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**FIT5157 Services science - Semester 1, 2010**

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FIT5157 Services science - Semester 1, 2010

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Tutor: Suttisak Jantavongso - suttiis@gmail.com
Introduction

Welcome to FIT5157 Services Science for semester 1, 2010. This 6 point unit is a core unit in the Business Systems professional track of the Master of Business Information Systems, Master of Business Systems and Master of Information Management and Systems degrees, and an elective unit for others studying these degrees and other masters degrees from within the Faculty of IT. The unit has been designed to provide you with an understanding of the management, design and operations of service organizations.

THE IBM DEFINITION: Services sciences, Management and Engineering (SSME) hopes to bring together ongoing work in computer science, operations research, industrial engineering, business strategy, management sciences, social and cognitive sciences, and legal sciences to develop the skills required in a services-led economy.

Unit synopsis

Services science draws from the social sciences, business, and engineering technology and applies scientific methods to the design and management of services. The use of IT is a crucial and essential part of services science and an understanding this area is of major importance to IT students. In the current business environment IT techniques and skills have become essential to successfully manage operations, services and projects. The focus of this unit is to provide students with sufficient knowledge of modern services science and business operations, concepts, and modern software, to work effectively in service operations roles in industry and government.

Learning outcomes

At the completion of this unit students will:

- understand how service businesses operate and evolve;
- understand the management principles, concepts and standards that guide service operations and project management practices;
- be able to specify the organisational capabilities to support service operations management;
- have the skills to design and develop an appropriate management structure for service operations and the management of service projects.

Contact hours

2 hrs lectures/wk, 1 hr laboratory/wk

Workload

One two-hour lecture and aOne-hour tutorialA minimum of 2-3 hours of personal study per one hour of contact time in order to satisfy the reading and assignment expectations. You will need to allocate up to 5 hours per week in some weeks, for use of a computer

Unit relationships
Prerequisites

Students are expected to have a background in IT, Engineering or Science.
Teaching and learning method

Teaching approach

There will be a 2 hour lecture and a one hour tutorial per week.

The tutorials will cover each topic of the course.

There will be a numerical questions assignment consisting of a question on each of four numerical topics.

There will be a software assignment consisting of a small program to solve a business need for a service business.

There will be a case study assignment.

Timetable information

For information on timetabling for on-campus classes please refer to MUTTS, http://mutts.monash.edu.au/MUTTS/

Tutorial allocation

On-campus students should register for tutorials/laboratories using the Allocate+ system: http://allocate.its.monash.edu.au/

Unit Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Key dates</th>
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<tbody>
<tr>
<td>1</td>
<td>01/03/10</td>
<td>Introduction and Process Design Tools</td>
<td></td>
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<tr>
<td>2</td>
<td>08/03/10</td>
<td>Business Strategy</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>15/03/10</td>
<td>Business Strategy and Marketing</td>
<td></td>
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<tr>
<td>4</td>
<td>22/03/10</td>
<td>Business Models for Services Businesses</td>
<td></td>
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<tr>
<td>5</td>
<td>29/03/10</td>
<td>Accounting / Contract Law</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Mid semester break</td>
</tr>
<tr>
<td>6</td>
<td>12/04/10</td>
<td>Project Management</td>
<td>16 April - Submit numerical questions assignment: Accounting</td>
</tr>
<tr>
<td>7</td>
<td>19/04/10</td>
<td>Inventory Control</td>
<td>23 April - Submit numerical questions assignment: Project Management</td>
</tr>
<tr>
<td>8</td>
<td>26/04/10</td>
<td>ANZAC day</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>03/05/10</td>
<td>Inventory Control</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>10/05/10</td>
<td>Mathematical Optimization</td>
<td></td>
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<tr>
<td>Week</td>
<td>Date</td>
<td>Assignment</td>
<td></td>
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<tr>
<td>11</td>
<td>17/05/10</td>
<td>Mathematical Optimization</td>
<td></td>
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<tr>
<td>12</td>
<td>24/05/10</td>
<td>Scheduling</td>
<td></td>
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<tr>
<td>13</td>
<td>31/05/10</td>
<td>Quality, ISO9000</td>
<td></td>
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- 14 May - Submit numerical questions assignment: Inventory Control
- 28 May - Submit numerical questions assignment: Mathematical Optimization
- 4 June - Submit Case Study assignment
Unit Resources

Prescribed text(s) and readings

Lecture notes will be supplied on Blackboard.

