Occupant Simulation in LS-DYNA®

Instructor: Hari Devaraj

2 Days - $400  Students $200 w/student ID
Includes on-site continental breakfasts, lunches, breaks, class dinner
Includes 30-day LS-DYNA demo license to practice

Description: This two-day class provides an overview of how to set up airbags, seatbelts, seats and dummy positioning. Students will complete workshop exercises using models provided by instructor. Course notes will be provided in paper format.

The objective of the course is to familiarize users with setup and modification of occupant restraints in a sled environment. Upon completion, participants will be able to design and develop their own sled studies for evaluating restraint systems.

Day 1: Occupant Restraints Setup

- Commonly used airbag types
- Quick modifications of airbags
- Airbag vent definitions
- Inflator data
- Airbag quick folding using LS-PrePost
- Airbag encapsulation
- Airbag deployment through seat seam
- Seatbelt types and combinations
- Seatbelt routing using LS-PrePost
- Seatbelt components in LS-DYNA
- Seat compression
- Seat deformer tool in LS-PrePost
- Dummy positioning
- Dummy data output
- Occupant-related contact setup

Day 2: Linear Impactor and Sled Setup Workshop

- Sensors in occupant modeling
- Linear impactor test setup
- Sled test setup