

## Training at PDSVISION

*Training is one of the best investments a company can make; it is not a huge expense, it creates a better quality of work, it creates efficiency and it is fun! PDSVISION is proud to be a Certified Platinum Training Provider of PTC courses.*

*Whether you are a first-time or an experienced user we offer suitable training for your needs. Greater knowledge contributes to increased efficiency and higher quality of work.*

# Introduction to Creo Simulate

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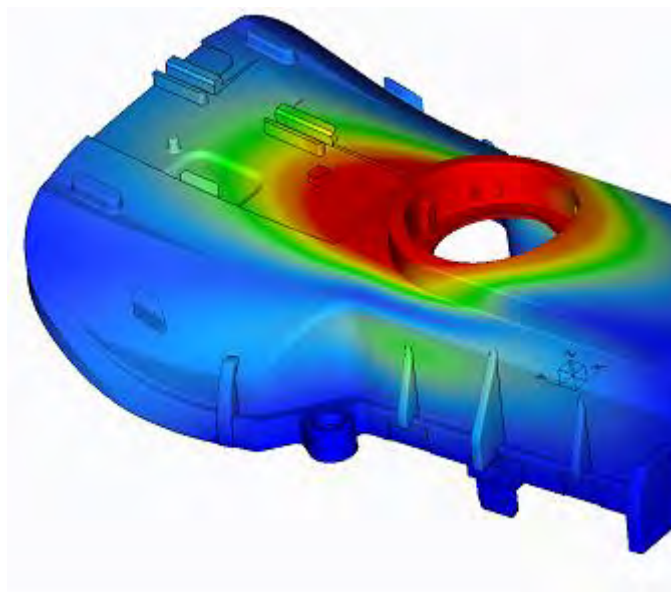
**Course Length: 3 Days**

**Prerequisites:** Introduction to Creo Parametric

**Audience:** This course is intended for design engineers and mechanical designers. People in related roles will also benefit from taking this course.

## Course Description:

This course is designed for new users who want to test, validate, and optimize product designs with the Creo Simulate module. Simulate enables you to simulate structural and thermal loads on product designs. In this course, you will complete comprehensive, hands-on lab exercises that simulate realistic analysis and design optimization activities. You will also be introduced to advanced topics such as dynamic analyses, combined mechanical and thermal analyses, and Optimization Studies. After completing the course, you will be able to run engineering analyses and optimizations on your product design models.



## Course Content:

This course will teach you the Simulate analysis process, as well as about materials and their properties. It will also cover how to use and understand Simulate idealization, structural loads, structural constraints and convergence. You will learn how to explore and analyze assemblies with Simulate, how to run structural analyses as well as optimization studies and sensitivity studies.

### Day 1

- Module 1 – Introduction to Creo Simulate
- Module 2 – Theoretical Foundations
- Module 3 – Simulation Models
- Module 4 – Materials and Material Properties
- Module 5 – Structural Constraints
- Dogbone Challenge

### Day 2

- Module 6 - Structural Loads
- Module 9 - Structural Analysis
- (Module 7 - Meshing)
- (Module 8 - Convergence)
- (Module 10 - Introduction to Results Evaluation)
- Module 14 - Analyzing Assemblies
- Module 15 - Shells
- Module 16 - Idealizations
- Module 11 - Refining the Design (optimization) if needed
- Module 12 - Basic Model Debugging, during the way
- Module 13 - Singularities

### Day 3

- Module 17 – Thermal Analysis
- Module 18 – Advanced Analysis
- Module 19 – Journeyman Project