The following text book will be helpful:


Recommended text(s) and readings

The following references will be available on Blackboard:

Lecture notes, tutorial exercises and worked examples.

Equipment and consumables required or provided

Students studying off-campus are required to have the minimum system configuration specified by the Faculty as a condition of accepting admission, and regular Internet access. On-campus students, and those studying at supported study locations may use the facilities available in the computing labs. Information about computer use for students is available from the ITS Student Resource Guide in the Monash University Handbook. You will need to allocate up to 5 hours per week for use of a computer, including time for newsgroups/discussion groups.

Study resources

Study resources we will provide for your study are:

Lecture notes, tutorial exercises and examples are available on the Blackboard site and ftp site ftp://ftp.monash.edu.au/pub/rmartin
Assessment

Overview

Examination (2 hours): 50%; In-semester assessment: 50%

Faculty assessment policy

To pass a unit which includes an examination as part of the assessment a student must obtain:

- 40% or more in the unit's examination, and
- 40% or more in the unit's total non-examination assessment, and
- an overall unit mark of 50% or more.

If a student does not achieve 40% or more in the unit examination or the unit non-examination total assessment, and the total mark for the unit is greater than 50% then a mark of no greater than 49-N will be recorded for the unit.

Final marks will be standardized.

Assignment tasks

Assignment coversheets

Assignment coversheets are available via "Student Forms" on the Faculty website: http://www.infotech.monash.edu.au/resources/student/forms/
You MUST submit a completed coversheet with all assignments, ensuring that the plagiarism declaration section is signed.

Assignment submission and return procedures, and assessment criteria will be specified with each assignment.

• Assignment task 1

  Title: Case Study
  Description: A case study of a service business. Groups of 2 students. The case study will involve planning out the operations of a service business, estimating financial aspects, and preparing a project plan and marketing plan to build and start the business. Variations on this description are invited.
  Weighting: 30%
  Due date: 4 June

• Assignment task 2

  Title: Numerical Questions Assignment
  Description:
A small exercise on each of the numerical topics: (1) Accounting, (2) Project Management, (3) Inventory Control, (4) Mathematical Optimization - 5% for each topic, making 20% total

**Weighting:**
20%

**Due date:**
16 April - Accounting, 23 April Project Management, 11 Sep - Inventory Control, 28 May - Mathematical Optimization

## Examination

- **Weighting:** 50%
- **Length:** 2 hours
- **Type (open/closed book):** Closed book

See Appendix for End of semester special consideration / deferred exams process.

### Due dates and extensions

Please make every effort to submit work by the due dates. It is your responsibility to structure your study program around assignment deadlines, family, work and other commitments. Factors such as normal work pressures, vacations, etc. are not regarded as appropriate reasons for granting extensions. Students are advised to NOT assume that granting of an extension is a matter of course.

Students requesting an extension for any assessment during semester (eg. Assignments, tests or presentations) are required to submit a Special Consideration application form (in-semester exam/assessment task), along with original copies of supporting documentation, directly to their lecturer within two working days before the assessment submission deadline. Lecturers will provide specific outcomes directly to students via email within 2 working days. The lecturer reserves the right to refuse late applications.

A copy of the email or other written communication of an extension must be attached to the assignment submission.

Refer to the Faculty Special consideration webpage or further details and to access application forms: [http://www.infotech.monash.edu.au/resources/student/equity/special-consideration.html](http://www.infotech.monash.edu.au/resources/student/equity/special-consideration.html)

### Return dates

Students can expect assignments to be returned within two weeks of the submission date or after receipt, whichever is later.
Appendix

Please visit the following URL: http://www.infotech.monash.edu.au/units/appendix.html for further information about:

- Continuous improvement
- Unit evaluations
- Communication, participation and feedback
- Library access
- Monash University Studies Online (MUSO)
- Plagiarism, cheating and collusion
- Register of counselling about plagiarism
- Non-discriminatory language
- Students with disability
- End of semester special consideration / deferred exams