

Training catalogue 2021

Éditorial

Since the Fukushima accident, our civil society has evolved and has never needed security as much, which is, according to Law 2006/686 of June 13, 2006, a set of areas that include nuclear safety.

It is with a permanent concern for performance and a demanding and strict ethical framework that SICA Nucléaire has provided you with its solutions since 2009. Relying on strong technical and quality internal skills, we provide customers the best service :

INSPECTION of supply of materials from your suppliers to the packaging of the finished product through entry control, manufacture and final control on your premises.

AUDIT in order to prepare the supplier qualification, to justify mastery of the AIP/QRA, to identify any deviation from the nuclear benchmarks, to select your subcontractors and to evaluate them periodically.

TECHNICAL SUPPORT, accompanying you in :

- Nuclear quality management system qualification by identification and justification of AIPs/QRAs, drafting of Specific Quality Assurance Plan, implementation of contractual documents (Reference File, Follow Up Document, End of Manufacturing Report, etc).
- Material qualification by drafting Qualification Summary report, Specific Qualification Program, Qualification Preservation Sheet, Identification File, Operation and Maintenance Guide or produce specifications for laboratories, and then by implementing the tests.

TRAINING, as follows...

“ Require the best for nuclear safety.”

Table of contents

Training organisation 4

Nuclear quality management System

	Module ref.	Days	Page
General rules relative to Basic Nuclear Installations			
Order of February 7th 2012	E1601	2	5
Safety culture	E1604	1	6
Nuclear quality management system	E1701	3	6
ISO 19443 : 2018	E2003	1	7

afcen accredited trainings

	Module ref.	Days	Page
RCC-E 2012 Qualification and manufacturing of electrical equipment	E1602	3	8
RCC-E 2016 Qualification and manufacturing of electrical equipment	E1801	3	9
RCC-E 2016 Qualification and manufacturing of electrical equipment	E1808	2	9
RCC-E 2019 Qualification and manufacturing of electrical equipment	E2001	3	10
RCC-E 2019 Qualification and manufacturing of electrical equipment	E2004	2	10
RCC-E 2019 Qualification and manufacturing of electrical equipment	E1802	1	11
Updating RCC-E 2012 -> 2016			

Awareness

	Module ref.	Hours	Page
Nuclear requirements for your organisation	E1605	4	12
Nuclear requirements for your manufacturing process	E1606	4	13
CCTR paint note	E1803	4	13
CSCT packaging	E1804	2	14
PMUC note	E1805	2	14

E-learning

	Module ref.	Hour	Page
Safety culture awareness	E1806	1	15
ISO 19443 : 2018 awareness	E2101	1	15



All these trainings are available in french

Training organisation



Planning

- ✓ Courses organized with a maximum number of people identified for each module
- ✓ Number of trainees to meet educational objectives SICA Nucléaire set for itself
- ✓ Minimum period of 2 weeks, between your request and the organisation of a training course, before sending you:
 - Agreement and training program
 - Invitation and internal regulations
 - Logistic information to access SICA Nucléaire premises



Processus certified Qualiopi

Our training center just received in décembre 2020 the Qualiopi certification. It complies with our CO1 procedure mapping. To illustrate it, here are the process' key points:

- ✓ Training material delivery for each trainee
- ✓ Secure access to a Cloud gathering nuclear related public data
- ✓ Validation of acquired knowledge by a MCQ (Multiple Choice Questionnaire) at the end of the training
- ✓ Feedback through your comments and suggestions on the satisfaction sheet at the end of the training
- ✓ Sending following documents to the trainees' manager:
 - Attendance sheet certificate (co-signed by AFCEN for certified training)
 - Presence sheet signed by each trainee
 - Corrected MCQ
 - satisfaction sheets
- ✓ Indicative training schedules: from 9 a.m. to 12:30 p.m. and from 1:30 p.m. to 5 p.m.

Each one of our inter-companies trainings is handicap accessible.



