

## Learning Module

# Modeling Contact with Abaqus/Standard

---

Participants are given a brief overview of the contact formulation and contact logic used in Abaqus/Standard. The hands-on workshops provide ample opportunity to use the concepts developed in the lectures and to learn how to postprocess the results of a contact analysis.

### Objectives

Upon completion of this course you will be able to:

- Define general contact and contact pairs.
- Define appropriate surfaces (rigid or deformable).
- Model frictional contact.
- Model large sliding between deformable bodies.
- Resolve overclosures in interference fit problems.

### Knowledge Prerequisites

This course is recommended for engineers with experience using Abaqus/Standard.

### Language(s) for selected release

English

### Brands

Simulia

### Available Releases

SIMULIA 2021, SIMULIA 2020, SIMULIA 2019, SIMULIA 2018, SIMULIA 2017, SIMULIA 2016, SIMULIA V6.14, SIMULIA V6.13, SIMULIA V6.12

### Duration

16 hours

### Discipline

Advanced Abaqus

## Contents

Overview - Modeling Contact with Abaqus-Standard

1 - Introduction

2 - Contact Workflow

3 - Surface Based Contact

4 - Contact Logic and Diagnostics Tools

5 - Contact Properties

6 - Interference Fits

7 - Additional Features

8 - Modeling Tips

A1 - Node-to-Surface Formulation

A2 - Contact Elements

A3 - Dynamic Contact using Implicit Integration