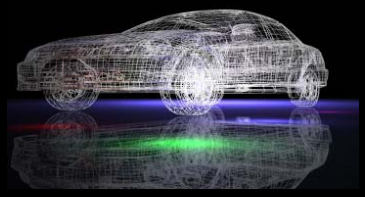

11th Int'l LS-DYNA Users Conference
Training Courses

Wednesday & Thursday,
June 09-10, 2010

Implicit for linear and nonlinear static and dynamic analysis

Instructor: Dr. Al Tabiei

Objective: Learn how to run LSDYNA Implicit for linear and nonlinear static and dynamic analysis. Detailed descriptions are given of the data required to run implicit analysis. Examples are used to illustrate the points made during the course.

COURSE CONTENTS

- Finite Element Modeling. Do you need Implicit or Explicit Analysis
- Current LSDYNA Implicit Capability (material models, elements, contacts, etc.)
- The Nonlinear Finite Element Static and Dynamic Equations
  - Geometric Nonlinearity
  - Material Nonlinearity
  - Contact Nonlinearity
- Nonlinear solution strategies
- Fundamental Modeling Techniques and Input Syntax
- Linear and Nonlinear Static Analysis
- Linear and Nonlinear Dynamic Analysis
- Stress Initialization Implicit/Explicit
- Contact Problems and Implicit Formulation
- Stability Problems and Non-convergence
- Understanding and Resolving Divergence Problems
- Stress Initialization Implicit/Explicit, Explicit/Implicit, and multi-steps simulations
- The difference between explicit and implicit simulations (comparison between explicit and implicit will be performed using two examples).
- Ways to battle non-convergence
- Quasi-static analysis using explicit and implicit LS-DYNA
- How to tell if your FE results are correct

For training inquiries contact Cathie – Cathie@lstc.com