Suggested contracts

- ✓ **Integral Pack** includes training, coffee breaks, Trainees' lunches, as well as conference room equipped with a video projector and a paperboard
- ✓ **Essential Pack** includes training with coffee breaks. Trainee's lunches as well as conferencel room equipped with a video projector and a paperboard remain the responsibility of the customer
- ✓ **Visio Pack** includes training support in pdf on a securised cloud
- ✓ **E-learning Pack** includes sending username and password to access the platform hosting the module



SICA Nucléaire

- ✓ Lump sum invoicing when the number of participants is less than 6 people
- ✓ Discount on individual rate applicable from the 8th registered in the same training session
- ✓ The legal declaration of activity is registered under number 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.
- ✓ Registration under Datadock since 09/2017
- ✓ Certified ISO 9001 : 2015 since 10/2020
- ✓ Certified QUALIOPi since 12/2020



Nuclear quality management System

E1601

General rules relative to Basic Nuclear Installations - Order of February 7th 2012

Pre-requisite:

- ✓ Good knowledge of the English language

Profile:

Project manager, business manager, Engineer and Manager of services such as manufacturing, design office, methods, qualification, quality, purchasing, marketing, sales, and human resources.

Description:

Analysis of the decree of 07/02/2012 (General rules relative to Basic Nuclear Installations) and its impact on the study, supply and manufacturing activities carried out on Elements Important for Protection (EIP).

Educational goals - training goals:

- Be able to understand the logic and the context of the Decree of 07/02/2012,
- Being able to understand the necessity of Activities Important Protection (AIP)/Quality Related Activities (QRA),
- Being able to draw a list of AIP/QRA by associating the necessary tools with it,
- Be able to identify exactly the quality documents associated with the Decree of 07/02/2012,
- Be able to determine the requirements for build a QMS consistent with the decree of the 02/07/2012.



2 days



In our training room or on your premises



Max. 12 people

1st DAY

2nd DAY

MORNING

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

- Forwarding of requirements to suppliers
- Exercise of AIP/QRA identification for some equipment
- Monitoring from your client

AFTERNOON

- Safety demonstration of a BNI
- Safety classifications and associated requirements
- Presentation of AIP/QRA
- Practical exercise on an AIP/QRA

- Other obligations of BNI operators
- Impact on your organisation
- Assessment of acquired knowledge by multiple choice questions

E1604 Safety culture

Pre-requisite

- ✓ Good knowledge of the English language

Profile:

Anyone working on nuclear business and wishing to be aware of the requirements of this area.

Description:

Safety culture training applied to design, study, production, maintenance, operation and repair for a nuclear project.

Educational goals - training goals:

- Be able to identify the safety culture, components
- Be able to assess and implement a safety culture,
- Be able to understand the logic of RCC-E and the Decree of 07/02/2012 (BNI general rules),
- Be able to define the RCC-E associated documents
- Be able to identify the impact of AIP/QRA on your organisation.



1 day



In our training room or on your premises



Max. 12 people

DAY

MORNING

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

AFTERNOON

- Recall on the Chernobyl accident
- The different components of a safety culture
- Good practices in safety culture
- Assessment of acquired knowledge by multiple choice questions

E2003 ISO 19443 : 2018

Prerequisites:

- ✓ Good knowledge of the English language

Profile:

Anyone working on nuclear business and wishing to be aware of requirements of this area.

Description:

ISO19443: 2018 training.

Educational goals :

- Discover the key points of ISO19443 standard,
- Be able to understand ISO19443 standard and its overlap with ISO 9001,
- Be able to apply ISO19443 standard to a nuclear quality management system,
- Be able to identify the links between ISO19443, the BNI rules and the RCC-E.



1 day



In our training room or on your premises



Max. 12 people

DAY

MORNING

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

AFTERNOON

- ISO19443 key points
- Relationship between ISO19443 and ISO9001
- Impact on your organisation
- Assessment of acquired knowledge by multiple choice questions (MCQ)

E1701 Nuclear quality management system

Pre-requisite

- ✓ Good knowledge of the English language

Profile:

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

Description:

Analysis of the decree of 07/02/2012 (BNI rules) and its impact on the design, supply and manufacturing activities carried out on Elements Important for Protection (EIP).

