

Learning Module

XFlow Advanced

This course introduces the advanced features and scripting capabilities of XFlow.

Objectives

Upon completion of this course you will be able to:

- Understand the Lattice-Boltzmann Method used in XFlow
- Use the different features available for all XFlow solvers: Single Phase, Free surface and Multiphase solvers
- Set up internal and external simulations using all the solvers of XFlow
- Set up thermal and acoustics analysis in XFlow
- Set up simulations in XFlow with different moving parts behaviors
- Handle all the postprocessing tools of XFlow
- Use advanced features and scripting capabilities of XFlow.

Knowledge Prerequisites

Before taking this course the completion of the following prerequisite courses (or equivalent knowledge) is required: - XFlow Introduction - XFlow Intermediate.

Contents

Overview - Xflow Advanced
Lattice-Boltzmann Method
Discrete Phase Model (DPM)
Turbulence Intensity
Scalar Transport
Porous Media
Acoustics Analysis
Supersonic Flow
XFlow-Abaqus Co-simulation
Advanced Computation

Brands

Simulia

Available Releases

SIMULIA 2021, SIMULIA 2020, SIMULIA 2019, SIMULIA 2018

Duration

16 hours

Discipline

XFlow

Language(s) for selected release

English