



NUCLEAR SAFETY Course in English

Regulatory Control of Nuclear Sites: Inspection of I&C and Electrical Systems

Session: Consult on-line training schedule

Registration deadline: 3 months prior to course

Duration: 5 days

Certificate of attendance will be issued to participants who attend the full course.

Price: Contact us

Code: CO1019

REGISTER NOW

Contact

Frédérique Boulesteix +33 (0)1 58 35 93 51 +33 (0)7 78 18 83 75

mailto: frederique.boulesteix@enstti.eu

Online catalogue

www.enstti.eu/training-catalogue

Examination:

Knowledge testing (multiple choice exam) will be performed on the full course content and successful candidates will be issued with a Knowledge Certificate.

Teaching methods:

Lectures, discussions and practical sessions are included.

Working group exercises and technical visits are supervised by experienced TSO experts.

A USB stick containing the course material will be provided.

OBJECTIVES

To provide trainees with an understanding of the regulatory control processes related to reactor instrumentation, plant control and electrical systems.

TARGET AUDIENCE

This training is intended for:

- Engineers wishing to acquire general knowledge of I&C and Electrical Systems technology and operation, and their role in the safety of nuclear facilities in normal and accident conditions.
- Professionals from regulatory authorities and technical support organizations.
- Members of reactor operator/licensee professional staff.

PREREQUISITES

Participants are expected to have basic knowledge in the area of nuclear and radiation science and technologies.

LEARNING OUTCOMES

Participants will acquire:

- The fundamentals of instrumentation and control systems.
- The fundamentals of electrical systems.
- Insight into the differences between analogue and digital I&C systems and individual pros and cons for different applications.
- The ability to apply their knowledge and skills to the main digital components, both the ones currently used and those considered for use in future nuclear plants.
- A grasp of design and regulatory requirements.
- Knowledge about the state of the art on human-machine interfacing and computerized control rooms.
- A grasp of the competencies on main components and issues related to the electrical systems and networks in a plant.
- A grasp of the regulatory procedures needed to ensure a good level of compliance with safety requirements.

PROGRAM

In addition to the general introduction, the 5-day training module will cover the following subjects:

- The basis for inspection and its role in the overall licensing process.
- The importance of reactor electrical systems and instrumentation/control systems in safety.
- Design, conduct, reporting and follow-up of inspection programs for SSCs during design, manufacture, construction, testing, commissioning and operation.

At the end of the module, a roundtable discussion session addresses issues identified by participants. It is followed by an evaluation during which participants give their impressions of the module, with a review of the degree to which the needs expressed on the first day of training were met.