Educational goals:

- Be able to understand the logic of the Decree of 07/02/2012 (BNI Rules),
- Be able to recognize Activities Important Protection (AIP)/Quality Related Activities (QRA),
- Be able to define a AIP/QRA list by associating the necessary tools,
- Be able to accurately identify quality documents associated with the Decree of 07/02/2012,
- Be able to determine requirements.



3 days



In our training room or on your premises



Max. 12 people

1ST DAY

2ND DAY

3RD DAY

MORNING

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

- Transfer of requirements to suppliers
- AIP/QRA identification exercise on equipment
- Monitoring from your client
- Other requirement concerning BNI operators

- Good safety culture practices
- Scope of the General Technical Specification Book (GTSC/CCTG)
- Main GTSC/CCTG requirements and impacts for a nuclear project

AFTERNOON

- Safety demonstration of a BNI
- Safety classifications and associated requirements
- Presentation of AIP/QRA
- Practical exercise on AIP/QRA

- Impact on your organisation
- The different Safety culture components
- Other requirement concerning BNI operators

- Applicability of PMUC note
- Main requirements and impacts of PMUC note for a nuclear project
- Assessment of acquired knowledge with a multiple-choice question sheet (MCQ)

afcen accredited trainings

E1602 RCC-E 2012 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, design 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 Protection (EIP).

Educational goals:

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

 3 days

 In our training room or on your premises

 Max. 12 people



	1 ST DAY	2 ND DAY	3 RD DAY
MORNING	<ul style="list-style-type: none"> • History and nuclear context • Operation of a Pressurized Water Reactor (PWR) • French regulatory texts 	<ul style="list-style-type: none"> • EIP Definition • Safety classification and associated requirements • Qualification for accidental conditions 	<ul style="list-style-type: none"> • Supplier qualification and rules in probation phase • Hardware engineering • Control and test methods
AFTERNOON	<ul style="list-style-type: none"> • RCC-E organisation • Architecture of electrical systems • Engineering of I&C systems 	<ul style="list-style-type: none"> • Management of a nuclear project • Qualification sustainability • Practical exercise on an AIP/QRA 	<ul style="list-style-type: none"> • Electrical equipment installation rules • Assessment of acquired knowledge by multiple choice questions (MCQ)

E1801 RCC-E 2016 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, design 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 Protection (EIP).

Educational goals:

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

 3 days

 In our training room or on your premises

 Max. 12 people



	1 ST DAY	2 ND DAY	3 RD DAY
MORNING	<ul style="list-style-type: none"> • History and nuclear context • Operation of a Pressurized Water Reactor (PWR) • French regulatory texts 	<ul style="list-style-type: none"> • Practical exercise on the qualification of equipment • Requirements of control systems 	<ul style="list-style-type: none"> • List of sensitive activities • Practical exercises on quality documents • Routine tests
AFTERNOON	<ul style="list-style-type: none"> • Specification of needs • Electrical power sources • EIP Qualification for accidental conditions 	<ul style="list-style-type: none"> • Hardware engineering • Qualification sustainability • Management of a nuclear project 	<ul style="list-style-type: none"> • Supplier evaluation • Installation rules • Assessment of acquired knowledge by multiple choice questions (MCQ)

E1808 RCC-E 2016 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, design office, methods, qualification and quality.

Description:


Accredited AFCEN training, detailing only qualification, manufacturing activities, inspection and modification

of Equipment Qualified to Accidental Conditions (MQCA).

Educational goals:

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

 2 days

 In our training room or on your premises

 Max. 12 people



	1 ST DAY	2 ND DAY
MORNING	<ul style="list-style-type: none"> • History and nuclear context • Operation of a Pressurized Water Reactor (PWR) • French regulatory texts 	<ul style="list-style-type: none"> • Qualification Sustainability • Hardware engineering • Control and test methods
AFTERNOON	<ul style="list-style-type: none"> • RCC-E organisation • Architecture of electrical systems • Qualification and production of safety classified equipment 	<ul style="list-style-type: none"> • Supplier qualification • Management of a nuclear project • Assessment of acquired knowledge by multiple choice questions (MCQ)

E2001 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, design 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 Protection (EIP).

