

MODULE DESCRIPTOR

Module Title

Problem Solving

| | | | |
|-----------|---------------|-------------|---------|
| Reference | ENM300 | Version | 10 |
| Created | August 2021 | SCQF Level | SCQF 11 |
| Approved | December 2007 | SCQF Points | 15 |
| Amended | August 2021 | ECTS Points | 7.5 |

Aims of Module

Develop a working knowledge of AIM policies, processes, tools and techniques used to drive a high performing safe and sustainable business.

Learning Outcomes for Module

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

- 1 Identify the key elements and benefits of Asset Management (AM) and Asset Integrity Management (AIM).
- 2 Critically evaluate the AM and AIM activities of their own organisation in a transparent business context and benchmark performance against peers and/or organisational best practice.
- 3 Critically analyse strengths and weaknesses; then identify, prioritise and justify effective improvement paths.
- 4 Explain and effectively demonstrate the theories of selected key thinkers on human behaviour.
- 5 Consolidate effectively commonly used decision making tools and techniques.

Indicative Module Content

- BUSINESS & ORGANISATION Asset and Asset Integrity Management Scenarios Theories of Hamel and Porter Business models Mission, Vision and Goals Managing Performance Characteristics of Top Performers Benchmarking Business Process Analysis and Design Outsourcing - HUMAN FACTORS Theories of Maslow, McGregor, Herzberg, Adair, Covey & other thinkers Leadership Management of Change Communication Negotiation - TOOLS AND TECHNIQUES Balanced Scorecard Matrix techniques for prioritisation SWOT Decision making tools Flow Charts Problem Solving Root Cause Analysis (RCA) Systems Diagrams Tutor and student experiences, case studies and examples will be used to facilitate discussion groups and exercises.

Module Delivery

DISTANCE LEARNING: The module is delivered by online lectures, interactive forum discussions and directed self-study.

| Indicative Student Workload | Full Time | Part Time |
|---|-----------|-----------|
| Contact Hours | N/A | 23 |
| Non-Contact Hours | N/A | 127 |
| Placement/Work-Based Learning Experience [Notional] Hours | N/A | N/A |
| TOTAL | N/A | 150 |
| 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: | Written report. | | | | |

Component 2

| | | | | | |
|--------------|--------------------------|------------|-----|--------------------|------|
| Type: | Examination | Weighting: | 50% | Outcomes Assessed: | 4, 5 |
| Description: | Closed book examination. | | | | |

MODULE PERFORMANCE DESCRIPTOR

Explanatory Text

The module has 2 components and an overall grade D is required to pass the module. The component weighting is as follows: C1 is worth 50% and C2 is worth 50%.

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

Module Requirements

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|--------------------------|---|
| Prerequisites for Module | Normally a UK honours degree, or equivalent, in Engineering or related discipline at class 2.2 or above and proficiency in English language for academic purposes (IELTS minimum score of 6.5 or equivalent). |
| Corequisites for module | None. |
| Precluded Modules | None. |

INDICATIVE BIBLIOGRAPHY

- BRIDGES, W., 2009. Managing Transitions: Making the Most of Change. Perseus Publishing.(electronic resource)
- TEN HAVE, S et al 2003. Key Management Models. London: Prentice Hall. ISBN0-273-66201-5