Module Definition Form (MDF)

Module code: MOD009694	**Version:** 1 **Date Amended:** 01/Mar/2024

1. Module Title
Operational Management

2a. Module Leader
Nasrin Asgari

2b. School
School of Management

2c. Faculty
Faculty of Business and Law

3a. Level
6

3b. Module Type
Standard (fine graded)

4a. Credits
15

4b. Study Hours
150

5. Restrictions

Type	Module Code	Module Name	Condition
Pre-requisites:	None		
Co-requisites:	None		
Exclusions:	None		
Courses to which this module is restricted:			

LEARNING, TEACHING AND ASSESSMENT INFORMATION

6a. Module Description

In today's dynamic business landscape, operations management plays a crucial role in optimizing processes and efficiently converting various inputs, such as raw materials, labor, and technology, into valuable goods and services. It is a fundamental discipline that enables organizations to achieve their strategic objectives and maintain a competitive edge. This module delves into the core concepts of operations management and explores how the blending of service and manufacturing principles can lead to more effective and agile business operations.

To excel in operations management, managers need a comprehensive understanding of both qualitative and quantitative aspects. On one hand, they must grasp the underlying principles, theories, and best practices that govern operations management to make informed decisions. This involves analyzing factors such as customer needs, market trends, and employee capabilities to optimize processes and enhance the overall efficiency of operations.

To provide a practical and real-world perspective, this module incorporates contemporary business examples, applications, and case studies. By examining how renowned organizations handle their operations, you'll gain valuable insights into the challenges and solutions faced by operations managers in various industries.

Furthermore, the module explores the application of modern tools and technologies, such as data analytics, supply chain management software, and automation, in streamlining operations and achieving operational excellence. This hands-on approach ensures that you're equipped with the knowledge and skills needed to tackle real-world operational challenges in your future career.

In conclusion, this module provides a comprehensive exploration of operations management, bridging the gap between service and manufacturing philosophies. It equips managers with the necessary competencies to optimize processes, align operations with corporate strategies, and drive organizational success. By combining qualitative understanding, quantitative analysis, and real-world examples, the module empowers you to make informed decisions and adapt to the ever-changing demands of the business environment.

6b. Outline Content

- Introduction to Operational Management
    - Definition and scope of operational management
    - Historical development and evolution of operational management
    - Role and importance of operational management in organizations
    - Key concepts and terminology in operational management
- Operations Strategy
    - Aligning operations with overall business strategy
    - Competitive priorities and trade-offs in operations
    - Process selection and design strategies
    - Capacity planning and resource allocation

- Process Analysis and Improvement
    - Process flow analysis and mapping
    - Identifying bottlenecks and inefficiencies
    - Lean principles and methodologies (e.g., Six Sigma)
    - Continuous improvement and Kaizen
- Quality Management
    - Understanding quality and its dimensions
    - Quality control and assurance techniques
    - Total Quality Management (TQM) principles
    - Implementing quality management systems
- Technology and Automation in Operations
    - Role of technology in improving operational efficiency
    - Automation and robotics in manufacturing and services
    - Industry 4.0 and the Internet of Things (IoT)
    - Challenges and considerations in adopting new technologies
- Operations Planning and Control
    - Aggregate planning and production scheduling
    - Material requirements planning (MRP) and just-in-time (JIT) systems
    - Production control and shop floor management
    - Capacity management and demand forecasting
- Module 9: Performance Measurement and Metrics
    - Key performance indicators (KPIs) for operations

- Performance benchmarking and best practices
- Using data analytics for operations performance improvement
- Balanced Scorecard approach in operations management

- Global Operations and Outsourcing
  - Managing operations in a global context
  - Offshoring and outsourcing strategies
  - Cross-cultural management in international operations
  - Risk management in global supply chains

- Emerging Trends in Operational Management
  - Exploring new technologies and innovations in operations
  - Trends in operational efficiency and performance optimization
  - Ethical and social considerations in operations management
  - Future challenges and opportunities in operational management

6c. Key Texts/Literature

The reading list to support this module is available at: https://readinglists.aru.ac.uk/

6d. Specialist Learning Resources

None

7. Learning Outcomes (threshold standards)		
No.	**Type**	**On successful completion of this module the student will be expected to be able to:**
1	Knowledge and Understanding	Apply relevant theoretical concepts and techniques to understand new complex business and supply chain situations;
2	Knowledge and Understanding	Critically evaluate the nature of operations processes and the interrelationship between time, cost and quality;
3	Intellectual, practical, affective and transferrable skills	Critically apply operations management techniques to the resolution of real-world problems in both manufacturing and service sectors, balancing qualitative and quantitative approaches;
4	Intellectual, practical, affective and transferrable skills	Operate leading computer software tools to support operations management activities including such techniques as production optimization, control and troubleshooting

8a. Module Occurrence to which this MDF Refers				
Year	**Occurrence**	**Period**	**Location**	**Mode of Delivery**
2025/6	ZZF	Template For Face To Face Learning Delivery		Face to Face

8b. Learning Activities for the above Module Occurrence			
Learning Activities	**Hours**	**Learning Outcomes**	**Details of Duration, frequency and other comments**
Lectures	12	1-4	Lecture 1 hr x 12 weeks
Other teacher managed learning	12	1-4	Seminar 1 hr x 12 weeks
Student managed learning	126	1-4	Preparation for seminars, including reading, researching issues
TOTAL:	150		

9. Assessment for the above Module Occurrence					
Assessment No.	**Assessment Method**	**Learning Outcomes**	**Weighting (%)**	**Fine Grade or Pass/Fail**	**Qualifying Mark (%)**
010	Coursework	1-4	100 (%)	Fine Grade	30 (%)
Assignment 3000 words					

In order to pass this module, students are required to achieve an overall mark of 40% (for modules at levels 3, 4, 5 and 6) or 50% (for modules at level 7*).

In addition, students are required to:
(a) achieve the qualifying mark for each element of fine graded assessment as specified above
(b) pass any pass/fail elements

[* the pass mark of 50% applies for all module occurrences from the academic year 2024/25 – see Section 3a of this MDF to check the level of the module and Section 8a of this MDF to check the academic year]