Educational goals:

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

 3 days

 In our training room or on your premises

 Max. 12 people



1ST DAY

2ND DAY

3RD DAY

MORNING

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

- Practical exercise on the qualification of equipment
- Requirements of control systems

- List of sensitive activities
- Practical exercises on quality documents
- Routine tests

AFTERNOON

- Specification of needs
- Electrical power sources
- EIP Qualification for accidental conditions

- Hardware engineering
- Qualification sustainability
- Management of a nuclear project

- 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, design office, methods, qualification and quality.

Description:


Accredited AFCEN training, detailing only qualification, manufacturing activities, inspection and modification

of Equipment Qualified to Accidental Conditions (MQCA).

Educational goals:

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

 2 days

 In our training room or on your premises

 Max. 12 people



1ST DAY

2ND DAY

MORNING

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

- Qualification Sustainability
- Hardware engineering
- Control and test methods

AFTERNOON

- RCC-E organisation
- Architecture of electrical systems
- Qualification and production of safety classified equipment

- Supplier qualification
- Management of a nuclear project
- Assessment of acquired knowledge by multiple choice questions (MCQ)

E1802 Updating RCC-E 2012 → 2016

Pre-requisites:

- ✓ Good knowledge of the English language
- ✓ Have followed the SICA Nuclear training on the 2012 version

Profile:

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

Description:

- Training on design, manufacture, modification or repair of Equipment Important for Protection (EIP) activities

Educational goals:

- Be able to understand the content of the code RCC-E 2016,
- Being able to grasp the developments of RCC-E 2016 compared to the 2012 version,
- Recall the main requirements of RCC-E 2016 applicable to:
 - equipment qualification and its sustainability,
 - Industrial quality systems,
 - Equipment installation on site.

 1 day

 In our training room or on your premises

 Max. 12 people



DAY

MORNING

- History and nuclear context
- Operation of a Pressurized Water Reactor (PWR)
- Organisation of the RCC-E
- Safety classification
- Qualification of classified safety equipment

AFTERNOON

- Presentation of the of the amended I&C chapter
- New elements on hardware engineering
- Evolutions on on-site installation
- Assessment of acquired knowledge by multiple choice questions (MCQ)

Awareness

E1605 Nuclear requirement for your organisation

Prerequisites:

- ✓ Good knowledge of the English language

Profile:

Director, Project Manager, Manager and Head for various services such as manufacturing, design office, methods, qualification, quality, purchasing, trade, and human resources.


Description:

Awareness of the main constraints related to the manufacture of electrical equipment classified security, on your organisation.

Educational goals:

- Be able to understand the logic of the Decree of 07/02/2012,
- To be able to draw the contours of the Important Activity for Protection/Quality Related Activities (AIP/QRA) by associating necessary tools,
- Be able to identify the AIP/QRA impact on your organisation.

 15 1/2 day

 In our training room or on your premises

 Max. 12 people

1/2 DAY

Programmable at your convenience

- History and nuclear context
- Operation of a Pressurized Water Reactor (PWR)
- Definition of EIP and AIP/QRA
- Qualification of material important for safety
- Management of a nuclear project
- Impact of nuclear requirements on your organisation
- Assessment of acquired knowledge by multiple choice questions (MCQ)

E1606 Nuclear requirements for your manufacturing process

Prerequisites:

- ✓ Good knowledge of the English language

Profile:

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


Description:

Awareness of the main impacts related to the production of safety classified electrical equipment, on your manufacturing process.

Educational goals:

- Be able to understand the logic of the RCC-E code,
- Be able to define the documents required by the RCC-E,
- Be performant during an inspection or audit with regard to these nuclear requirements.

