



# **Interregional Training Course on Fundamentals of Safe, Secure and Sustainable Nuclear Power Generation through the Intercontinental Nuclear Institute (INI)**

**Hosted by**

**The Government of the Czech Republic and United States of America**

**through a virtual component on**

**25 August – 29 September 2025**

**followed by an onsite component through the**

**NuclearHub**

**Prague, Czech Republic**

**6 – 18 October 2025**

**University of Massachusetts Lowell**

**Lowell (MA), United States of America**

**19 – 31 October 2025**

**Ref. No.: TN-INT0101-EVT2500886**

## **Information Sheet**

## Purpose

The purpose of the event is to train the participants on practical fundamentals of safe, secure and sustainable nuclear power generation.

## Working Language(s)

The working language(s) of the event will be **English**.

## Deadline for Nominations

Nominations received after **30 June 2025** will not be considered.

## Project Background

The IAEA supports Member States in developing national long-term nuclear energy strategies as part of a globally sustainable nuclear energy infrastructure. This is achieved through capacity building, global dialogue and technical engagement. A sustainable nuclear power programme must prioritize the highest levels of safety and security, address real long-term energy needs, mitigate proliferation risks and, ensure robust design and operation.

To this end, the Intercontinental Nuclear Institute (INI) plays a key role in developing a well-informed workforce capable of supporting the long-term sustainability of nuclear power programmes worldwide.

## Expected Outputs

The expected outputs of the INI programme are:

- Participants acquired hands-on experience in key practical areas of nuclear engineering, with a focus on nuclear industry and safety aspects.
- Participants gained fundamental knowledge and practical insights into the nuclear energy sector, supporting their professional development and potential future involvement in the industry.

## Scope and Nature

The INI programme, (<http://www.intercontinental-nuclear-institute.com/>) is supported by the IAEA, and will provide fundamental and practical training through hands-on experiments and insights into the nuclear industry. The programme consists of the following components:

- An online component will take place before the onsite training, consisting of technical lectures, discussions, group work, exercises and standalone e-learning modules.
- Technical lectures and workshops will be delivered by academic and industry experts, covering topics such as nuclear science and engineering, technology, planning, licensing, management, procurement, construction, human resource development, knowledge management, and safety and security culture in nuclear power programmes.
- Hands-on experiments will be conducted at the UML Radiation Laboratory, including the UML Research Reactor, as well as at various research reactors in the Czech Republic. These activities will

be guided by nuclear engineering professors and reactor operators, focusing on key nuclear reactor theory, practical applications, and safety concepts.

- Technical visits to various nuclear facilities, including nuclear power plants, in the Czech Republic and the United States.
- Assessment tools will be utilized during classes to evaluate session effectiveness.
- Evaluation forms will be provided to collect feedback on the pace and method of instruction, allowing for continuous improvement of the programme.

Ability to participate in all activities, both virtual and onsite, is a prerequisite for the acceptance into the programme and for the successful course completion. Participation in all online activities is a prerequisite before attending the onsite components in the Czech Republic and the United States. A certificate will be provided upon successful completion of the course.

## **Participation**

The INI programme is open to participants from IAEA Member States. Priority will be given to the qualified candidates from countries that operate, have operated or are planning to operate nuclear power plants. In particular, the following Member States are targeted: Algeria, Argentina, Armenia, Bangladesh, Brazil, Bulgaria, Croatia, Czech Republic, Egypt, El Salvador, Estonia, Ethiopia, Ghana, Hungary, Indonesia, Jordan, Kazakhstan, Kenya, Lithuania, Mexico, Morocco, Niger, Nigeria, Pakistan, Philippines, Poland, Romania, Saudi Arabia, Senegal, Slovakia, Slovenia, South Africa, Sri Lanka, Thailand, Tunisia, Türkiye, Uganda, Ukraine, United Arab Emirates, United States of America, Uzbekistan, Viet Nam, and Zambia.

Acceptance of participants will depend on the availability of funding. Self-funding is accepted.

Applicants who have previously participated in the INI programme will not be considered for participation.

## **Participants' Qualifications and Experience**

Participants should be early-career professionals, preferably with 3 to 5 years of work experience in the nuclear sector or industry, and generally not older than 35 years. Candidates should have: (i) a degree in science or engineering outside of the nuclear field (primary audience), or (ii) a degree in the nuclear sciences but with no or limited practical experience in the nuclear industry (secondary audience), or (iii) a non-nuclear degree but experience in the nuclear field (tertiary audience).

