

Advanced post-processing with META for NVH analyses

Training	Advanced post-processing with META for NVH analyses
Duration	1 day (8 hours)
Level	Advanced
Who should attend	CAE analysts who analyze NVH models and have experience of post-processing with META.
Training description and objectives	<p>This advanced course demonstrates the advanced META tools and techniques for evaluating/calculating NVH results.</p> <p>Upon course completion, participants will be able to :</p> <ul style="list-style-type: none"> – Compare FE models and experimental data with different reference coordinate system. – modify units of a model, – correlate modes and frequency responses using the MAC - COMAC and AutoMAC tools and automatically create a report, – calculate FRFs and transient responses. – calculate Modal Participation factors and create 3d results, – calculate modal frequency responses for an assembled model, – calculate connection forces - response connection sensitivities, – perform transfer path analysis (TPA) and connections optimization, – identify global and local modes, – load strain energy results and apply Fourier transformations and filtering on curves.
Prerequisites	Basic knowledge of the NVH principles and META is required.



Suggestions	This course can be combined with the trainings: <ul style="list-style-type: none">– ANSA for NVH analyses pre-processing– Introduction to post processing with META– META basics for NVH analyses post-processing trainings
Language	English, German, French <i>*ask for more languages</i>

Suggested topics
Day 1
<ul style="list-style-type: none">– Data transformation (modify units – match models with different reference coordinate systems)– Modal correlation (MAC – COMAC – AutoMAC tools and MAC report)– Modal response (2d/3d nodal/elements results, modal participation factor, FSI coupling)– FRF assembly (connection forces, transfer path analysis, connections optimization, response connection sensitivities, contribution analysis)– Identify global-local modes– Strain energy bar chart– 2d plot advanced options (Fourier transformations, curves filtering)

Course content is subject to change without notice.

Course content may be adjusted to audience requirements or background.