

Learning Module

Introduction to Fe-safe

This seminar covers basic usage of the Abaqus Scripting Interface and Python's syntax. It includes numerous hands-on exercises for the student to learn to automate tasks that are common to most analysts.

Objectives

Upon completion of this course you will be able to:

- Set up and run various fatigue analyses using fesafe.
- Set up models and import models into fe-safe.
- Select a material for fatigue analysis.
- Set up your loadings.
- Run various analyses in fe-safe.

Knowledge Prerequisites

None

Language(s) for selected release

English

Brands

Simulia

Available Releases

SIMULIA 2021, SIMULIA 2020, SIMULIA 2019,
SIMULIA 2018, SIMULIA 2017, SIMULIA 2016

Duration

16 hours

Discipline

Fe-safe

Contents

Overview - Introduction to fe-safe

1 - Overview of Fatigue and fe-safe

2 - Using FEA Solutions in fe-safe

3 - Using Group Parameters in fe-safe

4 - Scale-and-Combine Loading

5 - Dataset Sequence Loading

6 - Advanced Loading Methods

7 - Multiple Block Loading

8 - Material Properties for Fatigue

9 - Finite Life Algorithms

10 - Factor of Strength Calculations

11 - fe-safe Diagnostic Techniques

12 - Infinite Life Algorithms

A1 - fe-safe GUI Reference

A2 - Fatigue Algorithms Reference

A3 - High Temperature Fatigue Analysis in fe-safe

A4 - Plasticity and Fatigue

A5 - Theory of Critical Distances