BETA
SIMULATION SOLUTIONS

physics on screen

Introduction to CFD pre- & post- processing with ANSA and META

Training	Introduction to CFD pre- & post- processing with ANSA and META
Duration	3 days (24 hours)
Level	Entry
Who should attend	CAE analysts who work in CFD analysis and do not have experience in pre- and post- processing with ANSA and META.
Training description & objectives	This course introduces participants to the basics of CFD pre- and post- processing with ANSA and META and provides an overview of the necessary CFD principles. Upon course completion, participants will become familiar with the ANSA and META graphical interface and able to accomplish the essential steps needed to deliver a meshed file that can be used for CFD analysis. Users will be also able to benefit from the powerful tools of META for CFD post-processing. In more detail participants will be able to : – Use the integrated CAD tools for creation, modification, cleanup, simplification and watertight preparation, – Simplify mesh areas to get optimum mesh quality, – Generate uniform or variable size surface and volume mesh, – Wrap models for fast watertight creation, – Generate penta and hexa boundary layers, – Handle unstructured mesh, – Apply simple morphing procedures on CFD models, – Display contour plots, iso surfaces, cut planes, streamlines through the fluid domain, – make queries on entities, and – create reports.
Prerequisites	Basic understanding of CFD principles is required.
Suggestions	This course is a prerequisite for users that wish to attend the “ANSA / META for advanced CFD applications” training.

BETA CAE Systems International AG

D4 Business Village Luzern, Platz 4
CH-6039 Root D4, Switzerland

T +41 415453650
F +41 415453651

ansa@beta-cae.com
www.beta-cae.com

Language	English, Italian **ask for more languages*

Suggested topics
Day 1
ANSA session – Introduction to ANSA – File manager – GUI options and customization – Topo menu – Watertight preparation – Model checks – Transform functions – Link geometry – Model organization – Shell meshing
Day 2
ANSA session – Shell mesh quality improvement – Model checks – Surface wrapping – Volume meshing – Check and fix of a volume mesh – Batch mesh
Day 3
ANSA session – Morph menu – Hexablock META Session – Loading models and results – Handling geometry – Displaying and handling results – Streamlines, iso-functions, cut planes – User calculations – CFD post toolbar – Calculation of forces, moments and integrals – 2d plots – Query tools – Exporting images and videos

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