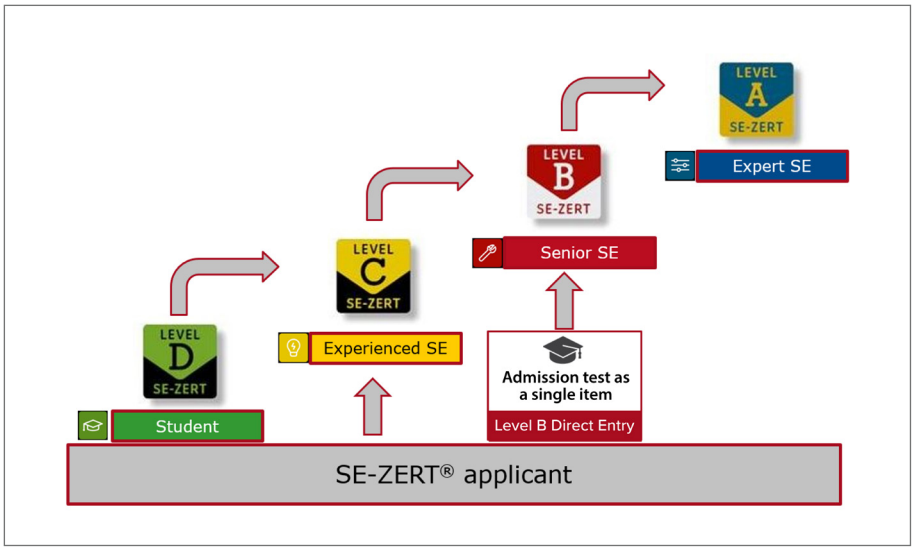
CERTIFICATION TRAINING INTERNATIONAL
A PPI Company

GfSE SE-ZERT® Preparation Course

Join us on an interactive journey designed to cement your Systems Engineering knowledge, aligned to the GfSE SE-ZERT® programme. Not including the examination day, the course takes 12 days (in 3 blocks of 4) for Levels B and C, and 3 days for Level B Direct Entry.

As a partner licensed by GfSE, CTI offers training courses for SE certification at levels C and B, as well as Level B Direct Entry (see diagram).



This is followed by an examination by a board consisting of GfSE and SE-TREC GmbH.

GfSE: Gesellschaft für Systems Engineering

INCOSE: The International Council on Systems Engineering

SE-TREC GmbH: the co-operation parter for the organisation and execution of the SE-ZERT® programme

Primary Course Objectives

To prepare yourself for the Level B, Level B Direct Entry, or Level C exam, in compliance with the SE-ZERT syllabus.

Course Design

The CTI Course is consciously designed around some key principles of adult learning that include:

- The learning environment has to be one of trust, respect, openness and acceptance of differences.
- Learners need to participate actively in the learning process.
- Learners need to set a clear direction and have a sense of progress towards their objectives.
- Effective learning depends on realistic, objective, and constructive feedback.
- Getting ideas wrong can be a valuable aid to developing understanding.
- Learning should be related to and use the learner's experience and knowledge.
- For learning to be processed and assimilated, time must be allowed for reflection.
- Facts, concepts, and skills are learned in different ways.

To learn more about CTI's teaching method, please watch this free webinar 'How to Learn SE (or anything)'.

These principles have been established with support from the Coaching Café, experienced leaders in learning design.

Use of Workshops

On average, there are 3 workshops per day of training, and there is plenty of practice in answering mock questions. Some are in multiple-choice format, whereas others require a mini essay to be written.

Course Structure

Our modules and themes:

Module 1 Themes

1.1 SE-ZERT and this Course
1.2 SE Fundamentals
1.3 Meaning and Value of SE
1.4 Uses of the 'Life Cycle' term
1.5 Processes and Standards

Module 2 Themes

2.1 The Learning Organization
2.2 Strategy
2.3 Standards
2.4 Infrastructure
2.5 Project Perspectives

Module 3 Themes

3.1 Planning
3.2 Assessment and Control
3.3 Project Authorization
3.4 Management of requirements change
3.5 Measures

Module 4 Themes

4.1 Decision Strategy
4.2 Evaluation of Alternatives
4.3 Recording Decisions
4.4 RIsk and Opportunity Management
4.5 Configuration Management

Module 5 Themes

5.1 Requirements Strategy
5.2 Stakeholder Management
5.3 More on Context Analysis
5.4 Requirements Analysis
5.5 Requirements Writing
5.6 Requirements Traceability
5.7 Architecture
5.8 System Integration Strategy

Module 6 Themes

6.1 Implementation Strategy
6.2 Enabling Systems
6.3 Interface Definition and Management
6.4 Verification and Validation
6.5 Quality Control

Module 7 Themes

7.1 Module 7 Overview
7.2 Reliability, Availability, Maintainability, and Safety (RAMS)
7.3 Security
7.4 Life Cycle Cost Analysis
7.5 Manufacturing, Logistics, Disposal, and Environment
7.6 Human Factors
7.7 Mass Properties
7.8 Electromagnetic Compatibility (emc)

Module 8 Themes

8.1 Whole Life Cycle Strategy
8.2 Operational Reporting
8.3 Waste Management
8.4 Design and Manufacture for Maintenance
8.5 Re-Use
8.6 Acquisition and Supply

Module 9 Themes

9.1 Ethics
9.2 Time Management
9.3 Communication
9.4 Behaviors and Characteristics
9.5 Relationship Management
9.6 Creativity
9.7 Teaming
9.8 Leadership