# Training CATALOG









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## **IN BRIEF**



« After 12 years' work experience in the nuclear industry as an inspector and auditor with an EDF engineering center, I founded SICA Nucléaire to support my customers in implementing civil and military nuclear standards such as the RCC-E and the Order of February 07, 2012. »

> Marc NEVCHEHERLIAN Founder, SICA Nucléaire

#### More than 30

training courses inter or intra company in





inluding 13

accredited courses

afcen

More than 4450

trainees trained since 2010

The nuclear industry requires us to be impeccable in terms of:



Cybersecurity and GDPR



**Nuclear safety** culture



Counterfeiting, Fraud and Suspicion

#### **OUR VALUES**

RESPECT FOR WOMEN **AND MEN** 

COMPETENCE

**PRIVACY** 

**INNOVATION** 

**COMMITMENT AND RESPONSIVENESS** 

**ETHICAL CODE** 



### **OUR OFFICES**

Located in the south-east of France, 10 km from Aix-en-Provence and 30 km from Marseille, SICA Nucléaire has fully-equipped premises for inter-company training courses.



#### **HOW TO FIND US**

#### From Aix-en-Provence or Nice:

Join the A8 highway in the direction of Toulon or Marseille and take exit n°32 Meyreuil. At the rondabout, take the 1st exit towards Aix-en-Provence. Follow the D7N for 500 m.

At the traffic lights, turn right towards Rue de la Belle du Canet.

#### From Marseille or Toulon:

Join the A52 highway to Aix-en-Provence and take exit n°32 Gardanne.

Take the D96 towards Aix-en-Provence.

At the rondabout, take the 3rd exit towards Aix-en-Provence. Follow the D7N for 500 m.

At the traffic lights, turn right towards Rue de la Belle du Canet.





The two training rooms have been carefully designed to comfortably accommodate up to 12 trainees.

What's more, one of these rooms is specially designed to accessible to disabled people.



## PEDAGOGICAL GAMES

They will enable you to test your skills on the RCC-E code and the NF ISO 19443 standard.

New to the marketplace, they involve memorization and team building.

What could be better than learning while having fun? Don't wait anymore, and challenge your colleagues.

on Windows Store



online!

### **CERTIFICATIONS**

Since January 2015 have we been members of AFCEN, and also participate in working groups. Our membership of **atcen**, allows us to participate in the RCC-E code working group and the code's drafting subcommittee. Our training courses on the RCC-E code are also accredited by the training sub-committee.

Then in September 2017, we registered under Datadock.

Subsequently, in 2018 we became partners and members of GIFEN.

This membership enables us to monitor quality and technology, and to take part in nuclear industry committees.

Since October 2020, we have been certified ISO 9001: 2015, by AFNOR.

Since December 2020, we have been certified Qualiopi, by AFNOR.

Since September 2024, we have been certified ISO 19443: 2018, by AFNOR.

legal declaration of activity is The registered under n°93 13 13 438 13 with the Prefect of the Provence-Alpes-Côte d'Azur region.

The registration does not constitute approval by the State.











## TRAININGS: PACKS AVAILABLE



#### **INTER PACK**

On-site training at our premises

#### Including:

- ✓ Lunch + snacks
- Pre-questionnaire
- Final MCQ
- On-the-spot evaluation
- Certificate of achievement

The satisfaction survey and follow-up evaluation are sent via Microsoft Forms.

A classroom equipped with a whiteboard and video projector



#### **INTRA PACK**

On-site training at your premises

#### Including:

- ✓ Snacks
- Pre-questionnaire
- Final MCQ
- On-the-spot evaluation
- Certificate of achievement

The satisfaction survey and follow-up evaluation are sent via Microsoft Forms.

The customer is responsible for: Lunch + video projector + whiteboard



#### PACK E-LEARNING

Online training on



#### Including:

- Username + password
- Intermediate exercises
- Final MCQ
- On-the-spot evaluation

The satisfaction survey and follow-up evaluation are sent via Microsoft Forms.

