



The University of Southern Queensland

## Course specification

The current and official versions of the course specifications are available on the web at <http://www.usq.edu.au/coursespecification/current>.  
Please consult the web for updates that may occur during the year.

### Description: Principles of Information Security

| Subject | Cat-nbr | Class | Term    | Mode | Units | Campus    |
|---------|---------|-------|---------|------|-------|-----------|
| CIS     | 2005    | 82009 | 6, 2008 | EXT  | 1.00  | Toowoomba |

|                                   |        |
|-----------------------------------|--------|
| <b>Academic group:</b>            | FOBUS  |
| <b>Academic org:</b>              | FOB005 |
| <b>Student contribution band:</b> | 2      |
| <b>ASCED code:</b>                | 029901 |

### STAFFING

Examiner: Michael Lane  
Moderator: Jianming Yong

### OTHER REQUISITES

Students who have not previously completed CIS1000 or CSC1401 at USQ will need to have prior knowledge/experience with introductory computing concepts. Students are required to have access to a personal computer, e-mail capabilities and Internet access to USQConnect. Current details of computer requirements can be found at <http://www.usq.edu.au/business/aboutfob.htm>.

### RATIONALE

The amount of data and information stored electronically is growing exponentially. At the individual organisational and societal level there is an increasing reliance on information systems to store and provide this information with the appropriate level of confidentiality, integrity and availability. Hence it is vitally important that business analysts recognise the need to ensure that corporate information and information systems are appropriately secure from unintentional and intentional threats from both authorised and unauthorised users while still maintaining a high level of service.

### SYNOPSIS

The increased reliance on technology to enhance business functions and store information means students must have an understanding of the vulnerabilities and threats which systems face and the controls or countermeasures which can prevent or limit their effect. It is a goal of this course for students to develop skills and knowledge to evaluate Information Security situations, identify specific issues and clearly communicate appropriate recommendations. The ongoing commitment to information systems security that organisations need to take is also stressed in this course.

### OBJECTIVES

The course objectives define the student learning outcomes for a course. The assessment item/s that may be used to assess student achievement of an objective is/are shown in parentheses after each objective. On successful completion of this course, students should be able to:

1. have a strong understanding of the vulnerabilities and threats relating to information systems and the controls which can be implemented to mitigate their effect (CMA Test, Assignment 1, Assignment 2, Examination)
2. understand the need for information systems security (CMA Test, Assignment 1, Examination)
3. describe various network related threats and controls as covered in this course (CMA Test, Assignment 1, Assignment 2, Examination)
4. discuss the legal and ethical issues that can play a part in information systems security (Examination)
5. understand that incidents can still occur and have knowledge of procedures to be put in place to facilitate appropriate incident and disaster response (Assignment 2, Examination)
6. recognise the ongoing commitment to information systems security that is imperative for organisations to maintain reasonably secure information systems and understand the concept of continual improvement (Assignment 1, Assignment 2, Examination).

## TOPICS

| Description   | Weighting (%) |
|---|---------------|
| 1. Information systems security vulnerabilities and threats covered | 45.00         |
| 2. Information systems security controls covered                    | 40.00         |
| 3. Incident and disaster response                                   | 10.00         |
| 4. Legal and ethical issues   | 5.00          |

## TEXT and MATERIALS required to be PURCHASED or ACCESSED

ALL textbooks and materials are available for purchase from USQ BOOKSHOP (unless otherwise stated). Orders may be placed via secure internet, free fax 1800642453, phone 07 46312742 (within Australia), or mail. Overseas students should fax +61 7 46311743, or phone +61 7 46312742. For costs, further details, and internet ordering, use the 'Textbook Search' facility at <http://bookshop.usq.edu.au> click 'Semester', then enter your 'Course Code' (no spaces).

All students will need access to a PC word processing and spreadsheet package. Any package will suffice.

Students also need MS Windows to view multimedia materials.

Panko, R 2004, *Corporate computer and network security*, Pearson Education, Upper Saddle River, New Jersey.

Summers, J & Smith, B 2006, *Communication skills handbook: how to succeed in written and oral communication*, 2nd edn, John Wiley & Sons, Milton, Queensland.

## REFERENCE MATERIALS

Reference materials are materials that, if accessed by students, may improve their knowledge and understanding of the material in the course and enrich their learning experience.

Bragg, R, Rhodes-Ousley, M & Strassberg, K 2004, *Network security: the complete reference*, McGraw-Hill/Osborne, Emeryville, California.

Campbell, P, Calvert, B & Boswell, S 2003, *Security+ guide to network security fundamentals*, Thomson Course Technology, Boston, Massachusetts.

Cheswick, WR, Bellovin, SM & Rubin, AD 2003, *Firewalls and Internet security: repelling the wily hacker*, 2nd edn, Addison-Wesley, Boston, Massachusetts.

Erbschloe, M 2003, *Guide to disaster recovery*, Thomson Course Technology, Boston, Massachusetts.

Parker, DB 1998, *Fighting computer crime: a new framework for protecting information*, John Wiley & Sons, New York.

Pfleeger, CP & Pfleeger, SL 2007, *Security in computing*, 4th edn, Prentice Hall, Upper Saddle River, New Jersey.

Schneier, B 2004, *Secrets and lies: digital security in a networked world*, John Wiley & Sons, New York.

