BHARATI VIDYAPEETH'S COLLEGE OF ENGINEERING, LAVALE, PUNE-412115

BHARATI ELECTRONICS & TELE-COMMUNICATION ASSOCIATION

MATLAB WORKSHOP- "FUNDAMENTAL OF MATLAB"
REPORT

OVERVIEW

Matlab workshop mainly focuses on the student eager to learn about Matrix Laboratory which is a high-level language and interactive environment for numerical computation, visualization, and programming. Using MATLAB, a student can analyze data, develop algorithms, and create models and applications. The language, tools and built-in math functions provide to explore multiple approaches and reaches to solution faster than with spreadsheets or traditional programming languages. MATLAB can be used for a range of applications including signal processing and communications, image and video processing, control systems, test and measurement, computational finance, and computational biology.

The duration of this workshop was two consecutive days with five hours session each day, in a total of ten hours properly divided into theory and hand on practical sessions.

18th Jan, 2016

Day 1 (Session 1 - 10:00 AM to 12:30 PM)

- Introduction to MATLAB
- What is MATLAB?
- The dominance of MATLAB over other languages
- Power of Matrix computations
- The application of MATLAB in various fields of engineering MATLAB Environment

Day 1 (session 2 - 1:00 PM to 4:00 PM)

- basic matlab commands
- Arithmetic Functions in MATLAB
- Matrixes and Vectors
- Creating Matrixes and Vectors
- Matrix Operation
- Array Operation

Note:
- 12:30 PM to 1:00 PM BREAK
- 4:00 PM to 4:30 PM revision of the topics

19th Jan, 2016

Day 2 (Session 1 - 10:00 AM to 12:30 PM)

- practice and revision on arithmetic, relational and logical operation
- introduction to basic programming structure

Day 2 (session 2 - 1:00 PM to 4:00 PM)

- Introduction to Image Processing
- What is Image Data?
- Image Processing Toolbox
- How to Display Image
- Image Operations
- Introduction to Graphical User Interface
- Application and Demos

Note:
- 12:30 PM to 1:00 PM BREAK
- 4:00 PM to 4:30 PM revision & certificate distribution