/07/2018	Session 3	Hands on
05/07/2018	Session 4	Hands on
06/07/2018	Session 5	Hands on

Day 01: Introduction to MATLAB

Matlab basics – variables, numbers, operators, expressions, input & output

Vectors, Arrays - Matrices

Day 02: MATLAB functions

Built in functions

User defined functions

Day 03: Graphics with MATLAB

Files and file management – import / export

Basic 2D, 3D plots

Day 04: Programming with MATLAB

Conditional statements, Loops



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MATLAB Programs- Programming and debugging

Applications of MATLAB programming

Day 05: Mathematical Computing with MATLAB

Algebraic equations

Basic Symbolic Calculus and Differential equations

Numerical Techniques and Transforms

Course Objectives:

1. To learn features of MATLAB as a programming tool
2. To promote new teaching model that will help to develop programming skills and technique to solve mathematical problems
3. To understand MATLAB graphic feature and its applications
4. To use MATLAB as a simulation tool

Course outcomes:

1. Students will be able to understand various tools used in MATLAB
2. Students will be able to understand various models for developing programming skills
3. Students will be able to understand graphic feature & applications
4. Students will be able to operate simulation tools