# Module Proforma

**Approved, 2022.02**

## Summary Information

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|---|---|
| **Module Code** | 6557USST |
| **Formal Module Title** | Industrial Management |
| **Owning School** | Engineering |
| **Career** | Undergraduate |
| **Credits** | 20 |
| **Academic level** | FHEQ Level 6 |
| **Grading Schema** | 40 |

## Module Contacts

### Module Leader

| Contact Name | Applies to all offerings | Offerings |
|---|---|---|
| Dante Matellini | Yes | N/A |

### Module Team Member

| Contact Name | Applies to all offerings | Offerings |
|---|---|---|

### Partner Module Team

| Contact Name | Applies to all offerings | Offerings |
|---|---|---|

## Teaching Responsibility

| LJMU Schools involved in Delivery |
|---|
| LJMU Partner Taught |

## Partner Teaching Institution

| Institution Name |
| --- |
| University of Shanghai For Science and Technology |

## Learning Methods

| Learning Method Type | Hours |
| --- | --- |
| Lecture | 33 |
| Tutorial | 11 |

## Module Offering(s)

| Offering Code | Location | Start Month | Duration |
| --- | --- | --- | --- |
| SEP-PAR | PAR | September | 12 Weeks |

## Aims and Outcomes

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| --- | --- |
| **Aims** | This module is designed to develop the core management techniques required to assess the economic viability of a product/project and to design and implement a plan to deliver it. |

## Learning Outcomes

**After completing the module the student should be able to:**

| Code | Description |
| --- | --- |
| MLO1 | Undertake a technical and economic assessment of a product/project. |
| MLO2 | Design a viable plan to organise and control the implementation of a project. |
| MLO3 | Explain the fundamental principles or intellectual property and contract law. |

## Module Content

| Outline Syllabus |
| --- |
| Innovation and decision making: Technical and social systems. Technology learning. Business case models. Technical readiness assessment, product life cycle assessment, product costs. Modelling supply and demand. Systems modelling and simulation (Systems Dynamics, Monte Carlo simulation).<br><br>Financial appraisal: Conventional costing, throughput accounting, investment appraisal - Net Present Value (NPV), Internal Rate of Return (IRR). Economic appraisal: Economic assessment including environmental and social costs and benefits. Sensitivity analysis.<br><br>Project management life cycle. Project scope. Project planning to achieve cost, time, and quality objectives. Network techniques and the use of Gantt charts. Project execution. Quality systems and risk management.<br><br>Introduction to the law, sources of law, courts of the UK, statutory interpretation, precedent. Principles of contract law, contract law in engineering practice, IMechE/IET Model forms of contract. Fundamental principles of intellectual property law for engineers. |

**Module Overview**

| Additional Information |
| --- |
| The module develops the skills to assess the financial and economic viability of a product/project and to develop a viable outline business case and plan. |

## Assessments

| Assignment Category | Assessment Name | Weight | Exam/Test Length (hours) | Learning Outcome Mapping |
| --- | --- | --- | --- | --- |
| Exam | Exam | 70 | 2 | MLO1, MLO2, MLO3 |
| Report | Report | 30 | 0 | MLO1, MLO2 |