FIT9004
Computer programming for business

Unit Guide

Semester 1, 2012

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.

Last updated: 15 Feb 2012
FIT9004 Computer programming for business - Semester 1, 2012

This unit provides an introduction to the principles and practice of programming for business applications. This includes an overview of spreadsheet modelling and a detailed introduction to programming with Excel including general programming concepts, the syntax and semantics of a current business programming language, design and development of graphical user interfaces.

Mode of Delivery

- Caulfield (Day)
- Sunway (Evening)

Contact Hours

2 hrs lectures/wk, 2 hrs laboratories/wk

Workload

For on-campus students, workload commitments are:

- two-hour lecture and
d- two-hour tutorial
- a minimum of 2-3 hours of personal study per one hour of contact time in order to satisfy the reading and assignment expectations.

Unit Relationships

Prohibitions

BUS4520, BUS5520, BUS9001, BUS9003, BUS9004, GCO4801, BUS9520, GCO1810, FIT2066, BUS1010, FIT1013

Chief Examiner

Dr Caddie Gao

Campus Lecturer

Caulfield

Caddie Gao

Sunway

Anushia Inthiran
Academic Overview

Outcomes

At the completion of this unit students will have:

- a knowledge of the fundamentals of spreadsheets which will provide them with an understanding of spreadsheet modelling presentation and analysis using Excel;
- learnt the fundamentals of OO concepts;
- gained an understanding of the Excel object model;
- learnt how to create Excel macros;
- learnt the basics of programming including variables, data types, control structures, subroutines and functions;
- learnt to create custom dialog boxes and custom forms using VBA;
- the ability to create non-trivial applications using Visual Basic for Applications;
- a knowledge of the fundamentals of spreadsheets which will provide them with an understanding of spreadsheet modelling presentation and analysis using Excel;
- learnt the fundamentals of OO concepts;
- learnt the basics of programming including variables, data types, control structures, subroutines and functions;
- learnt to create custom dialog boxes and custom forms using VBA;

the ability to create non-trivial applications using Visual Basic for Applications;

- learnt how to create Excel macros;
- learnt to create executable programs with custom dialog boxes and custom forms using appropriate software tools.

Graduate Attributes

Monash prepares its graduates to be:

1. responsible and effective global citizens who:
   a. engage in an internationalised world
   b. exhibit cross-cultural competence
   c. demonstrate ethical values

critical and creative scholars who:

   a. produce innovative solutions to problems
   b. apply research skills to a range of challenges
   c. communicate perceptively and effectively

Assessment Summary

Examination (2.5 hours): 60%; In-semester assessment: 40%

<table>
<thead>
<tr>
<th>Assessment Task</th>
<th>Value</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutorials</td>
<td>10%</td>
<td>To be completed each week during class</td>
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</tbody>
</table>
Teaching Approach

Lecture and tutorials or problem classes

This teaching and learning approach provides facilitated learning, practical exploration and peer learning.

Feedback

Our feedback to You

Types of feedback you can expect to receive in this unit are:

- Informal feedback on progress in labs/tutes
- Graded assignments with comments
- Test results and feedback
- Other: Solutions to tutes

Your feedback to Us

Monash is committed to excellence in education and regularly seeks feedback from students, employers and staff. One of the key formal ways students have to provide feedback is through SETU, Student Evaluation of Teacher and Unit. The University’s student evaluation policy requires that every unit is evaluated each year. Students are strongly encouraged to complete the surveys. The feedback is anonymous and provides the Faculty with evidence of aspects that students are satisfied and areas for improvement.

For more information on Monash’s educational strategy, and on student evaluations, see:
http://www.policy.monash.edu/policy-bank/academic/education/quality/student-evaluation-policy.html

Previous Student Evaluations of this unit

Based on previous student feedback this unit is well structured and no changes have been made this semester.

If you wish to view how previous students rated this unit, please go to

Required Resources

Please check with your lecturer before purchasing any Required Resources. Prescribed texts are available for you to borrow in the library, and prescribed software is available in student labs.

Microsoft Office 2010
Academic Overview

Software may be purchased at educational prices from some software retailers.
# Unit Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Activities</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td>No formal assessment or activities are undertaken in week 0</td>
</tr>
<tr>
<td>1</td>
<td>Introduction</td>
<td>Tutorial Week 1</td>
</tr>
<tr>
<td>2</td>
<td>Excel Functions and Applications</td>
<td>Tutorial Week 2</td>
</tr>
<tr>
<td>3</td>
<td>Introduction to Excel VBA</td>
<td>Tutorial Week 3</td>
</tr>
<tr>
<td>4</td>
<td>Programming Fundamentals</td>
<td>Tutorial Week 4</td>
</tr>
<tr>
<td>5</td>
<td>Variables, Controls, and Debugging</td>
<td>Tutorial Week 5</td>
</tr>
<tr>
<td>6</td>
<td>Control Structures</td>
<td>Tutorial Week 6</td>
</tr>
<tr>
<td>7</td>
<td>Repetition and Custom Dialog Boxes</td>
<td>Tutorial Week 7</td>
</tr>
<tr>
<td>8</td>
<td>Mid Semester Test (during lecture)</td>
<td>Tutorial Week 8; Mid Semester Test (during lecture)</td>
</tr>
<tr>
<td>9</td>
<td>Dialog Box Controls</td>
<td>Tutorial Week 9</td>
</tr>
<tr>
<td>10</td>
<td>Introduction to Access</td>
<td>Tutorial Week 10</td>
</tr>
<tr>
<td>11</td>
<td>Access Maintenance</td>
<td>Tutorial Week 11; Assignment due 18 May 2012</td>
</tr>
<tr>
<td>12</td>
<td>Introduction to SQL and Access Macros</td>
<td>Tutorial Week 12</td>
</tr>
<tr>
<td></td>
<td>SWOT VAC</td>
<td>No formal assessment is undertaken SWOT VAC</td>
</tr>
</tbody>
</table>

