MODULE DESCRIPTOR

Module Title

Project and Safety Management

Reference	EN3105	Version	4
Created	April 2023	SCQF Level	SCQF 9
Approved	July 2018	SCQF Points	30
Amended	August 2023	ECTS Points	15

Aims of Module

To provide the student with the knowledge and skills to operate safely in the workplace and evaluate risks within a project.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

1	Demonstrate a critical understanding about the inherent nature of safety and loss prevention and principal of hazard sources in an industrial plant.
2	Interpret the various means by which organisations manage health and safety.
3	Assess appropriate key techniques for specifying and assessing the safety integrity level of a given system.
4	Formulate a holistic and proportionate approach to the mitigation of safety and security risks in industrial settings.

Indicative Module Content

ATEX, HAZOP, Industrial safety standards, Intrinsic safety, Safety integrity levels, device ratings, process hazards & risk assessment, ergonomics, pressure safety, reliability Use techniques for specifying and assessing the safety integrity level of a given system. Causes and outcomes of industrial accidents. Role of design and management. Failure prediction and uncertainty of data. Safety life cycle. Hazard identification and control, HAZOP, Fault Tree and FMEA analysis. ALARP principle. Safety integrity levels, Human factors, Corporate responsibility, safety culture, management issues. Assessment techniques for system reliability. Design for reliability. Redundancy and standby systems. Maintenance and repair strategies.

Module Delivery

The module is delivered in Blended Learning mode using structured online learning materials/activities and directed study, facilitated by regular online tutor support. Workplace Mentor support and work-based learning activities will allow students to contextualise this learning to their own workplace. Face-to-face engagement occurs through annual induction sessions, employer work-site visits, and modular on-campus workshops.

Indicative Student Workload

	Full Time	Part Time
Contact Hours	30	N/A
Non-Contact Hours	30	N/A
Placement/Work-Based Learning Experience [Notional] Hours	240	N/A
TOTAL	300	N/A
Actual Placement hours for professional, statutory or regulatory body	240	

ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

Component 1

Type:	Coursework	Weighting:	50%	Outcomes Assessed:	1, 2
Description:	Case study report on general safety management				

Component 2

Type:	Coursework	Weighting:	50%	Outcomes Assessed:	3, 4
Description:	Case study report on technical safety				

MODULE PERFORMANCE DESCRIPTOR

Explanatory Text

The module has 2 components and to gain an overall pass a minimum D grade must be achieved in each component. The component weighting is as follows: C1 is worth 50% and C2 is worth 50%.

		Coursework:						
		A	**B**	**C**	**D**	**E**	**F**	**NS**
Coursework:	**A**	A	A	B	B	E	E	
	B	A	B	B	C	E	E	
	C	B	B	C	C	E	E	
	D	B	C	C	D	E	E	
	E	E	E	E	E	E	F	
	F	E	E	E	E	F	F	
	NS	Non-submission of work by published deadline or non-attendance for examination						

Module Requirements

Prerequisites for Module	Completion of Stage 2, SCQF Level 8, or equivalent.
Corequisites for module	None.
Precluded Modules	None.

INDICATIVE BIBLIOGRAPHY

1 HUGHES P. and FERRET E., 2010, Introduction to international health and safety at work: the handbook for the NEBOSH international general certificate. Oxford: Butterworth-Heinemann.

2 REASON, J.T., 1990. Human error. Cambridge [England]: Cambridge University Press.

3 STOREY, N., 1996. Safety-Critical Computer Systems, Harlow:Addison-Wesley.