

ACM MATLAB Course Syllabus

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1. Variables, Scripts and Operations

- a. Getting Started
- b. Scripts
- c. Making Variables
- d. Manipulating Variables
- e. Basic Plotting

2. Visualization and Programming

- a. Functions
- b. Flow Control
- c. Line Plots
- d. Image/Surface Plots
- e. Vectorization

3. Solving Equations, Fitting

- a. Linear Algebra
- b. Polynomials
- c. Optimization
- d. Differentiation/Integration
- e. Differential Equations

4. Images, Animations, Advanced Methods

- a. Probability and Statistics
- b. Data Structures
- c. Images and Animation

5. Extras

- a. Symbolic Math
- b. Simulink
- c. File I/O
- d. Graphical User Interfaces