The certificate of achievement is sent when the module has been completed to 100% and a minimum score of 8/10 has been obtained in the final MCQ.



#### **PACK VISIO**

Microsoft Teams videoconference training



#### Including:

- PDF support
- Pre-questionnaire
- Final MCQ
- On-the-spot evaluation
- Certificate of achievement

The satisfaction survey and follow-up evaluation are sent via Microsoft Forms.

**(in)** The training document is stored on a secure cloud.

## **QUALITY AND NUCLEAR** SAFETY TRAINING

E1701

#### ISO 19443: 2018 Nuclear quality management system

#### Pre-requisite:

✓ Good knowledge of the English language.

Project manager, Business manager, Engineer and Manager for services such as manufacturing, Engineering office, methods, qualification, quality, purchasing, sales, marketing and human resources.

#### **Description:**

Analysis of the ISO 19443 standard and the interactions it may have with the decree of 07/02/2012, the safety culture according to INSAG-4, the EDF notes such as CCTG 051168 and PMUC.

#### Trainings goals:

- Be able to understand the logic of the decree of 07/02/2012,
- Be able to define an AIP/QRA list and associate the necessary tools,
- Be able to determine the requirements for building a QMS consistent with the decree of 07/02/2012,
- Be able to grasp the concept of nuclear safety culture.



3 days



at your premises



Max. 12 trainees

1ST DAY

#### 2<sup>ND</sup> DAY

3RD DAY

- History and nuclear context
- Functioning of a Pressurized Water Reactor (PWR)
- French regulatory texts
- Planning (with 2 exercises of QRA/AIP)
- Principles of safety demonstration
- Safety classification
- Qualification and preservation
- External providers
- Production and service provision
- Release of products and services
- Control of non-conforming outputs

• Introduction of ISO 19443 standard

- Context
- Leadership
- Nuclear Safety culture
- Operational planning and control
- Product/service requirements
- Design and development
- Performance evaluation
- Improvement
- Synthesis
- Assessment of knowledge by multiple choice questions (MCQ)



#### ISO 19443: 2018

#### Pre-requisite:

✓ Good knowledge of the English language.

#### Profile:

Anyone working on a nuclear project and wishing to be aware of requirements of this

#### **Description:**

ISO 19443: 2018 training.

#### Trainings goals:

- Discover the key points of ISO 19443 standard,
- Be able to understand ISO 19443 standard,
- Be able to apply ISO 19443 standard to a nuclear quality management system,
- Be able to make the links between ISO 19443, the decree of 07/02/2012 and the RCC-E code.



1 day





Max. 12 trainees

#### THE DAY

• History and nuclear context

- Operation of a Pressurized Water Reactor (PWR)
- French regulatory texts

• ISO 19443 key points

- Impact on your organisation
- Assessment of acquired knowledge by multiple choice questions (MCQ)

#### E1604

#### **Nuclear safety culture**

#### Pre-requisite:

✓ Good knowledge of the English language.

#### **Profile:**

Anyone working on a nuclear project.

#### **Description:**

Safety culture training applied to study, production and repair activities for a nuclear project.

#### **Training goals:**

- Be able to relate manufacturing requirements (AIP/QRA, FuD, etc.) to nuclear safety culture,
- Be aware of counterfeit, fraudulent or suspect items,
- Be able to understand safety culture in accordance with document INSAG-4,
- Be able to establish the relationship with the ISO 19443 standard.



1 day



premises or by



Max. 12 trainees

#### THE DAY

- History and nuclear context
- Operation of a Pressurized Water Reactor (PWR)
- French regulatory texts
- Management of Counterfeit Fraudulent or Suspect items (CFSI) risks in manufacturing (AIP/QRA, FuD...)
- Recall on the Chernobyl accident
- The different components of a safety culture
- Best practices in safety culture
- Assessment of acquired knowledge by multiple choice questions (MCQ)

## **ACCREDITED** TRAINING afcen

E1602

#### RCC-E 2012 Qualification and manufacturing of electrical equipment

#### Pre-requisite:

- ✓ Good knowledge of the English language.
- ✓ Some knowledge about electrotechnical and quality engineering.

