Syllabus

Module 1: Defining Variables Functions Matrices and Vectors Strings. Input and Output statements -Script files Arrays in Matlab Addressing Arrays Dynamic Array Cell Array Structure Array File input and output Opening & Closing Writing & Reading data from files. Relational and logical operators Control statements if-end, if-else end, elseif, switch case, for loop, while loop, matlab functions & Variables

Module 2: Adding Title, Labels, Grid Lines and Scaling on the Graph, Adding Title, Labels, Grid Lines and Scaling on the Graph, Drawing Multiple Functions on the Same Graph, Setting Colors on Graph- Graphics- Drawing Bar Charts, Drawing Contours, Three Dimensional Plots

Module 3: Image Processing- Get Images into MATLAB, Grayscale and Color Images, Contrast Adjustment, Work with Images Interactively, Segmentation, Threshold Intensity Values, Work with Binary Images Improve Segmentation, Filter Noise, Background Subtraction

Module 4: Different types of machine learning models- Clustering, Classification, and Regression