



# National Institute of Electronics and Information Technology, Patna

**Name of Course:** Certificate course in DSP using MATLAB

**Objective:** It is designed to give students a basic understanding of MATLAB, including popular toolboxes. The course consists of interactive lectures and sample MATLAB problems given as assignments and discussed in class. No prior programming experience or knowledge of MATLAB is assumed.

**Duration:** 1 Month

**Batch Size:** 30

**Eligibility:** Pursuing B.E./ B. Tech./ Diploma/ BSc. In Electrical/ Electronics.

## **Course Syllabus:**

<b>Topic</b>	<b>Sub-topics</b>
Introduction to MATLAB Software	Getting MATLAB to RUN, Programming, The Command Prompt, Workspace, Simple Mathematical Expressions
Basic Mathematics Using MATLAB	Data types, Matrix, Differentiation, Integration
Logic Operations Using MATLAB	Conditional Operators, For loop, While loop, While loop
Graph	Plotting of linear variables, Plotting of signals
Image Processing	Image Processing Toolbox, Type of Image, Image Resizing
MALTLAB Simulink	Mini Project
Implement DSP algorithms using MATLAB.	To Learn about various Digital signal processing algorithm with Example.

Note: Students should have PC/ Laptop/ Smart Phone with Internet Connection for the Online Class.

HOW TO APPLY: Interested candidate may apply online through <http://14.139.202.67/registration>