#### **Profile:**

Project manager, Business manager, Engineer and manager of services such as manufacturing, Engineering office, methods, qualification and quality.

#### **Description:**

AFCEN-accredited training, on each requirement of the RCC-E, with focus on qualification, manufacturing and modification activities related to electrical material important to nuclear safety.

#### **Training goals:**

- Be able to understand the content of the RCC-E code.
- Be able to define the qualification limits and its preservation,
- Be able to define nuclear requirements in a quality management system,
- Be able to identify the requirements applicable to the manufacture of materials.
- Be able to understand the electrical equipment environment, includina installation rules, coordination and sizing.



3 days



In our training room or at your premises



trainees



#### 1ST DAY

- History and nuclear context
- Operation of a Pressurized Water Reactor (PWR)
- French regulatory texts

- Safety classification and associated requirements

2<sup>ND</sup> DAY

- Qualification for accidental conditions
- Software aspects of instrumentation and control (I&C)
- Preservation of qualification Records and traceability in manufacturing and control
- Monitoring by your customer

#### • RCC-E organisation

- Architecture of electrical systems
- Hardware aspects of control command
- Equipment engineering
- Electrical equipment installation rules
- Assessment of acquired knowledge by multiple choice questions (MCQ)









#### E2301

#### RCC-E 2012 Qualification and manufacturing of electrical equipment

#### Pre-requisite:

- ✓ Good knowledge of the English language.
- ✓ Some knowledge about electrotechnical and quality engineering.

#### **Profile:**

Project manager, Business manager, Engineer and manager of services such as manufacturing, Engineering office, methods, qualification and quality.

#### **Description:**

AFCEN-accredited training, detailing only qualification, manufacturing activities, inspection and modification of Equipment Qualified to Accidental Conditions.

#### **Training goals:**

- Be able to understand the content of the RCC-E code,
- Be able to define the qualification limits and its preservation,
- Be able to define nuclear requirements in a quality management system,
- Be able to identify exactly which quality documents are associated with RCC-E.



2 days



In our training room or at your premises



Max. 12 trainees



1ST DAY 2<sup>ND</sup> DAY

- History and nuclear context
- Operation of a Pressurized Water Reactor (PWR)
- French regulatory texts

- Preservation of qualification
- Hardware engineering
- Inspection and test methods

- RCC-E organisation
- Safety classification and associated requirements
- Qualification to accidental conditions

- Recording and traceability in manufacturing and control
- Surveillance carried out by your customer
- Assessment of acquired knowledge by multiple choice questions (MCQ)

E2402

**AFTERNOON** 

#### RCC-E 2012 Qualification and manufacturing of electrical equipment

#### Pre-requisite:

✓ Good knowledge of the English language.

#### **Profile:**

Anyone working on a nuclear project.

#### **Description:**

Awareness of the RCC-E 2012 code for all persons working in the nuclear field on electrical safety equipment.

#### **Training goal:**

• Be aware of certain requirements of the RCC-E 2012 code.



1 day



In our training room or at your premises or by videoconference



Max. 12 trainees



#### THE DAY

- History and nuclear context
- Operation of a Pressurized Water Reactor (PWR)
- French regulatory texts
- RCC-E organization
- Safety classification and associated requirements
- Qualification to accidental conditions

- Computer based system and PEC
  - Equipment engineering
  - Preservation of qualification
  - Recording and traceability in manufacturing and control
  - Surveillance carried out by your customer
  - Assessment of acquired knowledge by multiple choice questions (MCQ)





#### RCC-E 2019 Qualification and manufacturing of electrical equipment

#### **Pre-requisites:**

- ✓ Good knowledge of the English language.
- √ Some knowledge about electrotechnical and quality engineering.

