

COMBINED COURSE

LEARNING OUTCOMES



Collaborate across the nuclear sector disciplines and with the relevant stakeholders to establish and implement activities important to safety and their associated level of human reliability



Analyse tasks, activities and systems important to nuclear safety using human factors tools and techniques to identify the design requirements, shortfalls, and improvements. Where shortfalls are identified, determine effective improvements to the equipment, environment, task and/or organisation



Evaluate and justify the adequacy, reliability, proportionality and overall effectiveness of the system in reducing human error ALARP/ SFAIRP as part of an iterative process



Execute a plan to complete a significant piece of scholarly work across domains in human factors and demonstrate advanced skill in integrating the results into the decision-making process.

UNIT BREAKDOWN

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Level	Unit	Foundation Certificate (L1)	Higher Certificate (L2)	Advanced Certificate (L3)
1	An Introduction to Human Factors in Nuclear	<i>✓</i>	√	✓ (==,
1	Introduction to Human Physical Attributes			
1	Introduction to Psychology	✓	✓	✓
1	An Introduction to Performance-Shaping Factors			
1	Introduction to Human Factors Tools and Techniques	✓	✓	✓
1	Foundations of Nuclear Safety Management and the Human Factors Contribution			
2	Human Factors Integration		✓	✓
2	Human Machine Interface Design (Design)			
2	Human Factors in Control System Design		√	✓
2	Environmental and Physiological Factors			
2	Human Factors Design Analysis Methods		✓	✓
2	Human Factors Integration (Safety Case)			
2	Identifying Tasks Important to Safety		✓	✓
2	Analysis of Tasks Important to Safety			
2	Substantiation and Human Reliability Analysis		✓	✓
2	Human Factors Design Analysis Methods		1	✓
2	Performance Shaping Factors and Relevant Good Practice		1	✓
2	Human Factors Data Analysis		✓	✓
2	Human Factors Analysis Techniques		✓	✓
3	Integrating HF in work and project scopes			✓
3	Human Factors Tools and Techniques for continued Operations improvements			✓
3	Evaluating Human and Organisational Performance, Reliability and Culture			
3	Organisational Factors			✓
3	Evaluation and Assessment Tools and Methods			
3	Organisation Interface Management and Configuration Control			✓
3	Substantiation Judgements			
3	Safety Cases review and production of a HFIP			✓
3	Human Factors Modelling in Safety Case			
3	Substantiation of Human-Based Claims			✓