

# SimPowerSystems Jumpstart Service

SimPowerSystems™ Jumpstart Service is a two-day engagement that enables you to use SimPowerSystems to understand complex electrical power system behavior. It is intended for engineers working in control algorithm development or system-level design and integration. By the end of the engagement, you will be able to use SimPowerSystems with Simulink® to model and simulate the generation, transmission, distribution, and consumption of electrical power.

The consultants will provide sample models, code, and supporting electronic files.

## Service Topics

### Building AC and DC networks

- Using the SimPowerSystems library
- Connecting components

### Using SimPowerSystems with Simulink

- Analyzing the network
- Using the PowerGUI
- Controlling the SimPowerSystems network using Simulink and Embedded MATLAB™ code

### Understanding integration methods

- Applying continuous-time, discrete-time, and phasor simulation options

### Working with nonlinear loads and power electronics

- Developing power electronic interfaces
- Modeling switching algorithms
- Applying harmonic analysis

### Creating customized components

- Developing components in Simulink
- Linking Simulink components to SimPowerSystems
- Integrating multidomain physics

## Service Requirements

**Prerequisites:** Background in electrical power systems required; basic knowledge of Simulink recommended

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

**Duration:** Two days

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

**Maximum number of attendees:** Five

## Ordering Options

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

## Learn More

Consulting Services  
[www.mathworks.com/jumpstart](http://www.mathworks.com/jumpstart)

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