## Midsurface modeling with ANSA - Masterclass

| Training | Midsurface modeling with ANSA - Masterclass |
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| Duration | 2 days (16 hours) |
| Level | Advanced |
| Who should attend | CAE analysts whose part of their job is to model solid geometries of thin parts as 2D middle surface geometries and mesh |
| Training description and objectives | A common practice on Finite Elements Analysis modeling of solid geometries of thin parts as 2D middle surface geometries and mesh. Although middle surface modelling is a time consuming task, involving a lot of effort, ANSA offers tools and methods that expedite the middle surface construction process. <br> This is a Masterclass course on the ANSA tools and the optimal methods for the middle surface modeling. <br> Upon course completion, participants will be able to : <br> - Easily identify the optimal middle surface extraction method <br> - Extract the middle surface from one or many stamped parts, simultaneously <br> - Set up the parameters and extract the middle surface mesh from intricate casted parts <br> - Handle FE model mesh in order to improve the result <br> - Convert nodal thickness values to thickness based on properties <br> - Extract the middle surface from extruded parts <br> - Assign materials and properties <br> - Perform middle surface checks and fix any problems |
| Prerequisites | Participants should have an engineering background. Basic knowledge of ANSA is necessary. |
| Language | English, German *ask for more languages |

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## Suggested topics

## Day 1

- Introduction to middle surface creation
- Handling of stamped parts: prerequisites, options, variable thickness parts, checks, improvement, examples
- Handling of intricate casted parts $1^{\text {st }}$ approach: prerequisites, options, examples
- Handling of extruded parts

Day 2

- Handling of intricate casted parts $2^{\text {nd }}$ approach: introduction, parameters, checks, improvement tools and techniques, thickness handling, tips \& tricks

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

