ANSA for Crash simulation pre-processing

Training	ANSA for Crash simulation pre-processing
Duration	2 days (16 hours)
Level	Advanced
Who should attend	CAE analysts who develop BIW and study the crashworthiness of a vehicle.
Training description and objectives	This course introduces participants to the principles of pre-processing with ANSA for crash simulations so that users become familiar with software tools and able to prepare ready-to-run models for LS- DYNA, PAM-CRASH, Abaqus/Explicit or RADIOSS, for various crash cases (front, side, rear impact). Upon course completion participants will be able to : – Manage large models – Generate & improve surface mesh for crash applications – Set up a crash loadcase – Assemble a model, – Use tools dedicated to crash and safety analysis such as, impactors positioning, Dummy, Pedestrian, Interior – Create reduced model files in order to minimize the set up time and analysis complexity – Check the integrity of the model
Prerequisites	Basic knowledge of the Crash simulation principles and ANSA is required.
Suggestions	This course can be combined with any of the META for Crash simulation post-processing training courses. It is recommended that participants have attended the “Introduction to pre-processing with ANSA” training course.
Language	English, German, Swedish **ask for more languages*

Suggested topics
Day 1
– Introduction – Batch meshing – Mesh improvement – Mass trimming: a) Weighting a model b) Mass scaling c) Adding mass d) Generic entities for mass trimming e) Mass balance – Model management: a) Lists handling b) View modes c) Model cut d) Database browser – Files Input /Output a) Input /Output options b) Handling of missing references/unsupported definitions during input – Properties and materials, material database – Groups/Sets - Contacts – Substructuring
Day 2
– Load case set - up/solutions controls a) Plot output - cross sections b) Generic entities for output. c) Plot output - time history d) Transformations e) Barrier positioning f) Solver controls – Assembly tools a) Connection templates b) Connections and connectors c) Checks – Includes management and configurations – Model checks - check templates – Reporting

Course content is subject to change without notice.
Course content may be adjusted to audience requirements or background.