

# User training FTA with Isograph FaultTree+

## Basic knowledge and professionalization

Foundations and application of fault tree analysis using Isograph FaultTree+. Seminar duration: 2 days

## **Brief description**

FTA with Isograph FT+

- Foundations of using FTA for system analyses
- Applications and settings of the FT+ tool
- Tips, tricks and pitfalls when using the tool and documenting results

### **Goal and benefits**

After the training, participants will be able to create and evaluate FTAs with Isograph FT+ in a methodically and mathematically correct manner:

- The necessary tool settings will be learned and practiced
- The evaluation methods and report generation can be applied by the participants
- · Indications of special points when operating the tool and which settings can lead to incorrect calculation results
- A reference guide is provided with the training documents for using the tool in practice

Certificate: Isograph FT+ 2-day expert training

#### **Content**

Fault tree analysis (FTA) is established in many industries for determining the causes of potentially safety-critical events (hazards). FaultTree+ (a module in Isograph Reliability Workbench) is a market-established analysis tool for this purpose. Despite decades of market presence, there are also weaknesses in this commercial software, which will not be hidden in this seminar. Expert knowledge is required to achieve meaningful results for safety and reliability analyses with the tool. This applies both to the methodology of fault tree analysis and to the use of the tool. The methodological foundations are presented in a compact form in the introduction. The focus is then on getting to know all the important menu items of the tool for creating qualitative and quantitative FTAs as well as parameterization. The seminar offers a comprehensive insight, backed up with numerous examples and exercises. For professional use, report generation as well as import and export options of FT+ are also explained and trained. The training is enhanced with a series by a variety of tips and tricks for practical use.

#### **Target groups**

The method training addresses aspiring or practicing users of the FT+ tool as well as method experts for system analyses.

## **Prior knowledge**

Mathematical knowledge of engineering studies or comparable qualification is required. Fundamentals of probability theory should be known. An understanding of common representations of electronic systems such as HW block diagrams and/or SW descriptions is required.

#### Note

Each participant should bring a laptop with a Windows operating system. Further organizational requirements will be coordinated in advance.

## **Number of participants**

Appr. 4 to 12 persons

## Proven training concept

What previous participants liked about this seminar:

- ✓ Very good and intensive presentation of the FaultTree+ tool
- Suitability of the training for professionals and newcomers
- Identification of tips, tricks and pitfalls in the documents
- Many exercises to get to know the tool
- Practical relevance for the comprehensibility of an FTA
- Super expertise of the speaker
- Quick response to discussions