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LECTURER MANUAL

# C4: Operations Management

Lecturer Manual

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# Acknowledgements

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# About this lecturer manual

## Introduction

The lecturer manual for the course C4: Operations Management contains answers to the teacher-marked activities in the Course Manual. Some of the answers have been supplemented by explanations.

There are ample references and extra resources mentioned in the course manual that the lecturer can use for additional examples and exercises.

Summative assessments can be used as bases for examinations. An example of an examination is given at the end of this manual.

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## Course outcomes



### Outcomes

Upon completion of C4: Operations Management the student will be able to:

- *Discuss* operations strategy and customer requirements and demonstrate how operations management can be used to improve the competitive position of a firm.
- *Summarise* demand management and forecasting.
- *Describe* capacity management and balance aggregate demand with capacity.
- *Illustrate* the basic requirements for process design (including continuous operations, repetitive operations, batch operations and job shop operations).
- *Discuss* process improvement and the concepts of lean thinking.
- *Explain* product design and quality management techniques, including six sigma quality and process capability.
- *Outline* the role of inventory management.
- *Describe* supply chain management and supply issues, including supply chain dynamics.
- *Identify* basic project management techniques.
- *Understand* the role of performance measurement in operations management.



This course includes the following units:

1. **Unit 1:** Strategy and competitiveness: thinking about how the organisation should operate to maximise its effectiveness.
2. **Unit 2:** The nature and role of OM: how the operations management function operates and fits into the overall framework of the organisation.
3. **Unit 3:** Demand management and forecasting: to establish how much demand will be required in the future and once this is known the organisation can plan the resources required to meet that demand.
4. **Unit 4:** Capacity planning and management: once future demand is known, the firm has to balance that with sufficient capacity to deliver the goods and services required by customers.
5. **Unit 5:** Designing processes: all of business is a process and all decisions within an organisation follow processes so we have to design effective processes with the required capability to deliver goods and services.
6. **Unit 6:** Improving processes — lean thinking: customer requirements will change and technological improvements developed so the organisation will need to modify and improve processes to remain competitive.
7. **Unit 7:** Product design: products and services need to be designed to deliver to the customer exactly what the customer wants.
8. **Unit 8:** The concept of quality: this concept is about making the most of products and processes so that customers are delighted with the outcomes.
9. **Unit 9:** Inventory planning and management: production firms and service organisations require inventory of materials to work with, or to sell, so we need to determine how much material will be ordered, when those orders are placed and how much material will be held for future use.
10. **Unit 10:** Supply chain management: covers all the customer-supplier interactions from original supply all the way through to final customer and the design and operation of the entire supply chain determines the effectiveness of the end result.
11. **Unit 11:** Project management: often the subject of a course in its own right, this unit provides an operations manager

with sufficient understanding of project processes to effectively communicate with project management.

12. **Unit 12:** Performance measurement: measures how the organisation is performing and what metrics should be determined.

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## Timeframe



How long?

Learners are expected to spend 120 hours

[How much formal study time is required?]

[How much self-study time is expected/recommended?]

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## Reflection



Reflection

Some units have reflections which provide an opportunity for the student to “reflect” on what they are learning. These reflections are not assessed, but form part of the learning process.

The reflection feedback is provided in this Lecturers’ Guide.

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## Activities



Activities

Each unit has a small number of activities scattered throughout the unit. Students should work through each activity without looking at the activity feedback which is at the end of the module. Use the activity feedback as reassurance that you have understood the activity.



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## Assessments



### Assessments

This course has a final exam which is worth 30 per cent and covers all modules. The time allocated is three hours and the student selects any six questions from a choice of eight.

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## Assignments



### Assignments

There is an assignment comprising three questions at the end of module 2.

There is an assignment comprising four questions at the end of module 3.

[How are the assignments are to be submitted?]

[To whom should the assignments be submitted?]

[What is the schedule for submitting assignments? End of each unit? Specific dates?]

[What is the order of the assignments? Must they be completed in the order in which they are set?]