

RPC® Connect Advanced Software Operation

4 day course

COURSE OUTLINE

- I. System Analysis
- II. Advanced Data Analysis
 - A. Differentiate/integrate
 - B. Channel transformation
 - C. Degree of Freedom transformation
- III. Advanced Data Editing
- IV. FRF Diagnostic Tools
 - A. a. H1 and H2 FRF
 - B. Coherence
 - C. Estimating control bands and sensors
- V. Matrix Decomposition
 - A. Singular Value Decomposition introduction
 - B. SVD tools
 - C. Control band estimator
- VI. FRF Inverse and Analysis
- VII. Improving iteration results
- VIII. Component testing tools
- IX. Advanced Fatigue tools
 - A. Data classification methods
 - B. Damage Calculation models
 - C. Material editor
 - D. Damage based editing
 - E. Pseudo damage analysis
 - F. Fatigue in Applications
- X. Building processes

This course lays the foundation of using RPC Connect to its maximum capability. This course is for experienced RPC Connect users who are looking to expand their existing knowledge and ways to improve their lab efficiency. The Advanced simulation techniques for setting up complex RPC tests using various analytical tools will be discussed. The training also includes in-depth discussion of some of the advanced analysis methods for better system understanding and sound decision making capability.

This course also provides additional depth on fatigue damage calculation capabilities of RPC Connect. The course builds on the fatigue theory concepts introduced in RPC Connect Basic course and provides additional information on algorithms, advanced features and more complex fatigue analysis methods.

Who should attend

Experienced RPC Connect users who have simulation experience, but want to further expand their RPC Connect knowledge.

Prerequisites

Students should have some experience prior to attending this course in using the MTS 793 and RPC Pro applications along with a working knowledge of the current Microsoft operating system. All prerequisites are the students' responsibility.