



MONASH University

FIT5159
IT for financial decisions

Unit Guide

Semester 2, 2009

The information contained in this unit guide is correct at time of publication. The University has the right to change any of the elements contained in this document at any time.

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FIT5159 IT for financial decisions - Semester 2, 2009

Chief Examiner:

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Caulfield

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Contact hours: 12:00-2:00 pm

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Introduction

Welcome to FIT5159 IT for financial decisions for semester 2, 2009. This 6 point unit is a core unit in the Business Systems professional track of the MBIS degree, and an elective unit for the MBIS and other postgraduate courses within the Faculty of IT. The unit has been designed to provide students a broad understanding of IT tools and related techniques that can aid in the analysis and interpretation of real financial problems. This Unit will look at 6 real business related financial issues set in the context of specific case studies. You will gain an understanding of organizational environments, the contexts within which information technologies are used to aid financial decision making. This unit explores many aspects of IT with emphasis on the relationship between theoretical knowledge and its practical application using cases and real examples.

Unit synopsis

This unit provides students with an understanding of the development and use of IT tools and techniques for modelling and decision support in the field of finance. The unit is designed to give students a broad understanding of the financial subsystems confronting business enterprises. The main focus, besides the traditional modelling of finance decision making process using spreadsheet tools, will be IT tools and related techniques that can aid in the analysis and interpretation of real financial problems confronting an enterprise. This unit will look at business related financial issues in the context of specific case studies.

Learning outcomes

At the conclusion of the unit students will:

1. Understand the core foundations of finance, as appropriate to key financial analysis and decision making;
2. Understand the core technologies that support financial analysis and decision making;
3. Understand quantitative techniques supporting financial analysis and decision making;
4. Be able to apply the technologies and techniques studied to solving financial issues;
5. Be able to analyse financial solution requirements and select appropriate technical and quantitative decision aids;
6. Be able to interpret outputs from quantitative and technology based finance tools to aid in decision making.

Contact hours

3 hrs/week

Unit relationships

Prerequisites

FIT9004 or CSE9000 or BUS9520

Basic descriptive and inferential statistics.

Prohibitions

BUS5030

Relationships

FIT5159 is a core unit in the Business Systems professional track of the MBIS degree, and an elective unit for the MBIS and other postgraduate courses within the Faculty of IT.

Before attempting this unit you must have satisfactorily completed

FIT9004

or equivalent.

You may not study this unit and

BUS5003 (previous MBT unit)

in your degree.

Teaching and learning method

Lectures and hands on practical finance problem solving (modelling)

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.cc.monash.edu.au/>

Unit Schedule

Week	Topic	Key dates
1	Introduction and Financial Statement Analysis	Thursday 23 Jul 09 (2-4 pm Caulfield H1.26)
2	Capital Budgetting (spreadsheet modelling)	Thursday 30 Jul 09 (2-4 pm Caulfield H1.26)
3	Financial Processes (System Dynamics Fundamentals)	Thursday 06 Aug 09 (2-4 pm Caulfield H1.26)
4	System Dynamics Modelling Examples	Thursday 13 Aug 09 (2-4 pm Caulfield H1.26)
5	Financial Benchmarking Techniques and tools	Thursday 20 Aug 09 (2-4 pm Caulfield H1.26)
6	Real Options and Project valuations	Thursday 27 Aug 09 (2-4 pm Caulfield H1.26)
7	Financial clustering/classifications methods	Thursday 3 Sep 09 (2-4 pm Caulfield H1.26)
8	Financial Clustering/classification problems and solution tools	Thursday 10 Sep 09 (2-4 pm Caulfield H1.26)
9	Financial forecasting (statistical and machine learning approach)	Thursday 17 Sep 09 (2-4 pm Caulfield H1.26)
10	Some samples with empirical result	Thursday 24 Sep 09 (2-4 pm Caulfield H1.26)
Mid semester break		
11	Capital Structure Decision Basic	

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		Thursday 08 Oct 09 (2-4 pm Caulfield H1.26)
12	Capital structure Decision extension	Thursday 15 Oct 09 (2-4 pm Caulfield H1.26)
13	Revision	Thursday 22 Oct 09 (2-4 pm Caulfield H1.26)

Unit Resources

Prescribed text(s) and readings

Brigham E F & Ehrhardt, M.C. (2008), "Finance Management-Theory and Practice" (12th Edition), Thomson South-western, ISBN-13: 978-0-324-42269-6

Text books are available from the [Monash University Book Shops](#). Availability from other suppliers cannot be assured. The Bookshop orders texts in specifically for this unit. You are advised to purchase your text book early.