#### **Profile:**

Project manager, Business manager, Engineer and manager of services such as manufacturing, Engineering office, methods, qualification and quality.

#### **Description:**

AFCEN-accredited training, on each requirement of the RCC-E, with focus on qualification, manufacturing and modification activities related to Elements Important for Protection (EIP).

#### **Training goals:**

- Be able to understand the content of the RCC-F code.
- Be able to define the qualification limits and its preservation,
- Be able to define nuclear requirements in a quality management system,
- Be able to accurately identify the quality documents associated with RCC-E,
- Be able to understand the electrical environment, equipment including installation rules, coordination and sizing.



3 days



In our training room or at your premises



Max. 12 trainees



1ST DAY 2<sup>ND</sup> DAY 3RD DAY

MORNING

**AFTERNOON** 

- History and nuclear context
- Operation of a Pressurized Water Reactor (PWR)
- French regulatory texts
- Qualification for normal ambient conditions
- Qualification for accidental conditions
- List of sensitive activities
- Preservation of qualification
- Routine tests

- Specification of needs
- Electrical power sources
- Requirements of instrumentation and control (I&C)
- Hardware engineering
- Supplier evaluation
- Installation rules
- Assessment of acquired knowledge by multiple choice questions (MCQ)

E2004

#### RCC-E 2019 Qualification and manufacturing of electrical equipment

#### **Pre-requisites:**

- ✓ Good knowledge of the English language.
- ✓ Some knowledge about electrotechnical and quality engineering.

#### **Profile:**

Project manager, Business manager, Engineer and manager of services such as manufacturing, Engineering office, methods, qualification and quality.

#### **Description:**

Accredited AFCEN training, detailing only qualification, manufacturing activities, inspection and modification of Equipment Qualified to Accidental Conditions.

#### **Training goals:**

- Be able to understand the content of the RCC-E code,
- Be able to define the qualification limits and its preservation,
- Be able to define nuclear requirements in a quality management system,
- Be able to accurately identify the quality documents associated with RCC-E.



2 days



In our training room or at your premises



Max. 12 trainees



#### 1ST DAY 2<sup>ND</sup> DAY

- History and nuclear context
- Operation of a Pressurized Water Reactor (PWR)
- French regulatory texts

- · Hardware engineering
- Preservation of qualification
- Control and test methods

- RCC-E organisation
- Qualification of equipment important to nuclear safety
- Instrumentation and control (I&C) systems

- Recording and traceability in manufacturing and control
- Surveillance carried out by your customer
- Assessment of acquired knowledge by multiple choice questions (MCQ)





#### **Pre-requisites:**

- ✓ Good knowledge of the English language.
- ✓ General knowledge of mechanics, metallurgy, pressure equipment manufacturing.
- ✓ Have the complete RCC-M code in an edition applicable to 2007, 2015, 2016, 2017, 2018 or 2020

#### Profile:

Project manager, Business manager, Engineer and manager of services such as manufacturing, Engineering office, methods, qualification and quality.

#### **Description:**

Training on the design, manufacture, inspection and control, and quality assurance of Nuclear Pressure Equipment (ESPN) subject to the RCC-M code.

#### **Training goals:**

- · Identify the contextual factors influencing regulations and standards in the nuclear field,
- Define the roles and objectives of AFCEN and RCC-M,
- · Classify equipment according to the different levels of RCC-M,
- · Select the volume applicable to a piece of equipment and the appropriate technical reference specification sheet,
- Describe the various physico-chemical tests required by the RCC-M,
- · Cite the issues relating to welding,
- Identify the various quality documents required in a manufacturing file.



