

# Application Development with MATLAB Jumpstart Service

Application Development with MATLAB® Jumpstart Service is a three-day engagement that builds expertise in developing applications with MATLAB. It is intended for scientists and engineers who are already familiar with MATLAB. By the end of the engagement, you will be able to create standalone, interactive applications using object-oriented programming, user-interface design techniques, data types, and memory management.

The consultants will provide sample code and supporting electronic files.

## Service Topics

### Programming fundamentals and best practices

- Object-oriented design concepts: MATLAB classes, comparison with other languages, data encapsulation, data manipulation in classes
- Nested functions, Handle Graphics® for user interfaces, incorporating Java™ UI controls
- Source code management, modular design, test-driven development

### Advanced programming skills

- GUI development approaches: capturing analysis workflow
- Review of GUI development methodologies in MATLAB, GUI examples using GUIDE, nested functions, and new object-oriented programming capabilities
- Application deployment, producing a standalone executable version of the application using the MATLAB Compiler

## Service Requirements

**Prerequisites:** MATLAB Fundamentals (ML01), MATLAB for Data Processing and Visualization (ML02), MATLAB Programming Techniques (ML03), and MATLAB for Building Graphical User Interfaces (ML04) training courses; familiarity with object-oriented principles and notation; and experience programming in an object-oriented language required

**Required equipment and software:** A laptop computer, with the appropriate software installed, for each attendee

**Duration:** Three days

**Location:** Onsite or at a MathWorks training facility

**Maximum number of attendees:** Five

## Ordering Options

You can order Application Development with MATLAB Jumpstart Service when you purchase the software or at a later date. Contact your MathWorks sales representative for details.

### Learn More

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