



Nuclear Essentials

Course Overview:

The Nuclear Essentials course is designed to provide delegates with a comprehensive understanding of working on a nuclear site and becoming a nuclear professional.

This course will equip delegates with the fundamental knowledge and skills required to navigate the unique challenges and responsibilities associated with the nuclear industry.

Course Duration:

10 days

Location:

Gen2 Training Centre, On-site Delivery or blended learning.

To book or find out more email martin.barwise@gen2.ac.uk.

✓ Course Content:



Module 1

Introduction and Overview

- Welcome and programme orientation
- Introduction to nuclear behavioural safety principles
- Overview of nuclear safety regulations and standards
- Importance of behavioural safety in nuclear facilities
- Interactive group activities and icebreaker

Module 2

Safety Culture and Leadership

- Understanding safety culture and its impact
- Leadership's role in fostering a strong safety culture
- Identifying organizational values and behaviours
- Communication and reporting structures
- Case studies and discussions on safety culture transformation.

Module 3

Human Performance Factors

- Human factors in nuclear safety.
- Factors influencing human performance (e.g., fatigue, stress).
- Error prevention techniques (e.g., pre-job briefings, task analysis).
- Strategies for maintaining situational awareness.



Course Content:



Module 4

Decision-Making and Risk Assessment

- Introduction to decision-making models.
- Identifying potential hazards and risks.
- Analysing risk and implementing risk controls.
- Human error and its implications for risk assessment.
- Practical exercises in risk assessment and decision-making.

Module 5

Teamwork and Communication

- Importance of teamwork in nuclear safety.
- Effective communication techniques (e.g., assertiveness, active listening).
- Conflict resolution strategies.
- Team-building exercises and simulations.
- Role-playing scenarios for improving communication skills.

Module 6

Emergency Preparedness and Response

- Overview of emergency response plans and procedures.
- Roles and responsibilities during emergencies.
- Decision-making under stress and time pressure.
- Emergency communication protocols.
- Emergency drills and simulations.

Module 7

Safety Training and Competence

- Training requirements for nuclear personnel
- Identifying training needs and developing training programmes.
- Assessing competence and performance evaluations.
- Job task analysis and training documentation.
- Interactive workshops on developing effective training programmes.

Module 8

Behaviour Observation and Feedback

- Conducting effective behaviour observations.
- Providing constructive feedback and reinforcement.
- Positive reinforcement techniques.
- Corrective action and disciplinary procedures.
- Practice sessions for behaviour observation and feedback.



Course Content:



Module 9

Continuous Improvement and Learning

- Introduction to continuous improvement methodologies.
- Analysing incidents and near-misses.
- Lessons learned and knowledge sharing practices.
- Implementing feedback loops for improvement.
- Group exercises on continuous improvement initiatives.

Module 10

Review and Evaluation

- Recap of key concepts and learning outcomes.
- Participant presentations on key takeaways.
- Course evaluation and feedback.
- Next steps and action plans