UNIVERSITY of BRADFORD

Module Descriptor

Module Details	
Module Title:	Supply Chain Management and Production
Module Code:	ENB7008-B
Academic Year:	2019-20
Credit Rating:	20
School:	Engineering and Informatics (Faculty-wide)
Subject Area:	Engineering Business
FHEQ Level:	FHEQ Level 7 (Masters)
Pre-requisites:	
Co-requisites:	

Contact Hours	
Type	**Hours**
Lectures	24
Tutorials	24
Directed Study	152

Availability	
Occurrence	**Location / Period**
BDA	University of Bradford / Semester 2 (Feb - May)

Module Aims

1. To develop a comprehensive and in-depth knowledge on operations and supply chain management with a strong focus on sustainability aspects. A strategic perspective will be adopted throughout this module.
2. To analyse globalisation, sustainability and technological aspects influencing the performance of operations and the supply network.

Outline Syllabus

Principles of operations and supply chain management. Principles of marketing, analysing the global marketing environment, understanding the impact of customer behaviour, distribution management and customer relationship management. Strategic fit in operations and supply

chain strategies. Drivers and obstacles in supply chain management. Designing the supply chain network. Locating facilities. Planning supply and demand in the supply chain. Technologies to support operations and supply chain management. Supply chain integration. Lean operations and supply chain. Value Stream Mapping. Sustainable operations, carbon footprint, green supply chains and sustainability assessment. Reverse logistics. The role of supply chain management in the circular economy. Impact of globalisation in operations and the supply chain. Supplier selection. Assessment of supply chain risks. The concept of Industry 4.0. Analysing operations and supply chain management issues in different industries such as manufacturing, services, automotive, aerospace, oil and gas, and information technology.

Learning Outcomes

1	Critically analyse the framework of operations and supply chain management.
2	Apply lean principles to operations and supply chain management.
3	Explain how new technologies support operations and supply chain management, including the concept of Industry 4.0.
4	Evaluate sustainability issues in operations and the supply chain.
5	Examine the principles of marketing, the global market environment, the impact of customer behaviour, and customer relationship management.
6	Apply data presentation skills, apply communication and oral presentation skills, develop ICT skills, develop problem solving skills, work in teams effectively and develop self-learning ability

Learning, Teaching and Assessment Strategy

1. The module is delivered through a series of lectures, supported by appropriate case study material. The learning materials (both lecture notes and case study) use a coherent problem-based approach, introducing management issues and tools and approaches to address these.
2. Lectures are supported with tutorial sessions in which case studies are analysed. These provide the oprtunity to undertake guided reading to understand and address a variety of operations and supply chain management issues. Tutorial sessions promote teamwork, development of oral presentation and ICT skills, e-learning, peer feedback and self-learning. Formative feedback is provided after each presentation.
3. Directed study hours are dedicate to self-study, reading study materials before lectures and tutorials, research and preparation of coursework.

Summative assessment is through coursework as an individual report (3000 words) to analyse current and future challenges in operations and supply chain management. The report includes a detailed analysis of a case study from industry to illustrate those challenges. Sustainability issues are also analysed. LO1, LO3, LO4, LO6.
Formative feedback is provided during oral presentations in tutorials, where students work in groups to anlayse and prepare their slides to support their oral presentations. LO1, LO2, LO3, LO4, LO5, LO6.

This module satisfies the below Learning Outcomes as specified by the Accreditation of Higher Education Programmes: Third Edition (AHEP3) as published by The Engineering Council in-line with the UK Standard for Professional Engineering Competence (UK-SPEC). These outcomes specify six key areas of learning: Science and Mathematics (SM), Engineering Analysis (EA), Design (D), Economic, Legal, Social, Ethical and Environmental Context (EL), Engineering Practice (P) and Additional General Skills (G).

SM1m, SM2m, SM3m, SM4m, SM6m, EA5m, D4, D5, D8m, EL1m, EL2, EL3m, EL4, EL5m, EL6m, P1, P5, P7, P10m, G1, G4, EL8M, EL9M, EL10M, EL11M, EL12M, EL13M.
Further details of these learning outcomes can be found at https://www.engc.org.uk/.

Mode of Assessment

Type	Method	Description	Length	Weighting
Formative	Presentation	12 oral presentations in tutorial sessions		%
Summative	Coursework	Report analysing current and future challenges in operations and supply chain management. Report to include detailed analysis of case study from industry.	-3000 words	100%

Reading List

To access the reading list for this module, please visit https://bradford.rl.talis.com/index.html.

Please note:

This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.