

STAR 6.4 Course Outline

This course is based on STAR 6.4 and will cover essentially every feature, command, and short cut in the STAR. Topics will include basic modal analysis theory, operating deflection shapes, modal parameter estimation, FRF synthesis, structural dynamics modification.

STAR 6.4 will be used at every step along the way so it is recommended to bring a laptop with STAR6 loaded or with a CD drive if STAR is not loaded.

Lab sessions are included which enhance the hands on aspect of learning STAR. The emphasis in this course is learning STAR and relating it to the theory as the various features are covered.

Course notes with annotated screen displays will be provided.

Topics Covered

Project and Model Creation. Building and importing models. Use of traditional methods and Sketch Box. STARv5 model import.

Excitation Techniques – Impact, shaker, acoustic techniques. Signals used for excitation

Measurement Importing - FRF, transfer function, what makes a good measurement? STARv5 measurement import

Modal Theory and Parameter Estimation – Single Reference and Poly Reference testing

Modal Parameter Estimation – Curve Fitters including SDOF, MDOF, and Advanced Curve Fitter

Operating Deflection Shapes (ODS) and Time Domain Animation – using the various methods for calculating and displaying ODS

FRF Synthesis, Structural Dynamics Modifications, Tuned Absorbers, Rib Stiffeners

AVI Creation