



TRAINING SCIAENGINEER

SCIA ENGINEER - FUNDAMENTALS 1 (FRAME STRUCTURES) (2 DAYS)

Description

During this two-day training, we will go through the SCIA Engineer basic principles and applications in **steel and concrete beams** on the basis of **practical examples**, adapted to the **new start-up users**.

- You already know how to model a structure in SCIA Engineer, but are you doing this in the most quick and efficient way?
- How are load cases calculated precisely and how can load combinations be created completely automatic in SCIA Engineer?
- In what way can you effectively create a clear and professional analysis report?
- And how do you perform a steel- and concrete check?

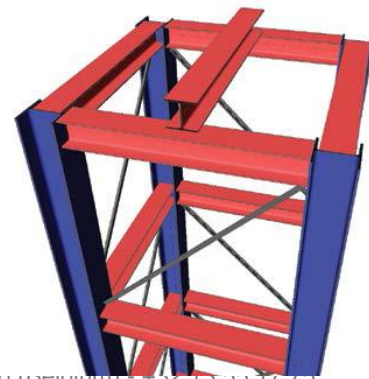
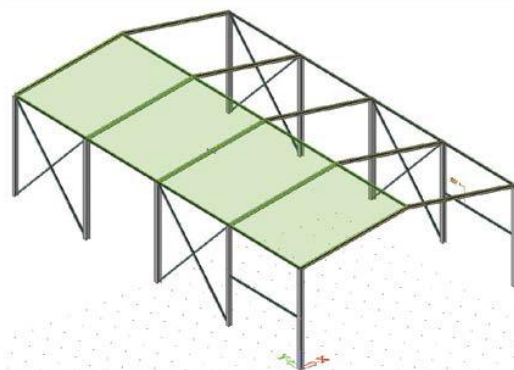
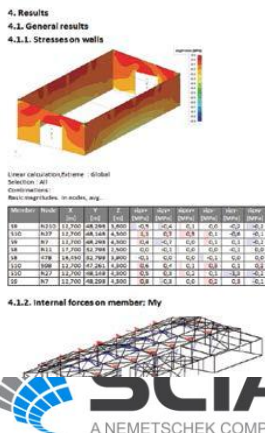
All these questions will be answered during this steel and concrete bars training. If you are also interested in applications of plates and shells, we invite you to register as well for the additional day 'SCIA Engineer - Fundamentals Training 2'.

What knowledge will you obtain?

Each participant works individually on several practical applications, under guidance of a Customer Service Engineer of SCIA. At the end of the training, you will have the knowledge and confidence to:

- Model in a quick and correct way structures in SCIA Engineer with the intention to drastically increase your productivity and efficiency.
- You will learn how to compose combinations automatically of load cases and how to generate in a flexible manner a readable analysis report that will impress your customers.
- Finally, also the basic principles of steel and concrete calculations will be discussed and how you can interpret the results.

To guarantee the interaction between the participants and the trainer, the course will be given for a small group of up to 8 people.



For a complete list of all our international agencies and partners, visit www.scia.net



TRAINING

SCIAENGINEER

Program

Modeling

- You will learn how to input a structure in a quick and correct manner in SCIA Engineer and to connect the members
- How can you increase your efficiency by using the modeling options?
- What are the modeling opportunities for steel and concrete structures?
- You will learn how you can easily insert supports and hinges in the model.
- What is the use of load panels?
- How to work with eccentric bars?

Load cases and combinations

- What type of load cases can be introduced?
- What is the difference between linear, envelope and code combinations?
- How to use load groups?
- What are result classes in SCIA Engineer?

Results

- Requesting calculation results such as deformation, internal forces, stresses, ...
- How can you request a bill of materials of the structure?
- Where can you quickly verify the reaction forces and the sum of loads?

Output note (Engineering Report)

- Introduction of tables and calculation results
- Introduction of images (from SCIA Engineer and external)
- How can you insert a table of contents, header and/or footer?
- How can the layout of the Engineering Report be changed?
- If the structure in SCIA Engineer changes, does the Engineering Report also change?
- Practical 'tips and tricks' for editing the report
- Export possibilities (pdf, pdf 3D, Word, Excel, ...)

Introduction to the concrete check

- How can you request the theoretical necessary reinforcement?
- In what manner can you add practical reinforcement to the bars?
- What kinds of checks are possible for 1D elements?

Introduction to the steel check

- Where can you perform the steel code check?
- What are the used principles for this verification?
- You also learn how to create a bolted connection in a steel structure.



TRAINING

SCIAENGINEER

Additional training

SCIA Engineer Fundamentals Training 2: During this extra day, the input of 2D/3D plates and shells and the calculation using the finite elements method will be discussed on the basis of practical examples.

Syllabus & Hand-outs

All participants will receive a syllabus at the start of the course containing the practical examples and exercises which will be discussed in detail during the training.

Prerequisites

This course is adapted to completely new and start-up SCIA Engineer users with the necessary knowledge of building design.

Certificate

Each participant will receive an official SCIA Engineer “Fundamentals Training 1” certificate at the end of the training, signed by the trainer.

Disclaimer: *The content of the training may be modified without notification (11/2015).*