*Unit Schedule details will be maintained and communicated to you via your MUSO (Blackboard or Moodle) learning system.*
Assessment Requirements

Assessment Policy

Faculty Policy - Unit Assessment Hurdles

Assessment Tasks

Participation

• Assessment task 1

  Title: Tutorials
  Description: Tasks will be given during tutorial classes based on lectures from the previous week. See unit outline for a description of the materials covered in tutorials.
  Weighting: 10%
  Criteria for assessment: The assessment criteria is fully described during each tutorial.
  Due date: To be completed each week during class

• Assessment task 2

  Title: Mid Semester Test
  Description: A test based on the materials covered in Weeks 1 - 6 will be conducted in Week 8.
  Weighting: 10%
  Criteria for assessment: Students must demonstrate a comprehensive knowledge of the lecture materials and tutorial tasks from Weeks 1 to 6.
  Due date: Week 8 during lecture

• Assessment task 3

  Title: Assignment
  Description: This is an individual assignment involving the development of a system using the concepts and features of the unit content.
  Weighting: 20%
  Criteria for assessment: The assessment criteria will be based your ability to perform the following tasks:
Assessment Requirements

- Write Macros (sub procedures) using VBA in Microsoft Excel
- Use appropriate data types, to declare and use variables and/or constants
- Use the Workbook, Worksheet and Range objects
- Write event procedures for some Excel and VBA objects
- Use other objects as necessary
- Use repetition and selection structures in VBA code
- Perform data validation on user input
- Use the Vlookup() worksheet function in VBA code
- Construct arithmetic expressions in VBA code
- Follow appropriate rules relating to the scope of variables
- Design user forms, using a variety of common graphic-controls (graphic-objects)

Due date:
18 May 2012

Examinations

- Examination 1

  Weighting:
  60%

  Length:
  2.5 hours

  Type (open/closed book):
  Closed book

  Electronic devices allowed in the exam:
  None

Assignment submission

It is a University requirement (http://www.policy.monash.edu/policy-bank/academic/education/conduct/plagiarism-procedures.html) for students to submit an assignment coversheet for each assessment item. Faculty Assignment coversheets can be found at http://www.infotech.monash.edu.au/resources/student/forms/. Please check with your Lecturer on the submission method for your assignment coversheet (e.g. attach a file to the online assignment submission, hand-in a hard copy, or use an online quiz).

Online submission

If Electronic Submission has been approved for your unit, please submit your work via the VLE site for this unit, which you can access via links in the my.monash portal.

Extensions and penalties

Submission must be made by the due date otherwise penalties will be enforced.

Assessment Requirements

Returning assignments

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

Policies

Monash has educational policies, procedures and guidelines, which are designed to ensure that staff and students are aware of the University’s academic standards, and to provide advice on how they might uphold them. You can find Monash’s Education Policies at: http://policy.monash.edu.au/policy-bank/academic/education/index.html

Key educational policies include:

- Plagiarism  
  (http://www.policy.monash.edu/policy-bank/academic/education/conduct/plagiarism-policy.html)
- Assessment  
- Special Consideration  
  (http://www.policy.monash.edu/policy-bank/academic/education/assessment/special-consideration-policy.html)
- Grading Scale  
  (http://www.policy.monash.edu/policy-bank/academic/education/assessment/grading-scale-policy.html)
- Discipline: Student Policy  
  (http://www.policy.monash.edu/policy-bank/academic/education/conduct/student-discipline-policy.html)
- Academic Calendar and Semesters (http://www.monash.edu.au/students/key-dates/);
- Academic and Administrative Complaints and Grievances Policy  
  (http://www.policy.monash.edu/policy-bank/academic/education/management/complaints-grievance-policy.html)
- Codes of Practice for Teaching and Learning  
  (http://www.policy.monash.edu/policy-bank/academic/education/conduct/supppdocs/code-of-practice-tea

Student services

The University provides many different kinds of support services for you. Contact your tutor if you need advice and see the range of services available at www.monash.edu.au/students. For Sunway see http://www.monash.edu.my/Student-services, and for South Africa see http://www.monash.ac.za/current/

The Monash University Library provides a range of services and resources that enable you to save time and be more effective in your learning and research. Go to http://www.lib.monash.edu.au or the library tab in my.monash portal for more information. At Sunway, visit the Library and Learning Commons at http://www.lib.monash.edu.my/. At South Africa visit http://www.lib.monash.ac.za/

Academic support services may be available for students who have a disability or medical condition. Registration with the Disability Liaison Unit is required. Further information is available as follows:

- Website: http://monash.edu/equity-diversity/disability/index.html;
- Email: dlu@monash.edu
- Drop In: Equity and Diversity Centre, Level 1 Gallery Building (Building 55), Monash University, Clayton Campus, or Student Community Services Department, Level 2, Building 2, Monash University, Sunway Campus
- Telephone: 03 9905 5704, or contact the Student Advisor, Student Community Services at 03 55146018 at Sunway
Recommended Reading:

For Excel:


For Access:


For VBA:
