

LS-DYNA implicit training

LS-DYNA, the state-of-the-art explicit finite element (FE) program for large deformation mechanics, has also extensive capabilities for solving implicit type of problems. This course presents a theoretical and practical introduction to the implicit capabilities in LS-DYNA. The course is suited for users with a previous experience from using LS-DYNA for explicit analyses .

Prior knowledge: Some experience with FE-simulation using LS-DYNA is preferred.

Course outline:

- Linear and non-linear static analysis
- Modal analysis and linear dynamics by modal superposition
- Implicit non-linear dynamics
- Eigenvalue buckling analyses
- Nonlinear buckling and post-buckling analysis using the arc-length method
- 2D, 3D and axi-symmetric models
- Element and materials library
- Loads, boundary conditions and constraints
- Contact definitions, tips and tricks
- Troubleshooting convergence problems
- Control parameters
- Output format and output files
- Pre and post processing with LS-PRE/POST
- Selected exercises throughout the course

The course is given by the staff at Engineering Research Nordic AB. The number of accepted course attendee is limited to 12.

Place: ERAB's office, Garnisonen, Linköping.
A roadmap is available on <http://www.erab.se>.

Date: See <http://www.erab.se/courses>

Schedule: The course starts at 09⁰⁰ the first day and 08³⁰ the following days. The course ends at approximately 17⁰⁰. On the last day of the course, the course ends at 16⁰⁰.

Course fee: The course fee includes course notes, lunches, refreshments and one evening meal, excluding VAT. See <http://www.erab.se/courses> for actual course fee. Hotel accommodation is not included in the course fee

Registration: Online registration at <http://www.erab.se/courses>

Confirmation: A confirmation will be sent out by e-mail upon registration.

Cancellation: Classes can be cancelled up to 10 days before course start if the number of attendees is too small. Any fees paid to ERAB will be returned if the class is cancelled. For cancellations by attendees received later than two weeks before course start the attendee will be invoiced 50% of the course fee.

Questions: E-mail course@erab.se