



MODULE SPECIFICATION

Part 1: Information			
Module Title	Principles of Lean Engineering		
Module Code	UFMEE8-15-M	Level	Level 7
For implementation from	2019-20		
UWE Credit Rating	15	ECTS Credit Rating	7.5
Faculty	Faculty of Environment & Technology	Field	Engineering, Design and Mathematics
Department	FET Dept of Engin Design & Mathematics		
Module type:	Project		
Pre-requisites	None		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description
<p>Overview: 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</p> <p>Educational Aims: See Learning outcomes</p> <p>Outline Syllabus: 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.</p> <p>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.</p> <p>Teaching and Learning Methods: See Contact Hours.</p>

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Part 3: Assessment			
Students complete an individual case study assignment that requires demonstration of independent learning of theory and critical reflection of their work both in the classroom and during the assignment period outside the classroom resulting in a written report of 3000 words.			
The referred assignment will involve a reworking of the 1st sit case study.			
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	✓	100 %	Report (3000 words)

Part 4: Teaching and Learning Methods											
Learning Outcomes	On successful completion of this module students will achieve the following learning outcomes:										
	<table border="1"> <thead> <tr> <th>Module Learning Outcomes</th> <th>Reference</th> </tr> </thead> <tbody> <tr> <td>Critically evaluate and synthesise professionally relevant information regarding the significance of lean philosophies, principles, systems and tools in enhancing the effectiveness and profitability of manufacturing and service operations</td> <td>MO1</td> </tr> <tr> <td>Creatively and critically reflect upon the need for leading with lean principles, engaging people through systems and applying tools to solve business problems and eliminate waste</td> <td>MO2</td> </tr> <tr> <td>Demonstrate through evaluation the need for a coordinated, structured and scientific approach in adopting and implementing lean engineering into an organisation</td> <td>MO3</td> </tr> <tr> <td>Explain the importance of strategy and the role of leaders in enabling lean practices that drive a culture of continuous improvement and apply this in context</td> <td>MO4</td> </tr> </tbody> </table>	Module Learning Outcomes	Reference	Critically evaluate and synthesise professionally relevant information regarding the significance of lean philosophies, principles, systems and tools in enhancing the effectiveness and profitability of manufacturing and service operations	MO1	Creatively and critically reflect upon the need for leading with lean principles, engaging people through systems and applying tools to solve business problems and eliminate waste	MO2	Demonstrate through evaluation the need for a coordinated, structured and scientific approach in adopting and implementing lean engineering into an organisation	MO3	Explain the importance of strategy and the role of leaders in enabling lean practices that drive a culture of continuous improvement and apply this in context	MO4
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Contact Hours	Independent Study Hours:										
	Independent study/self-guided study	114									
	Total Independent Study Hours:	114									
	Scheduled Learning and Teaching Hours:										
	Face-to-face learning	36									
	Total Scheduled Learning and Teaching Hours:	36									

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	Hours to be allocated	150
	Allocated Hours	150
Reading List	<i>The reading list for this module can be accessed via the following link:</i> https://uwe.rl.talis.com/modules/UFMEE8-15-M.html	

Part 5: Contributes Towards

This module contributes towards the following programmes of study:

Engineering Business Management [Sep][PT][Frenchay][2yrs] MSc 2019-20

Engineering Competence [Jan][PT][FR][2yrs] PGDip 2018-19