

DIGITALISATION, AUTOMATION AND END-TO-END DATA AND PROCESS INTEGRATION

תיאור הקורס

Perhaps more than other industries, engineering for energy has become an increasingly complex process with demands for digitalisation and interconnected services and products in increasing. Thus, a fundamental understanding of utitilies applications and energy digitalisation is essential for all systems engineers working in this domain.

The course provides the basics of digitalisation, automation and integration in the environment of power utilities and comparable industries (different types of network operators transport, gas, railway, etc.). It shows the approaches, that can be taken for internal enterprise data integration and the ways, the utilities in Europe shall be integrated. It also shares some best practice approaches and discusses their chances and risks.

תוצאות הלמידה

 Understand the challenges of application integration for power grid operators (TSO, DSO) and similar industries

 Know the main integration approaches, tools and solutions
 Distinguish between different kinds of customers and corresponding process automation solutions
 Know the requirements towards TSO-centric integration (standards, media, processes)
 Understand the role of cyber-security in the IT / OT integration

למי מיועד הקורס

 Project Managers
 System Operators
 Software Engineers
 Software Architects
 Product Owners

Attendees must have basic training in Systems Engineering (e.g. SE Foundations).

מחירי הקורסים

Regular: 800 CHF

משך הקורס

1 day

המרצה



Dmitri Tchoubraev

Dr. Dmitri Tchoubraev has had different leading roles over the last 20 years in Swiss industry. He was responsible for the introduction of Swiss Ancillary Market services, engineering and operation of numerous business-critical systems of Swiss Transmission Grid National Control Center, establishing of Enterprise Integration and Solution Architecture at Swiss TSO.

Today he lectures, consults and mentors on the Power Utilities System Architecture, Energy Digitalisation and System Integration. His experience includes multiple applications of Project Management and Architectures Development in the area of complex heterogeneous IT System Landscapes. He also teaches Utilities IT Systems and Substation Automation Systems at the Technical High School Fribourg, Switzerland and was an Assistant Professor on Power Utilities Systems and Processes for 10 years, at the University of Aerospace Instrumentation, St. Petersburg, Russia.

Dr. Tchoubraev has more than 20 years of experience as project and program manager and as operational manager in development, engineering, integration and operation of complex industrial systems for both government and private sector industries.

Dr. Thoubraev is author and co-author of 30 papers and author of the book "Information Technologies for Electromechanical and Power Systems".

In addition, he is specialised on the System Design based upon Mini- and Micro-Services and optimisation of Industrial Operational Environments using Design Thinking and Usability approaches.