



# Geometry, CAD and Meshing



SciEngineer's training courses are designed to help organizations and individuals close skills gaps, keep up-to-date with the industry-accepted best practices and achieve the greatest value from MathWorks® and COMSOL® Products.

# Geometry, CAD and Meshing

As a computational modeling specialist, you may want to produce models based on highly complex geometries or CAD files that you receive from your coworkers or customers. In this course, you will learn how to **create advanced geometries and prepare CAD files for successful modeling in the COMSOL Multiphysics® software.**

After a detailed introduction to geometry entities and operations, we will cover advanced import and defeaturing techniques as well as virtual operations that allow you to work with CAD files of high complexity.

During the second part of the training course, you will learn how efficient strategies for unstructured and structured meshing can help you to produce accurate models and how you can parameterize and optimize meshes for a variety of physics. The course uses a combination of lecture on theory and practice as well as hands-on exercises.

**The Geometry and Meshing Training course will be held in English.**

# Suggested Background

The Geometry and Meshing course assumes some familiarity with the basic concepts of COMSOL Multiphysics®. We recommend that those new to COMSOL Multiphysics® take the COMSOL Multiphysics® Intensive Training course prior to attending this class.

# Topics Include

- Introduction to COMSOL Multiphysics®
- Geometrical entities and operations
- CAD import and defeaturing
- Virtual operations
- LiveLink™ for CAD interfaces
- Basic and advanced meshing strategies
- Unstructured and structured meshes
- Mesh quality and visualization
- Mesh import



**Expand your  
knowledge**

