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MODULE DESCRIPTOR

Module Title

Engineering Management

Reference	EN3802	Version	2
Created	August 2021	SCQF Level	SCQF 10
Approved	March 2021	SCQF Points	15
Amended	August 2021	ECTS Points	7.5

Aims of Module

To provide the student with: the fundamental understanding of business functions, strategy, management and asset management; the ability to critically apply quality management theory; and the key concepts for socially responsible management.

Learning Outcomes for Module

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

- 1 Apply and critically discuss the theoretical basis of business finance, accounting and law for engineers.
- 2 Demonstrate awareness of the importance of socially responsible management to an engineer's professional development; by identifying societal issues within engineering projects.
- 3 Evidence ability to communicate non-technical issues relevant to engineering clearly, through production of an outline socially responsible management strategy document.
- 4 Specify and critically evaluate the principles of operation management, quality management, quality assurance and international standards.
- 5 Appraise the issues in managing the change process and be able to lead a change initiative in organisations that adopt an Asset Management approach.

Indicative Module Content

Introduction to business finance, accounting and law for engineers. Key concepts and standards in socially responsible management; risk governance (risk characterisation and communication); community relations and the legacy of infrastructure projects; building sustainable community relations; understanding value chains; building value across the supply chain. Identification of process improvement strategies. Theoretical concepts of quality management and applications to organisational development and performance excellence. The way in which Asset Management is developed and implemented in organisations. The process of organisational change required when the Asset Management approach is adopted in organisations; issues and approaches to managing change; organisational change and culture; leading people through change. Content will be supported with case studies throughout, and students will be encouraged to make links to their own experiences and practices.

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	36	N/A
Non-Contact Hours	114	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	N/A
Actual Placement hours for professional, statutory or regulatory body		

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, 3
Description:	Report.				

Component 2

Type:	Coursework	Weighting:	50%	Outcomes Assessed:	4, 5
Description:	Report.				

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	None.
Corequisites for module	None.
Precluded Modules	None.

INDICATIVE BIBLIOGRAPHY

- 1 VERTIGANS, S. and IDOWU, S. eds., 2017. Corporate Social Responsibility: Academic Insights and Impacts. New York, NY: Springer.
- 2 HOPKIN, P., 2017. Fundamentals of risk management: understanding, evaluating and implementing effective risk management. 4th ed. London: CIPD.
- 3 ATRILL, P., 2017. Accounting and finance for non-specialists. 10th ed. Harlow: Pearson Education.
- 4 GREASLEY A., 2013. Operation management. 3ed Edition, New York: Wiley.
- 5 O'CONNOR P.D.T., 2003. Practical Reliability Engineering. Chichester & NY: J Wiley & Sons.