



## Pre-Conference Training

**June 3, 2012** (Sunday), 9a-5p, **Hyatt Regency Dearborn**  
(one day, includes light continental breakfast at 8:30am, lunch)

**Course Fee: \$350**

## User Material Implementation in LS-DYNA®

Instructor: Paul du Bois

**NOTE:** Training room does not have computers; however, students that can bring a laptop with a compiler (FORTRAN) will be able to load example files and practice.

### One-day Course Schedule:

9:00am - 10:30am	Systems, Compilers and Installation
Break	
11:00am - 12:30pm	Basic user law, Hypo-elasticity Use of history variables, example of J2 plasticity
Lunch	
1:30pm - 3:00pm	Non-linear hardening and iterative techniques Use of curves and tables, example of visco-plasticity Shell elements and plane stress Failure and erosion Orthotropic materials, example of Hill plasticity
Break	
3:30pm - 5:00pm	Hyper-elasticity Velocity and deformation gradients Total vs incremental material laws

At 5:00pm, Registration opens for those attending  
**12<sup>th</sup> International LS-DYNA® Users Conference**