

MODULE SPECIFICATION

| Part 1: Information | | | | | | | |
|---------------------------|--|--|--------------------|-------------------------------------|--|--|--|
| Module Title | Princi | Principles of Lean Engineering | | | | | |
| Module Code | UFM | EE8-15-M | Level | Level 7 | | | |
| For implementation from | 2018- | 018-19 | | | | | |
| UWE Credit Rating | 15 | | ECTS Credit Rating | 7.5 | | | |
| Faculty | Facul [®] Techr | ty of Environment & nology | Field | Engineering, Design and Mathematics | | | |
| Department | FET [| FET Dept of Engin Design & Mathematics | | | | | |
| Contributes towards | Engineering Competence [Jan][PT][FR][2yrs] PGDip 2018-19 Engineering Business Management [Sep][FT][Frenchay][1yr] MSc 2018-19 | | | | | | |
| Module type: | Proje | Project | | | | | |
| Pre-requisites | | None | | | | | |
| Excluded Combinations | | None | | | | | |
| Co- requisites | | None | | | | | |
| Module Entry requirements | | None | | | | | |

Part 2: Description

Overview: The module provides an overview of lean engineering and its tools and techniques in enabling supporting business improvement and the importance of strategy and the role of leaders in enabling lean practices that drive a culture of continuous improvement.

Features: The module is intended for science and engineering graduates, or equivalent, engaged in professions who require a comprehensive understanding of manufacturing in the Aerospace and related sectors.

Educational Aims: The need for a coordinated, structured and scientific approach in adopting and implementing lean into an organisation and the challenges and benefits of implementing lean and lean engineering into an organisation and across its enterprise (beyond just manufacturing) area is also integral to the module outcomes.

STUDENT AND ACADEMIC SERVICES

Outline Syllabus: This module introduces the principles of lean manufacturing and engineering and the significance of the philosophies, principles, systems and tools in enhancing the effectiveness and profitability of manufacturing and service operations.

Teaching and Learning Methods: This module is taught in a single week. The block-week delivery will contain a mixture of lectures and reflective workshops where students work in preparation towards being able to complete the case study assignment.

Part 3: Assessment

The assignment will require demonstration of independent learning of theory and critical reflection of their work both in the classroom and during the assignment period outside the classroom and will result in a written report of 3000 words.

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| First Sit Components | Final Assessment | Element weighting | Description |
| Report - Component A | ~ | 100 % | Report (3000 words) |
| Resit Components | Final Assessment | Element weighting | Description |
| Report - Component A | \checkmark | 100 % | Report (3000 words) |

| Part 4: Teaching and Learning Methods | | | | | | | |
|---------------------------------------|--|--------------------------|--|--|--|--|--|
| Learning Outcomes | On successful completion of this module students will be able to: | | | | | | |
| | | Module Learning Outcomes | | | | | |
| | MO1 Critically evaluate and synthesise professionally relevant information regarding the significance of lean philosophies, principles, systems and tools in enhancing the effectivenes profitability of manufacturing and service operations | | | | | | |
| | MO2 Creatively and critically reflect upon the need for leading with lean principles, engaging people through systems and applyin tools to solve business problems and eliminate waste MO3 Demonstrate through evaluation the need for a coordinated, structured and scientific approach in adopting and implementi lean into an organisation. | | | | | | |
| | | | | | | | |
| | MO4 Understand the importance of strategy and the role enabling lean practices that drive a culture of cont improvement and apply this in context. | | | | | | |
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| Contact Hours | Contact Hours | | | | | | |
| | | | | | | | |
| | Independent Study Hours: | | | | | | |
| | Independent study/self-guided study | | | | | | |

| | Total Independent Study Hours: Scheduled Learning and Teaching Hours: | 114 | | | |
|-----------------|--|-----|--|--|--|
| | Face-to-face learning | 36 | | | |
| | Total Scheduled Learning and Teaching Hours: | 36 | | | |
| | | | | | |
| | Hours to be allocated | 150 | | | |
| | Allocated Hours | 150 | | | |
| Reading List | The reading list for this module can be accessed via the following link: | | | | |
| | https://uwe.rl.talis.com/modules/UFMEE8-15-M.html | | | | |