



## DIGITAL SOLUTIONS

# SIMULATION-DRIVEN DESIGN AND SHAPE OPTIMIZATION WITH CAESES - INTRODUCTORY

Course code: SE-31

Duration: 2 days

Prerequisite:

Good knowledge of CAE simulation is preferred as well as basic knowledge of CAD modelling.

No previous experience using CAESES is required.

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### DESCRIPTION

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The course gives you an introductory overview of the major functions and features found within CAESES. You will learn how to create parametric models which are ready to be used in the automation process. A general introduction to the software connector will be given in order to provide guidelines on how to couple CAESES with your simulation software of choice. Optimization algorithms, DoE, and post-processing will also be touched upon.

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### LEARNING OBJECTIVES

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Learn the basic principles of using CAESES for automated shape optimization studies. Typical industrial applications include reducing the resistance of your hull-form, maximizing the efficiency of your pump, lowering the pressure losses through your duct or manifold, or improving the sea-keeping behavior of your offshore platform.

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### TARGET GROUP

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CAE engineers who have a solid background in simulation (e.g. CFD, FEA, seakeeping) and are using these codes to drive their mechanical or hydrodynamic designs.