 15 1/2 day

 In our training room or on your premises

 Max. 12 people

1/2 DAY

Programmable at your convenience

- History and nuclear context
- Operation of a Pressurized Water Reactor (PWR)
- Safety culture
- Reminder of the definition of EIP
- Safety classification and qualification
- Requirements related to AIP/QRA
- Impact on manufacturing
- Assessment of acquired knowledge by multiple choice questions (MCQ)

E1803 CCTR paint note

Prerequisites:

- ✓ Good knowledge of the English language

Profile:

Project Manager, Manager, Business Manager, Quality Engineer, Method engineer, Painting Manager.


Description:

Awareness of the Coating Application Specific Requirements (CCTR) on painting activities performed on equipment intended for EDF nuclear power plants.

Educational objective:

- Be able to understand the requirements of the CCTR.

 15 1/2 day

 In our training room or on your premises

 Max. 12 people

1/2 DAY

Programmable at your convenience

- Role of paint
- Qualification of paint systems
- Certifications required
- Storage and packaging
- Assessment of acquired knowledge by multiple choice questions (MCQ)

E1804 CSCT Packaging

Prerequisites:

- ✓ Good knowledge of the English language

Profile:

Project Manager, Manager, Account Manager, Quality Engineer, Method engineer, Packaging / Shipping Service.


Description:

Awareness of Book of Specification and Technical Conditions (CSTC) requirements dealing with long-term packaging, packing marking, loading and transport of equipment for EDF nuclear power plants.

Educational objective:

- Be able to understand the requirements of the CSTC packaging which specifies the EDF requirements relating to packaging and packing.

 2 hours

 In our training room or on your premises

 Max. 12 people

2 HOURS

Programmable at your convenience

- Presentation of the different types of packaging
- Specific requirements for packing
- Marking and labelling
- Assessment of acquired knowledge by multiple choice questions (MCQ)

E1805 PMUC NOTE

Prerequisites:

- ✓ Good knowledge of the English language

Profile:

Project manager, Manager, Business manager, Quality engineer, Method engineer, Workshop manager.


Description:

Awareness of PMUC note requirements (Products and Materials Usable in Nuclear Power Plants) which specifies the sulphur and halogen limit rates for manufacturing, packaging, installation and maintenance of equipment for EDF nuclear power plants.

Educational goals:

- Be able to understand the requirements of the PMUC note,
- Be able to identify the PMUC note impact on your equipment.

 2 hours

 In our training room or on your premises

 Max. 12 people

2 HOURS

Programmable at your convenience

- Scope of PMUC note
- Different types of corrosions
- Product approval
- Specifications to be respected
- Assessment of acquired knowledge by multiple choice questions (MCQ)

E-learning

E1806 Safety culture awareness

Prerequisites:

- ✓ Good knowledge of English language
- ✓ Possess a computer and a broadband internet connection

Profile:

Anyone working in nuclear industry.

Description:

E-learning awareness of safety culture for operators carrying out activities that can impact the safety of classified safety equipment.

Educational goals:

- Be aware of the requirements related to manufacturing.

 1 hour

 Remote

 Individual

1 HOUR

Achievable over a given period

- History and nuclear context
- Operation of a Pressurized Water Reactor (PWR)
- Activity Important for Protection/ Quality Related Activities (AIP/QRA)
- Qualification of classified safety equipment
- Safety culture
- Assessment of acquired knowledge by multiple choice questions (MCQ)

E2101 ISO 19443 : 2018 awareness

Prerequisites:

- ✓ Good knowledge of English language
- ✓ Possess a computer and a high-speed internet connection

Profile:

Anyone working in nuclear industry.

Description:

E-learning awareness of ISO 19443: 2018 standard for anyone working in nuclear industry carrying out activities that can impact the safety of classified safety equipment.

Educational goals:

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

 1 hour

 Remote

 Individual

1 HOUR

Achievable over a given period

- Context and legislation
- Discovery of ISO 19443: 2018 standard
- Products and services Important To Nuclear Safety (ITNS)
- Counterfeit, Fraudulent and Suspect (CFS) items
- Safety culture
- Assessment of acquired knowledge by multiple choice questions (MCQ)

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