2 days



In our training room or at your premises



Max. 12 trainees



#### 1ST DAY 2<sup>ND</sup> DAY

- History and nuclear context
- Operation of a Pressurized Water Reactor (PWR)
- French regulatory texts
- Presentation of AFCEN and RCC-M code
- Design approach
- Safety classification and RCC-M classification
- Collapse mode and margin coefficient
- Practical application: equipment design

- Procurement and materials
- Technical specification sheets
- Corrosion
- Fabrication and welding
- Quality documents (welding manuals)
- Inspection before installation
- Probationary rules
- Practical application: using the RCC-M to meet a specification
- Assessment of acquired knowledge by multiple choice questions (MCQ)

## **AWARENESS**







#### E1605

#### Nuclear requirement on your organisation

#### **Pre-requisites:**

✓ Good knowledge of the English language.

#### **Profile:**

Director, Project Manager, Manager and Head of various departments such as manufacturing, Engineering office, methods, qualification, quality, purchasing, sales and human resources.

#### **Description:**

Awareness of the main constraints on your organization related to the manufacture of safety-classified electrical equipment.

#### **Training goals:**

- Be able to understand the main requirements of ISO 19443 for your organization,
- Be able to integrate the safety culture and notions of counterfeit, fraudulent and suspect items into your organization,
- Be aware of the monitoring carried out by your customer.

#### 1/2 DAY

- History and nuclear context
- Pressurized Water Reactor (PWR) operation
- Management's commitment to nuclear safety
- Key requirements of ISO 19443
- Monitoring by your customer
- Assessment of knowledge by multiple choice questions (MCQ)

#### E1606

#### **Nuclear** requirement on your manufacturing process

#### **Pre-requisites:**

✓ Good knowledge of the English language.

#### **Profile:**

Business manager, Engineer, technician and Operator of services such as manufacturing, Engineering office, methods, qualification, quality, purchasing, sales & marketing, and human resources human.

#### **Description:**

Awareness of the main impacts related to the manufacture of electrical equipment important to nuclear safety.

#### **Training goals:**

- Be able to identify in manufacturing the main requirements of electrical equipment important to nuclear safety.
- Be able to integrate the safety culture and notions of counterfeit, fraudulent and suspect items into your manufacturing.

#### 1/2 DAY

rogrammable to

- History and nuclear context
- Pressurized Water Reactor (PWR) operation
- Qualification and durability
- Recording and traceability in manufacturing and control
- Key requirements of ISO 19443
- Assessment of knowledge by multiple choice questions (MCQ)

## **E-LEARNING**







E1806

#### **Nuclear safety culture**

E2101

ISO 19443: 2018

#### **Pre-requisites:**

- ✓ Good knowledge of the English language.
- ✓ Access to a computer and a broadband Internet connection

#### **Profile:**

Anyone working on a nuclear project. This module offers 3 profile types: Operator, Manager or Support. Course content, intermediate exercises and the final MCQ are adapted to the chosen profile.

#### **Description:**

Awareness of safety culture for anyone carrying out activities that could have an impact on the safety of classified equipment.

#### **Training goal:**

• Be aware of the nuclear safety culture.

#### **PROGRAM**

- History and nuclear context
- Operation of a Pressurized Water Reactor (PWR)
- Qualification according to the RCC-E code
- Quality Related Activities (QRA/AIP)
- The CFS items (Counterfeit, Fraudulent, Suspect)
- Origin of the safety culture
- The 3 main components
- Assessment of knowledge by multiple choice questions (MCQ)

#### **Pre-requisites:**

- ✓ Good knowledge of the English language.
- ✓ Access to a computer and a broadband Internet connection

#### **Profile:**

Anyone working on a nuclear project. This module offers 3 profile types: Operator, Manager or Support. Course content, intermediate exercises and the final MCQ are adapted to the chosen profile.

#### **Description:**

ISO 19443 awareness training for anyone working in the nuclear field on items or activities important to nuclear safety (ITNS).

#### **Training goal:**

• Be aware of the requirements related to ISO 19443: 2018 standard.

