Garnet
Garnet Global Training Center

GGT-NR-112

Nuclear & Radiation Safety **Rare specialisation**

Nuclear Power Plant Fundamentals

أساسيات محطات الطاقة النووية

Duration	Language	Formats	Hours	Level
5 or 10 days	**English or Arabic**	**Classroom, online, in-house**	**35 / 70**	**Foundation**

Overview

This course builds a solid base in Nuclear Power Plant Fundamentals, starting from first principles and moving quickly to the everyday tasks participants meet at work. Safe use of radiation sources in industry, medicine and energy, aligned with international safety standards. It runs as a 5-day or 10-day program in English or Arabic, in classrooms in Dubai, Riyadh, Cairo, London, Istanbul and other cities, or live online, and can be delivered in-house.

What you will be able to do

- Explain the key concepts, terms and standards of Nuclear Power Plant Fundamentals.
- Communicate confidently with specialists and colleagues.
- Plan the next steps in your own learning.
- Recognise the main hazards, errors and misconceptions newcomers face.
- Carry out basic tasks correctly using simple checklists and tools.

Who should attend

Radiation protection officers, industrial radiographers, medical physicists and nuclear sector staff. No prior experience is required; it also suits new hires, graduates and staff moving into this field.

Key topics

- Radiation physics basics
- Dose limits and regulation
- Shielding and monitoring
- Source security
- Emergency planning
- Waste and transport

Formats and fees

5-day classroom	**USD 4,750**
5-day online	**USD 2,950**
10-day classroom	**USD 8,950**
10-day online	**USD 5,450**
In-house	**Quotation per group**

Fees per participant, excluding VAT.

Register or ask

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Email: info@garnettrainings.com

Training: training@garnettrainings.com

Web: garnettrainings.com

Sharjah Publishing City Free Zone, Sharjah, UAE

Certificate

Participants who attend at least 90% of sessions and complete the final assessment receive a certificate of completion stating 35 contact hours (5-day) or 70 contact hours (10-day).

5-day outline

Day 1 Introduction to Nuclear Power Plant Fundamentals

- Shielding and monitoring
- Checklists and templates to take away

Day 2 Core concepts and terminology

- Source security
- Emergency planning

Day 3 Basic methods and tools

- Waste and transport
- Group discussion and peer review

Day 4 Working safely and correctly

- Radiation physics basics
- Measurement and reporting

Day 5 Practical exercises and review

- Dose limits and regulation
- Hands-on workshop on a workplace challenge

10-day outline

Day 1 Introduction to Nuclear Power Plant Fundamentals

- Shielding and monitoring
- Checklists and templates to take away

Day 2 Core concepts and terminology

- Source security
- Emergency planning

Day 3 Basic methods and tools

- Waste and transport
- Group discussion and peer review

Day 4 Working safely and correctly

- Radiation physics basics
- Measurement and reporting

Day 5 Practical exercises and review

- Dose limits and regulation
- Hands-on workshop on a workplace challenge

Day 6 Advanced techniques and specialist practice

- Complex cases in depth
- Common mistakes and how to avoid them

Day 7 Digital tools, data and automation

- Analysis tools and software
- Using AI in this field

Day 8 Benchmarking against international practice

- Global performance benchmarks
- Regional and international case studies

Day 9 Capstone project

- Analyse a real challenge from your organisation
- Build the solution and implementation plan

Day 10 Presentations, final assessment and certificates

- Project presentations and review
- Final exam and certificate award

Schedule 2027–2030

Dates	Format	City	Language	Fee (USD)
1–5 Feb 2027	5-day online	Live online	Arabic	2,950
21–25 Jun 2027	5-day classroom	London	English	4,750
15–19 Nov 2027	5-day classroom	Dubai	English	4,750
6–17 Dec 2027	10-day classroom	Geneva	English	8,950
3–7 Apr 2028	5-day classroom	Istanbul	English	4,750
9–13 Jul 2028	5-day classroom	Riyadh	English	4,750
7–18 Aug 2028	10-day classroom	Amsterdam	English	8,950
6–17 Nov 2028	10-day online	Live online	Arabic	5,450
1–12 Jan 2029	10-day classroom	Paris	English	8,950

Dates	Format	City	Language	Fee (USD)
19–23 Feb 2029	5-day classroom	Istanbul	English	4,750
2–6 Apr 2029	5-day classroom	Dubai	Arabic	4,750
17–21 Dec 2029	5-day online	Live online	Arabic	2,950
4–15 Mar 2030	10-day classroom	Dubai	English	8,950
13–17 May 2030	5-day classroom	Abu Dhabi	English	4,750
4–15 Nov 2030	10-day online	Live online	English	5,450
9–13 Dec 2030	5-day classroom	London	English	4,750

Customised and in-house versions of this course are available on request. garnettrainings.com/en/customise/