

SHORT COURSE**Uncertainty and Reliability in Engineering**

This course focuses on how to model uncertainties in engineering and on how to assess the reliability of engineering systems. All sessions providing a theoretical overview are combined with practical hands-on examples. In the hands-on sessions you will learn how to tackle the problem at hand using the packages Comrel and Sysrel from the leading reliability analysis software Strurel. By the end of the course you will understand the basic concepts of probabilistic reliability assessment and you will be able to apply most standard numerical methods for solving component as well as system reliability problems.

After the course you will have the opportunity to discuss a problem of your choice in a personal meeting with us - free of additional charge.

Course-language: English

Location: center of Munich

Date: 11.-12. March 2019

Cost: 800€ (50% discount for students; 25% discount for university members) student rate does not include consulting

Number of participants: is limited to a maximum of 10 people

Examples considered in the course: Engineering systems and structures

Software used: Strurel (Comrel and Sysrel)

Course material will be provided

Instructors: Dr. Wolfgang Betz, Dr. Iason Papaioannou, Prof. Daniel Straub

Registration: eracons.com/short-course

SCHEDULE**Day 1**

12:00-12:30

Introduction

12:30-14:00

Uncertainty in Engineering
Monte Carlo simulation

14:00-14:15

Break

14:15-15:45

Hands-on application (with Comrel):
Uncertainty propagation and sensitivity analysis

15:45-16:00

Break

16:00-17:30

Probabilistic design and assessment
FORM

17:30-18:00

Discussion & Feedback

Day 2

8:30-10:00

Hands-on application (with Comrel):
Reliability analysis

10:00-10:45

Advanced simulation methods

10:45-11:15

Break

11:15-12:15

System reliability

12:15-13:00

Hands-On Example (with Sysrel)
System reliability

13:00

Joint lunch with Feedback round