Recommended text(s) and readings

John Charns (2007), Financial modelling with Crystall + Excel, John Wiley

Required software and/or hardware

The following softwares are useful tools to carry out laboratory tasks

Excel Spreadsheet and Crystal Ball

i-think or System Dynamic

Neuroshell version 2

Viscovery SOMINE

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 6 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:

- Weekly detailed lecture notes outlining the learning objectives, discussion of the content, required readings and exercises;
- Weekly tutorial or laboratory tasks and exercises with sample solutions provided one to two weeks later;
- Assignment specifications and sample solutions;
- A sample examination and suggested solution;
- Access to past examination papers;
- Discussion groups;
- This Unit Guide outlining the administrative information for the unit;
- The unit web site on MUSO (moodle), where resources outlined above will be made available.

Assessment

Overview

Examination (2 hours): 60%; Assignments: 40%

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 44% then a mark of no greater than 44-N will be recorded for the unit.

At FEC meeting 5/07 (Item 4.1.1) the following assessment policy was adopted for all Faculty units that have an exam component:

<http://www.infotech.monash.edu.au/about/committees-groups/fec/2007/meet/fec507min.html>

"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 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 assessment then a mark of no greater than 44-N will be recorded for the unit."

Please ensure that this policy is incorporated in the unit guides for all applicable units.

The following are examples that detail how the policy works:

Example 1:

Student A

Assignment 1 - 10 marks out of 20

Assignment 2 - 2 marks out of 20

Exam - 35 marks out of 60

To pass the hurdle requirements set by the above Faculty policy the student would need:

- at least 16 marks out of the 40 available marks for the assignments (student has received 12 marks - has not met the hurdle requirement)
- at least 24 marks out of the 60 available marks for the exam (student has received 35 marks)
- at least 50 marks overall (student has received 47 marks overall)

Because the student has not met the Assignment hurdle and their overall

mark is greater than 44, their mark of 47 N will be downgraded to a 44 N. This ensures that the student does not become eligible for an NP.

Example 2:

Student B

Assignment 1 - 15 marks out of 20

Assignment 2 - 17 marks out of 20

Exam - 20 marks out of 60

To pass the hurdle requirements set by the above Faculty policy the student would need:

- at least 16 marks out of the 40 available marks for the assignments (student has received 32 marks)
- at least 24 marks out of the 60 available marks for the exam (student has received 20 marks - has not met the hurdle requirement)
- at least 50 marks overall (student has received 52 marks overall)

Because the student has not met the Exam hurdle and their overall mark is greater than 44, their mark of 52 P will be downgraded to a 44 N.

Example 3:

Student C

Assignment 1 - 9 marks out of 20

Assignment 2 - 7 marks out of 20

Exam - 24 marks out of 60

To pass the hurdle requirements set by the above Faculty policy the student would need:

- at least 16 marks out of the 40 available marks for the assignments (student has received 16 marks)
- at least 24 marks out of the 60 available marks for the exam (student has received 24 marks)
- at least 50 marks overall (student has received 40 marks overall)

Because the student has not met the overall unit mark of 50%, they will fail the unit, and since their overall mark is less than 44, their mark of 40 N remains unchanged.

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:

Assignment Tasks - Hands on practical problem solving

Description:

Task 1- Capital Budgetting Spread sheet modelling

Task 2 - Discounted Cash flow and cash flow estimation

Task 3- Benchmarking using Envelope Analysis

Task 4 - System dynamics modelling problem

Task 5 - visualisation of self organising Map for financial clustering (beta criteria)

Task 6 - Modelling of operational risk in financial institutions (Fuzzy neuro inference System)

Weighting:

10% for first task; 15% each for tasks 2 to 4 (compulsory); tasks 5 and 6 are optional.

Due date:

All 4 compulsory tasks (i.e. Tasks 1 to 4, inclusive) At least three out of six tasks must be completed by end of wk 12

Examination

• **Weighting:** 60 %

Length: 2 hours

Type (open/closed book): Closed book

Remarks:

Multiple choice questions plus computation and discussion questions

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>

Late assignment

Only on very exception situation, no approval will be given to late assessment of task. Task(s) not assessment will be given mark(s).

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