

Technical Education Services

Inventor Professional: FEA and Simulation



Course Length: 3 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. They also learn how to analyze parts and assemblies, perform parametric design studies, and use modal analysis. Hands-on exercises representing real-world, industry-specific design scenarios are included.

This training includes the following topics:

- Theoretical basis of finite element analysis.
- Static stress analysis and results interpretation.
- Modal analysis.
- Assembly analysis using contacts.
- Parametric design studies and optimisation.
- Validation of digital prototypes
- Creation of dynamic simulations of mechanisms
- Using joints and environmental constraints.
- Eliminating redundancies in a design.
- Interpret Dynamic Simulation results.
- Exporting Motion Loads to Stress Analysis.
- Frame Generator and Frame Analysis tool.
- Practice solving real-world design problems.

For the current course
schedule and to register
for this course:

Web: redstack.com.au

Phone: 1300 667 263



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Prerequisites:

Students should have completed an Autodesk Inventor Essentials course and have a working knowledge of the following:

Complex assembly design using Autodesk Inventor

Mechanical engineering or engineering analysis principles

Microsoft® Windows® 7 or Vista or Microsoft® Windows® XP

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Cancellation Policy

The following cancellation policy shall apply to all training and consulting engagements including customised training solutions:

Redstack 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 Redstack, Customer is entitled to a full refund. Redstack 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, Customer is entitled to a full refund of its payment or reschedule enrolment, (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 Redstack

For all Training orders, cancellation notices must be submitted in writing. Redstack is not responsible for any error in the delivery of the email notice. In the event of any reschedule of any training or consulting services by Customer, Redstack will invoice Customer for all non-cancellable travel expenses.

For more information, contact us on 1300 667 263.