(new edition)

## STUDENT WORKLOAD REQUIREMENTS

| ACTIVITY      | HOURS  |
|---------------|--------|
| Private Study | 155.00 |

## ASSESSMENT DETAILS

| Description           | Marks out of | Wtg (%) | Due date               |
|-----------------------|--------------|---------|------------------------|
| CMA TEST              | 30.00        | 5.00    | 17 Oct 2008            |
| ASSIGNMENT 1          | 100.00       | 15.00   | 31 Oct 2008            |
| ASSIGNMENT 2          | 100.00       | 20.00   | 24 Nov 2008            |
| PART A OF 2-HOUR EXAM | 30.00        | 18.00   | END S6<br>(see note 1) |
| PART B OF 2-HOUR EXAM | 70.00        | 42.00   | END S6                 |

### NOTES

1. The examination is scheduled to be held in the end-of-semester examination period. Students will be advised of the official examination date after the timetable has been finalised.

## IMPORTANT ASSESSMENT INFORMATION

- 1 Attendance requirements:  
It is the students' responsibility to attend and participate appropriately in all activities (such as lectures, tutorials, laboratories and practical work) scheduled for them, and to study all material provided to them or required to be accessed by them to maximise their chance of meeting the objectives of the course and to be informed of course-related activities and administration.
- 2 Requirements for students to complete each assessment item satisfactorily:  
To satisfactorily complete an individual assessment item a student must achieve at least 50% of the marks. (Depending upon the requirements in Statement 4 below, students may

- not have to satisfactorily complete each assessment item to receive a passing grade in this course.)
- 3 Penalties for late submission of required work:  
If students submit assignments after the due date without prior approval of the examiner, then a penalty of 5% of the total marks gained by the student for the assignment may apply for each working day late up to ten working days at which time a mark of zero may be recorded.
  - 4 Requirements for student to be awarded a passing grade in the course:  
To be assured of receiving a passing grade a student must achieve at least 50% of the total weighted marks available for the course.
  - 5 Method used to combine assessment results to attain final grade:  
The final grades for students will be assigned on the basis of the aggregate of the weighted marks obtained for each of the summative assessment items in the course.
  - 6 Examination information:  
This is a restricted examination. Candidates are allowed access to specific materials during the examination. The only materials that candidates may use in the examination for this course are (i) Writing materials: non-electronic and free from material which could give the student an unfair advantage in the examination; (ii) Translation dictionaries: with the Examiner's approval, candidates may, take an appropriate non-electronic translation dictionary into the examination. This will be subject to perusal and, if it is found to contain annotations or markings that could give the candidate an unfair advantage, it may be removed from the candidate's possession until the appropriate disciplinary action is completed.
  - 7 Examination period when Deferred/Supplementary examinations will be held:  
Any Deferred or Supplementary examinations for this course will be held during the next examination period.
  - 8 University Regulations:  
Students should read USQ Regulations 5.1 Definitions, 5.6 Assessment, and 5.10 Student Academic Misconduct for further information and to avoid actions which might contravene university regulations. These regulations can be found at <http://www.usq.edu.au/corporateservices/calendar/part5.htm>. Students should also read the Faculty of Business Policies and Procedures which can be found at <http://www.usq.edu.au/business/aboutfob.htm>.

## ASSESSMENT NOTES

- 1 Assignments: (i) The due date for an assignment is the date by which a student must despatch the assignment to the USQ. The onus is on the student to provide proof of the despatch date, if requested by the examiner. (ii) Students must retain a copy of each assignment submitted for assessment. This must be produced within 24 hours if required by the examiner. (iii) In accordance with university policy, the examiner may grant an extension of the due date of an assignment in extenuating circumstances. (iv) The examiner will normally only accept assignments which are electronically submitted through the USQ Study Desk for this course. Students who are unable to meet this submission requirement should contact the examiner of the course to negotiate alternative arrangements. (v) Students who do not have regular access to postal services or who are otherwise disadvantaged by these regulations may be given special consideration. They should contact the examiner to negotiate such special arrangements. (vi) In the event that a due date for an assignment falls on a local public holiday in their area, such as a show holiday,

- the due date for the assignment will be the next day. Students are to note on the assignment cover the date of the public holiday for the examiner's convenience.
- 2 Course weightings: Course weightings of topics should not be interpreted as applying to the number of marks allocated to questions testing those topics in an examination paper.
  - 3 Guidelines for assignments: Unless otherwise directed by the examiner, all written and oral assignments submitted by students must conform to the guidelines laid out in the 'Communication skills handbook: how to succeed in written and oral communication'. Any work not prepared in accordance with these guidelines may be subject to penalty or requirement for resubmission.
  - 4 Make-up work: Students who have undertaken all of the required assessments in a course but who have failed to meet some of the specified objectives of a course within the normally prescribed time may be awarded the temporary grade: IM (Incomplete - Make up). An IM grade will only be awarded when, in the opinion of the examiner, a student will be able to achieve the remaining objectives of the course after a period of non-directed personal study.
  - 5 Deferred work: Students who, for medical, family/personal, or employment-related reasons, are unable to complete an assignment or to sit for an examination at the scheduled time may apply to defer an assessment in a course. Such a request must be accompanied by appropriate supporting documentation. One of the following temporary grades may be awarded: IDS (Incomplete - Deferred Examination); IDM (Incomplete Deferred Make-up); IDB (Incomplete - Both Deferred Examination and Deferred Make-up).

## **OTHER REQUIREMENTS**

- 1 E-mail and Internet access: Students will require access to e-mail and Internet access to USQConnect for this course.
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