#### **PROGRAM**

## Achievable within a given timeframe

- Context and legislation
- Leadership
- Important To Nuclear Safety product (ITNS)
- Graded approach
- Competence and Awareness
- The CFS items (Counterfeit, Fraudulent, Suspect)
- Assessment of knowledge by multiple choice questions (MCQ)

E2104

#### **RCC-E 2012**

#### Pre-requisites:

- ✓ Good knowledge of the English language.
- ✓ Have a computer and a broadband Internet connection

#### Profile:

Anyone working on a nuclear project.

#### **Description:**

Awareness of the RCC-E 2012 code for all persons working in the nuclear field on electrical safety equipment.

#### **Training goal:**

• Be aware of certain requirements of the RCC-E 2012 code.

#### **PROGRAM**

## a given timeframe

- Operation of a Pressurized Water Reactor (PWR)
- Regulatory, normative and technical references
- The reasons for the existence of the RCC-E 2012 code and its constitution
- Engineering requirements and electrical systems
- Qualification, instrumentation and control and qualification preservation
- Nuclear Quality Management System
- Materials and installation engineering
- Assessment of knowledge by multiple choice questions (MCQ)

14

#### **Nuclear safety culture**

#### **Pre-requisites:**

- ✓ Good knowledge of the English language.
- ✓ Access to a computer and a broadband Internet connection

Anyone working on a nuclear project. This module offers 3 profile types: Operator, Manager or Support. Course content, intermediate exercises and the final MCQ are adapted to the chosen

#### **Description:**

Awareness of safety culture for anyone carrying out activities that could have an impact on the safety of classified equipment.

## Individual

1h30

**Online** 

#### **Training goal:**

• Be aware of the nuclear safety culture.

#### **PROGRAM**

## Achievable within a given timeframe

- History and nuclear context
- Operation of a Pressurized Water Reactor (PWR)
- Qualification according to the RCC-E code
- Quality Related Activities (QRA/AIP)

- The CFS items (Counterfeit, Fraudulent, Suspect)
- Origin of the safety culture
- The 3 main components
- Assessment of knowledge by multiple choice questions (MCQ)

E2101

ISO 19443: 2018

#### **Pre-requisites:**

- ✓ Good knowledge of the English language.
- ✓ Have a computer and a broadband Internet connection

Anyone working on a nuclear project. This module offers 3 profile types: Operator, Manager or Support. Course content, intermediate exercises and the final MCQ are adapted to the chosen profile.

#### **Description:**

ISO 19443 awareness training for anyone working in the nuclear field on items or activities important to nuclear safety (ITNS).

#### **Training goal:**

• Be aware of the requirements related to ISO 19443: 2018 standard.

## 1h30 Online Individual

#### **PROGRAM**

## Achievable within a given timeframe

- Context and legislation
- Leadership
- Important To Nuclear Safety product (ITNS)
- Graded approach
- Competence and Awareness
- The CFS items (Counterfeit, Fraudulent, Suspect)
- Assessment of knowledge by multiple choice questions (MCQ)



#### **Pre-requisites:**

- ✓ Good knowledge of the English language.
- ✓ Have a computer and a broadband Internet connection

#### **Profile:**

Anyone working on a nuclear project.

#### **Description:**

Awareness of the RCC-E 2012 code for all persons working in the nuclear field on electrical safety equipment.

#### **Training goal:**

• Be aware of certain requirements of the RCC-E 2012 code.



#### **PROGRAM**

## Achievable within a given timeframe

- Operation of a Pressurized Water Reactor (PWR)
- Regulatory, normative and technical references
- The reasons for the existence of the RCC-E 2012 code and its constitution
- Engineering requirements and electrical systems
- Qualification, instrumentation and control and qualification preservation
- Nuclear Quality Management System
- Materials and installation engineering
- Assessment of knowledge by multiple choice questions (MCQ)



Phone: +33 (0)4 42 68 09 65

contact@sicanucleaire.fr



www.sicanucleaire.fr