Participants should be able to demonstrate a keen interest in working in the nuclear energy sector. Applications from PhD or Master's students who do not meet the selection requirements will not be considered.

The intercontinental training course will be conducted in English, and candidates may be contacted for an English interview with an IAEA panel, in addition to submitting a certified English proficiency confirmation, to ensure active participation.

All nominations must include a passport-size photo on the first page of the nomination (top right corner) as well as a copy of the first page of the applicant's passport (with photo). Incomplete nominations will not be reviewed.

# Occupational Exposure to Radiation

This event may involve occupational exposure to radiation. Therefore, candidates are required to duly complete and return the Occupational Exposure History (OEH) form upon applying for the event. The IAEA will provide selected participants in due course with a dosimeter to monitor their occupational exposure during this event.

## Application Procedure

Candidates wishing to apply for this event should follow the steps below:

1. Access the InTouch+ home page (<https://intouchplus.iaea.org>) using the candidate's existing Nucleus username and password. If the candidate is not a registered Nucleus user, she/he must create a Nucleus account (<https://websso.iaea.org/IM/UserRegistrationPage.aspx>) before proceeding with the event application process below.
2. On the InTouch + platform, the candidate must:
  - a. Finalize or update her/his personal details, provide sufficient information to establish the required qualifications regarding education, language skills and work experience ('Profile' tab) and upload relevant supporting documents;
  - b. Download and complete the [Designation of Beneficiary and Emergency Contact Form](#), and upload to InTouch+ ('Profile' tab under the personal section) specifying the document name. If already provided, kindly discard this step; and
  - c. Search for the relevant technical cooperation event (**EVT2500886**) under the 'My Eligible Events' tab, answer the mandatory questions and lastly submit the application to the required authority.

**NOTE:** Completed applications need to be approved by the relevant national authority, i.e. the National Liaison Office, and submitted to the IAEA through the established official channels by the provided designation deadline.

For additional support on how to apply for an event, please refer to the [InTouch+ Help page](#). Any issues or queries related to InTouch+ can be addressed to [InTouchPlus.Contact-Point@iaea.org](mailto:InTouchPlus.Contact-Point@iaea.org).

Should online application submission not be possible, candidates may download the nomination form for the training course from the [IAEA website](#).

**NOTE:** A medical certificate signed by a registered medical practitioner dated not more than four months prior to starting date of the event must be submitted by candidates when applying.

## Administrative and Financial Arrangements

The INI programme will be organized through two different types of participants: IAEA Financed (Type I) and Self-Funded (Type II).

Selected IAEA financed (Type I) participants will be provided with a round-trip travel from their home countries to Prague, Czech Republic, from Prague, Czech Republic, to Lowell, United States of America, and back to their home countries. In addition, the IAEA will cover the training fees and daily expenses.

Self-funded (Type II) participants (or their funding entity) are responsible for the training course fee of USD 13,200, which includes online lectures, group materials, meals, accommodation, transportation and technical tours. They will be also responsible for the travel from their home countries to Prague.

Czech Republic, from Prague, Czech Republic, to Lowell, United States of America, and back to their home countries.

**When submitting the training course nomination form to the IAEA, candidates are requested to indicate in the header whether their application is to be considered as an IAEA Financed (Type I) or as a Self-Funded (Type II) application.**

Nominating authorities will be informed in due course of the names of the candidates who have been selected and will at that time be informed of the procedure to be followed with regard to administrative and financial matters.

## **Disclaimer of Liability**

The organizers of the event do not accept liability for the payment of any cost or compensation that may arise from damage to or loss of personal property, or from illness, injury, disability or death of a participant while he/she is travelling to and from or attending the course, and it is clearly understood that each Government, in approving his/her participation, undertakes responsibility for such coverage. Governments would be well advised to take out insurance against these risks.

## **Note for women participants**

Any woman engaged by the IAEA for work or training should notify the IAEA on becoming aware that she is pregnant.

The Board of Governors of the IAEA approved new International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources. The Standards deal specifically with the occupational exposure conditions of women workers by requiring, inter alia, that a woman worker should, on becoming aware that she is pregnant, notify her employer in order that her working conditions may be modified, if necessary. This notification shall not be considered a reason to exclude her from work; however, her working conditions, with respect to occupational exposure shall be adapted with a view to ensuring that her embryo or foetus be afforded the same broad level of protection as required for members of the public.

## **IAEA Contacts**

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