The following set of MATLAB notes is designed to accompany UCIrvine's Mechanical and Aerospace Engineering course MAE10 – Introduction to Engineering Computations. However, because the notes are divided based on individual MATLAB topics, they can be used as a reference for any student seeking help with a specific command, function, etc.

Although each document focuses on a specific topic and is designed to be standalone, some topics require knowledge of commands and syntax that it is assumed the reader is already familiar with (and are covered in earlier documents). Thus, depending on the reader's familiarity with MATLAB, it may be necessary to read more than one document to fully understand a given topic.

For the MATLAB beginner, the notes are best read in the order they are listed below. The notes begin with an introduction to MATLAB are written for students with no prior programming experience or knowledge of MATLAB.

Given below is a complete list of all files, the contents of each file, and the page numbers for each topic included within a given document. Each document covers the syntax required to use a given command, describes typical applications, covers examples, and provides detailed explanations on sample scripts and the resulting output. Most topics are concluded with a summary of key points for students to remember, including warning about common mistakes that can result in errors or unexpected behavior. Good programming practices and extensions to real-life problems are also discussed where appropriate.

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MATLAB_Introduction

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Numerical_Character_Arrays

Relational_Logical_Operators

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LinePlots_in_2D