

5-Day HyperSizer Training

The 5-Day HyperSizer Training course is suitable for both novice and experienced HyperSizer users. The course begins by reviewing the fundamental software capabilities and quickly builds to studying the advanced software features. The course material is structured so the users become proficient at driving HyperSizer while also fully understanding the analysis & sizing methodology behind the software. An introduction to the scripting and programming customization is provided, however the HyperSizer Analysis Plugin Training course is more suitable for users who want a detailed understanding of the programming customization and scripting capability.

Objectives

- Develop "best practices" for deploying HyperSizer within a stress group
- Create and manage material data in HyperSizer material database
- Review traditional aerospace analytical methods
- Use HyperSizer to perform stress analysis and sizing of complex airframe structure
- Couple HyperSizer with FEA solver (Nastran, Abaqus or ANSYS)
- Explore Zone and Ply based Design Optimization with multiple objectives

Who Should Attend

Stress and design engineers with an interest in automated sizing and analysis of composite and metal airframe structure.

Course Overview

Day 1

- Rapid sizing of airframe structures
- Managing material data
- Analyze/size composite laminates

Day 2

- Free Body Analysis
- Analysis Methods
- FEA Verification

Day 3

- Coupling HyperSizer with FEA
- Size large GFEM with thousands of load cases
- Automatically generated stress reports

Day 4

- Composite Bolted Joint
- VB Programming Integration
- Scripting and Analysis Plugins

Day 5

- Introduction of Express (Scope, Use Cases, Workflow)
- Design Optimization Requirements: Strength and Stiffness
- Design and Modelling Strategies
- Setup Analysis and Design Optimization Task in Express

Contact Us

For more information including upcoming training classes, pricing, or trainer availability, please <u>contact</u> <u>us</u>.