



Distant Training in TRIZ, Systematic Innovation and Creativity

Advanced TRIZ and Systematic Innovation for Technology and Engineering (MATRIZ Certificate Level 2)

About the Course

- The course provides learning of advanced methods and techniques of TRIZ and Systematic Innovation for Technology and Engineering.
- The course is based on personal online communication between a trainer and a student.

Requirement

Basic knowledge of TRIZ and Systematic Innovation for Technology and Engineering is required to take the course (Certificate of MATRIZ Level 1 as evidence).

Content

- Fundamentals of Advanced TRZ.
- Roadmap to advanced TRIZ techniques.
- TRIZ-based Function Analysis to model functional interactions within a product or a process to discover a full set of problems and challenges which can be used for innovative improvement of a selected product or technology.
- Practice with TRIZ-based Function Analysis on the customer's problems.
- Functional Trimming: increasing benefits/costs ratio of products and processes
- Using Functional Trimming to circumventing existing patents and creating patent umbrellas.
- Substance-Field Modelling to build abstract models of problems.
- 76 Inventive Standards system: a structured collection of practical techniques on eliminating negative and improving positive effects within products and processes.
- Practice with Substance-Field Modeling and Inventive Standards on customer's problems.
- Understanding principles of technical products and technologies evolution.
- The system of TRIZ Laws, Trends and Lines of Products and Technologies Evolution.
- Analysis of Innovative Evolutionary Potential of technical systems.
- Demonstration of TRIZ technology evolution trends and specific lines of evolution with examples.
- Evolutionary Potential Analysis.
- Practice with the TRIZ Trends and Lines of Evolution to evolve specific technical products or technologies.

- ARIZ-85C (Algorithm of Solving Inventive Problems): logic of ARIZ, explanation of major concepts, structure, and working principles, resolving physical contradictions, fighting mental inertia.
- Demonstration of a problem solving process with ARIZ on the basis of specific examples.
- Overview of additional tools of TRIZ and xTRIZ: Value Conflict Mapping, Multi-Screen Analysis, Creativity Imagination Development.

Process

- Downloading and watching a set of lectures in HD video format.
- Online discussions with questions, answers and explanations on each topic.
- Off-line assignments performed by a student.
- Off-line evaluations performed by the trainer.
- Interactive online feedback session after each assignment.

TRAINING PACKAGE

- Set of video lectures by Valeri Souchkov
- Course slides
- Guides to tools and techniques used in the course
- Practical assignments
- Online interactive sessions
- Offline evaluations and communication
- After-course questions/answers support

TRAINER



Training is delivered by Valeri Souchkov, certified TRIZ Master with experience of delivering services related to TRIZ and Systematic Innovation worldwide since 1991. He was certified as TRIZ Specialist by the founder of TRIZ G. Altshuller and as TRIZ Master by the International TRIZ Association (MATRIZ). Currently he heads ICG Training & Consulting located in Enschede, The Netherlands and teaches TRIZ at the University of Twente and TIAS Business School. Among his customers are Capgemini, DSM, DuPont, General Electric, LG Electronics, Océ, Oracle, Philips, POSCO, Shell, Siemens, as well as various academic and governmental organizations. In total, he participated in 100 innovative projects and trained more than 5000 people in TRIZ. He is a co-founder of the European TRIZ Association (ETRIA), member of Global TRIZ R&D Council of the International TRIZ Association (MATRIZ) and founder of the TRIZ Training International Centre. Valeri Souchkov is a developer of several TRIZ and Systematic Innovation techniques and the author of this course. Valeri is also currently the Chief Consultant TRIZ Association of Asia



TECHNICAL REQUIREMENT

[Our standard technical requirements](#)

CERTIFICATE

The International TRIZ Association (MATRIZ) Certificate Level 2. In addition: Certificate of TRIZ Practitioner, Advanced Level. Certificate is issued by ICG T&C and the TRIZ Training International Centre.

USE LICENSE

If granted a certificate, a student is also granted the rights to use all the techniques learned in his practice as well as for any customer of a student including consulting activities. However the use of the course material as a whole or any it's part for training purposes requires permission from ICG Training & Consulting & TAA.

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