



Professional Development & Certification Program

Dan Goldberg, ANS Director of Programs

OVERVIEW & BACKGROUND

Professional Development

New program was developed by the ANS Special Committee on Certification

- Established in 2022 by President Steven Arndt
- Chaired by Rebecca Steinman (Constellation Energy)

Market research led to the recommendation of two programs:

- Professional Development Certificate Program
- Certified Nuclear Professional Development Credential

CERTIFICATE COURSES

Current Offerings



Nuclear 101

- Sold out two years in a row, 20 students per class
- Next offering: November 9-13 in Washington, DC
- Online version to be released in early 2026



Nuclear Licensing & Regulation

- Released in March through new online learning platform
- 16-hour online course
- \$595 for Members/\$795 for Non-members
- Practice exam also available



Coming Soon!

- Radioactive Waste Management
 - November 13 in Washington, DC
- The Business of Nuclear Economics
 - Nuclear Energy Conference & Expo 2026, August 24-27

CERTIFICATE COURSES

Nuclear 101 Topics



32-hour course with 8 hours of pre-course materials covering:

- History and Legacy of Nuclear
- Nuclear Fundamentals
- Introduction to Nuclear Fuel Cycle
- Nuclear Reactors and Power Generation
- Licensing and Regulatory Concepts
- Radiation Detection and Measurement
- Health Physics and Radiation Safety
- Non-Power Applications of Nuclear Energy
- Nuclear Safety Culture
- Perspectives in Nuclear
- Elective modules:
 - Nuclear Non-Proliferation
 - Decommissioning
 - Advanced Reactor Technologies
 - Simulation Tools in the Nuclear Industry
 - Storage, Transportation, and Disposal of Radioactive Material

CERTIFICATE COURSES

Nuclear 101 Contributors

Alex Lang

Andrew Sowder

Bob Martin

Candace Davison

Carl Willis

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Chris Lohse

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Supathorn

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CERTIFICATE COURSES

Nuclear 101 Instructors



Steven Arndt
Oak Ridge National Laboratory



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Oak Ridge National Laboratory



Mary Lou Dunzik-Gougar
Idaho State University



Ugur Mertuyrek
Oak Ridge National Laboratory



Walid Metwally
Oak Ridge National Laboratory



Mark Schanfein
Idaho National Laboratory



CERTIFICATE COURSES

Nuclear 101 Attendees

- Accountant
- Assistant Manager of R&D
- Business Development Engineer
- Director of Business Development
- Director of Congressional & External Affairs
- Director of Marketing
- Director of Sales & Marketing
- Educator
- Engineering Manager
- Environmental Health and Safety Manager
- Manager, Learning & Development
- Mechanical Engineer
- Nuclear Engineering Supervisor
- PhD Candidate
- President & CEO
- Principal
- Professor
- Program Manager
- Quality Manager
- R&D Program Manager
- Science Writer and Communications Specialist
- Sr. Manager AI Development
- Senior Nuclear Training Instructor
- Senior Scientist
- Senior Underwriter
- Social Media Coordinator
- Vice President of Sales Engineering Director

CERTIFICATE COURSES

Licensing & Regulation Topics

Available Online Now

16-hour certificate course features 13 self-paced modules covering:

- Overview of NRC, DOE and EPA
- Types of NRC Licenses
- Safety Analysis Reports
- Technical Specification and Bases
- Licensing Change Processes
- Reactor Oversight Process
- Fuel Licensing Considerations
- Transportation
- Waste Management
- Decommissioning Regulations
- International Regulatory Framework



CERTIFICATE COURSES

Radioactive Waste Management

November 13, 2025 | Washington, D.C.

Held in conjunction with 2025 ANS Winter Conference

7-hour course covering:

- Nuclear fuel cycle and radioactive waste
- Nuclear waste regulations and waste classification
- Radioactive waste transportation and storage
- Reprocessing and advanced fuel cycle technologies
- Disposal technologies (LLW, WIPP, HLW)
- Performance assessments of nuclear waste repositories
- Sociotechnical aspects of radioactive waste management



REGISTRATION OPENS SOON!

CERTIFIED NUCLEAR PROFESSIONAL (CNP)

Just Launched This Summer!

- Eligibility Requirements: High school or GED plus 2 years of nuclear experience or education
- Summer, Fall, and Spring testing periods
 - Fall applications open September 15 to test between November 12 – December 16
- Exams are in person at Pearson Vue testing centers and online in 2026
- Must renew every three years by paying fee and 36 hours of CE hours



CERTIFIED NUCLEAR PROFESSIONAL (CNP)

Exam Content Outline

- 20% Nuclear fundamentals
- 15% General nuclear safety culture
- 15% Nuclear power
- 10% Industry codes & standards in nuclear facilities
- 10% Applied health physics
- 10% Licensing & regulatory concepts
- 10% Non-power application of radiation & nuclear technology
- 10% Fuel cycle & waste management



CERTIFIED NUCLEAR PROFESSIONAL (CNP)

Applicant Audience

- Consultant - Nuclear Safety
- Contractor
- Engineering Technologist
- Environmental Scientist
- Group Lead, Fusion Safety and Regulation
- Health Physicist
- Nuclear Expert
- Nuclear Facility Manager
- Nuclear Fuel Engineer
- Nuclear Reactor Supervisor
- Nuclear Unit Supervisor (SRO)
- Physics Manager
- Principal Engineer Discipline Lead
- Process Design Engineer
- Project Lead
- Radiographic Engineer
- Reliability Engineer
- Senior Communications Manager
- Senior Nuclear Operations Instructor
- Senior Project Manager, I&C New Product Introduction
- Senior Research Scientist
- Students
- Supervisory General Engineer
- Technical Expert - Nuclear Safety

CERTIFIED NUCLEAR PROFESSIONAL (CNP)

CNP Credential vs. Nuclear 101 Course

| | Nuclear 101 | Certified Nuclear Professional (CNP) |
|--------------------------|--------------------|--------------------------------------|
| Course | Yes – 40 hours | No |
| Exam | Yes – 20 questions | Yes – 100 questions |
| Eligibility Requirements | None | 2 yrs education/experience |
| Renewal Requirements | None | 36 hours of CE every 3 yrs |
| Credential | No | Yes |
| Certificate | Yes | No |



Questions/Discussion

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