

Technical Education Services

Autodesk Inventor Professional Simulation

Course Length: 2 days

Learn the fundamental principles and recommended workflows for analyzing designs and creating dynamic simulations of mechanisms using Autodesk® Inventor® Professional. Users learn how to validate digital prototypes by simulating the operation of mechanisms and motorized assemblies in the Dynamic Simulation Environment. They also learn how to analyze parts and assemblies, perform parametric design studies, and use modal analysis in the FEA and Frame Analysis Environment of Autodesk Inventor. Hands-on exercises representing real-world, industry-specific design scenarios are included.

Topics Covered

- Cyclic Symmetry Analysis
- Assembly Optimization
- Bolted Connections
- Weldment Analysis
- Assembly Analysis with built-in welds
- Wind Load Analysis
- Fabrication Analysis
- Sheet Metal Analysis
- Motion Load Transfer Analysis
- Multiple Motion Load Transfer
- Modal Analysis
- Frame Analysis Environment
- Frame Analysis Using Content Center Structures
- Frame Analysis Using Frame Generator Structures
- Dynamic Simulation Joints
- Dynamic Simulation Environmental Constraints
- Analyzing Dynamic Simulation Results

Prerequisites

Students should have completed an Autodesk Inventor Introduction to Modeling course. Students are also should also have a solid understanding of Frame Generator and Weldments found in the Autodesk Inventor Advanced Assembly Modeling course and have a working knowledge of the following:

- Complex assembly design using Autodesk Inventor
- Foundational Understanding of Finite Element Analysis and Kinematic Motion
- Mechanical engineering or engineering analysis principles

Course description shown for Autodesk Inventor Professional 2020. Topics, curriculum, and/or prerequisites may change depending on software version.



Cancellation Policy

The following cancellation policy shall apply to all training engagements, Live Online, Consulting Services and Dedicated/Custom Training:

- Company reserves the right to reschedule or cancel the date, time and location of its class at any time. In the event that a Training Class is cancelled by Company, Customer is entitled to a full refund. Company shall not be responsible for any other loss incurred by Customer as a result of a cancellation or reschedule.
- For Customer cancellations when written notice is received (i) at least ten (10) business days in advance of the class, the Customer is entitled to a full refund of its payment or reschedule enrollment, (ii) less than ten (10) business days, Customer shall not be entitled to a refund, but shall receive a class credit to be used within three (3) months of the date of the original class.
- Student substitutions are acceptable with at least two (2) days prior notice to the class, provided substitution meets course prerequisites and is approved by Company's Training Coordinator (trainingcoordinator@rand.com)
- For all Training orders, cancellation notices must be submitted to trainingcoordinator@rand.com. Company is not responsible for any error in the delivery of the email notice. In the event of any reschedule of Consulting Services and/or Dedicated/Custom Training by Customer, Company will invoice Customer for all non-cancellable travel expenses.

To request more information or to see training locations, visit www.imaginit.com/contact-us.

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