

Cadna R[®] Training Basic Level

This seminar imparts all basic knowledge for an efficient and successful room acoustic simulation with **CadnaR**. It covers all relevant topics including basic handling of the software, effective creation and handling of even complex room acoustic models, planning and assessment of measures to improve the acoustic situation as well as visualization and presentation of the results. Using many hands-on examples it also gives insight into the underlying calculation methods and their limitation and ensures a lasting qualification.

WHO SHOULD ATTEND?

CadnaR users with less than 6 months of experience who want to get the basic knowledge for an efficient and successful application as well as the underlying techniques and their limitations.

The completion of the **CadnaR Webtutorial** is not a requisite but highly recommended.

TRAINING DEVELOPMENT

The general workflow is as follows:

1. Presentation of a topic by the trainer
2. Step by step hands-on exercises by the participants
3. The trainer repeats the exercise
4. Short Q&A and summary

MATERIALS

- CadnaR License at the latest version
- CadnaR Training book (pdf format)
- CadnaR Files
- Official Training Certificate

Contents*

Basic Handling of CadnaR	<p>CadnaR Interface</p> <p>Project area</p> <p>Working in 2D and 3D</p>
Modelling	<p>Inserting and editing objects using mouse and keyboard</p> <p>Application of acoustic properties like absorption scattering and transmission</p> <p>Modelling sources, assignment of sound power levels</p> <p>Grouping Objects</p>
Calculation methods	<p>Overview over the calculation methods available</p> <p>Deeper insights into the particle model in order to be able to assess the quality of the results</p> <p>Insights to the implementation of absorption, scattering, transmission and diffraction</p>
Calculation results	<p>Introduction in the types of results obtainable with CadnaR</p> <p>Discussion of sound pressure levels, partial levels, reverberation time and speech transmission index (STI) and the respective things to consider for a successful simulation</p> <p>Receiver chains to assess the decay of levels and STI along certain paths.</p>
Project Organization	<p>ObjectTree: hierarchical grouping structure for an effective organization of even large projects</p> <p>Variants for an easy comparison of different planning scenarios and the assessment of different acoustic optimization measures</p>
Import	<p>Import of BMP as layout plans</p> <p>Import of SketchUp files</p> <p>Import of DWG files</p> <p>Import of CadnaR files to re-use previously created groups of objects</p>
Presentation of results	<p>Coloring of grids for different calculation results in 2D and 3D</p> <p>Individual coloring of objects in 2D and in 3D</p> <p>Auralisation</p> <p>Plot Designer</p>

Duration: One full day

* The contents of the training as well as the duration of each topic may be different depending on specific requests or interests of the attendees