RPC Pro Advanced Software Operation

4 day course*

COURSE OUTLINE

I. Using process manager to build user processes
   A. Introduction to batch processor tool
   B. Building user processes
II. Channel transformation, differentiate, and integrate
   A. Using channel transformation
   B. Vector transformation of X-Y wheel force data
   C. Calculating system flow from LVDT data**
   D. Calculating servovalve flow requirements ** from proving ground data
III. Inverse FRF
   A. Inverse tool options
   B. Scaling and partitioning
   C. Multiple control bands for different channels
IV. Histograms**
   A. Rainflow counting and level crossing**
   B. Histogram accumulation**
V. Fatigue damage**
   A. Basic fatigue theory**
   B. Calculating damage from time histories**
   C. Calculating damage from histograms**
VI. Other fatigue tools**
   A. Back calculation of scale and notch factors**
   B. Damage assessment of proving ground schedule**
   C. Damage-based editing**
VII. FRF analysis
   A. H1 and H2 FRF
   B. Inverse FRF evaluation
   C. Coherence
   D. Estimating control bands
VIII. Singular value decomposition
   A. Introduction to SVD
   B. SVD tools
IX. Turbo
   A. Iterating with turbo
   B. Review turbo-created files
X. RPC reporting tools
   A. Time history report tool
   B. Model and simulate reports
XI. Component testing tools
   A. Block cycle generator
   B. Peak slicing

** Europe and Asia offer a 3 day course.*

*** Items not offered in the 3 day course*

Software training alone does not ensure successful simulation tests. This course is for the experienced RPC software user who needs to keep abreast of current simulation technology. Instructors take you through advanced techniques for setting up complex RPC tests utilizing the application of the various analytical tools in the RPC Pro Software.

Learning outcome

The course combines theory with hands-on exercises to help make the RPC software user more effective in the following areas:

- RPC control and correlation sensor choices
- Fatigue-based editing
- Test correlation analysis
- Engineering and test methods decisions

Who should attend

Experienced RPC Pro operators who have simulation experience, but who want to further their RPC knowledge.

Prerequisites

- Proficiency in the latest Windows operating systems
- Experience with RPC Pro software