

## **REGULATIONS FOR THE DEGREE OF BACHELOR OF ENGINEERING (SOFTWARE ENGINEERING) AWARDED IN CONJUNCTION WITH THE DEGREE OF BACHELOR OF BUSINESS ADMINISTRATION (INFORMATION SYSTEMS)**

*(See also General Regulations and Regulations for First Degree Curricula)*

(Subject to University's approval)

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### **ISSE 1 Admission Requirements**

To be eligible for admission to the programme leading to the Degree of Bachelor of Engineering in Software Engineering under these regulations, a candidate shall

- (a) comply with the General Regulations; and
  - (b) hold a degree of BBA(IS) from the University of Hong Kong.
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### **ISSE 2 Length of Study**

The curriculum shall normally extend over one academic year of full-time study.

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### **ISSE 3 Curriculum Requirements**

To be eligible for the award of the Degree of Bachelor of Engineering in Software Engineering, a candidate shall

- (a) comply with the General Regulations;
  - (b) complete the curriculum and satisfy the examiners in accordance with these regulations; and
  - (c) satisfy the examiners in no less than 63 credit-units of courses as prescribed in the syllabuses.
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**ISSE 4** Candidates shall normally select not less than 33 and not more than 39 credit-units of courses in each semester, unless otherwise permitted or required by the Board of the Faculty. Candidates who have overloaded in preceding semesters will be allowed to reduce the load by up to the equivalent number of credit-units they have passed in excess of the normal load in a subsequent semester without having to seek prior approval.

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**ISSE 5** Candidates with unsatisfactory academic progress may be required by the Board of the Faculty to take a reduced study load.

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### **ISSE 6 Selection of Courses**

Candidates shall select their courses in accordance with these regulations and the guidelines specified in the syllabuses before the beginning of each academic year.

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### **ISSE 7 Assessment and Grades**

Candidates shall be assessed for each of the courses which they have registered for, and assessment may be conducted in any one or any combination of the following manners: written examinations or tests, continuous assessment, laboratory work, field work, project reports, or in any other manner as specified in the syllabuses. Grades shall be awarded in accordance with UG 5 of the Regulations for the First Degree Curricula.

**ISSE 8** Written examinations or tests shall normally be held at the end of each semester unless otherwise specified in the syllabuses. A candidate who fails in any course may be required to repeat the same course in a subsequent semester, or to take a special examination at a time specified by the Board of the Faculty. The grades for all the attempts made will be recorded in the transcript. Candidates shall not be permitted to repeat a course for which they have received a grade D or above for upgrading purposes.

**ISSE 9** A candidate will normally be recommended for discontinuation if

- (a) his/her yearly average of Semester GPA is unsatisfactory for two consecutive academic years;
- (b) he/she has failed in a core course twice; or
- (c) he/she has accumulated less than half of the credit-units expected of a normal load for two consecutive years.

### **ISSE 10 Degree Classification**

The degree of Bachelor of Engineering in Software Engineering shall be awarded under these regulations in five divisions:

First Class Honours  
 Second Class Honours Division One  
 Second Class Honours Division Two  
 Third Class Honours  
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**ISSE 11** The classification of honours shall be determined by the Board of the Faculty at its full discretion based on 180 credit-units selected in the manner specified in the syllabus for the degree of BEng(SE) awarded in conjunction with the degree of BBA(IS).

## **SYLLABUSES FOR THE DEGREE OF BACHELOR OF ENGINEERING (SOFTWARE ENGINEERING) AWARDED IN CONJUNCTION WITH THE DEGREE OF BACHELOR OF BUSINESS ADMINISTRATION (INFORMATION SYSTEMS)**

### **YEAR FOUR**

*Course code*      *Course title*      *Credit-units*

BUSI0009	Business policy	6
CSIS0405	Professionalism and ethics	6
CSIS0406	Real-time and embedded systems	6
ELEC2803	Engineering and society+	3
CSIS0803	System integration project	6
CSIS0802	Software engineering project	12
BUSIxxxx	IS Elective <sup>1</sup>	12

BUSIxxxx	Business Elective <sup>2</sup>	6
CSISxxxx	CSIS Elective <sup>3</sup>	6
CSIS1410	Industrial training	3

+ To complete the curriculum, a candidate must pass all courses with the exception of those indicated by +

<sup>1</sup> Elective courses in the Information Systems area offered by the School of Business

<sup>2</sup> Elective courses offered by the School of Business

<sup>3</sup> Elective courses offered by the Department of Computer Science and Information Systems

The degree classification for the BEng(SE) degree awarded to a BBA(IS)/BEng(SE) student shall be based on:

- (a) All compulsory courses and projects offered by the Department of Computer Science and Information Systems in the BBA(IS)/BEng(SE) syllabuses, with the following provisos:
  - (i) Where a syllabus permits a course offered by the School of Business to be taken in place of a course offered by the Department of Computer Science and Information Systems, then the actual course taken shall be used in the classification,
  - (ii) Workshop Training and Industrial Training shall carry a weight of zero\*;
- (b) The compulsory course in Engineering mathematics;
- (c) The following three compulsory language and communications courses:
  - (i) Practical Chinese language course for business, economics and finance students,
  - (ii) Business communication,
  - (iii) English for computer science;
- (d) The following two courses on information systems development:
  - (i) Information systems development and project management I,
  - (ii) Information systems development and project management II;
- (e) The best 12 credit-units of elective courses offered by the Department of Computer Science and Information Systems;
- (f) The best 18 credit-units of IS and Business elective courses taken as part of the Year 4 syllabus;
- (g) The best 15 credit-units from the following courses:
  - (i) Business policy,
  - (ii) Engineering and society,
  - (iii) Culture and Value studies broadening course,
  - (iv) Principles of management,
  - (v) Introduction to economics.

## Compulsory Courses

### **BUSI0009. Business policy (6 credit-units)**

The course will review the analysis and implementation of strategic corporate decisions which encompass all functional areas of business. Students will be split into small groups and will be required to write a mini-project of not more than 5,000 words outlining the desired corporate strategy for a given corporate problem.

\* A weight of zero is given so that the Pass/Fail grade will not lower the classification

**CSIS0405. Professionalism and ethics (6 credit-units)**

Topics include definitions of software engineering subject areas and professional activities; professional societies and ethics; professional competency and life-long training; uses, misuses and risks of software; information security and privacy; intellectual property and software law; software contract; social responsibilities; and software engineering standards.

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**CSIS0406. Real-time and embedded systems (6 credit-units)**

Topics include: specification of real-time software requirements; design, implementation, and evaluation of real-time software; analysis and verification of real-time computing system performance.

Prerequisite: CSIS0230

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**ELEC2803. Engineering and society (3 credit-units)**

Interaction between engineers and society; impact of technologies on society; environmental and safety issues; professional conduct and responsibility; contract law; law of tort; professional negligence and intellectual property law.

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**CSIS0803. System integration project (6 credit-units)**

This is a team project involving development and integration of software components. The objective is to put the concepts and theories covered in the main software engineering courses (such as CSIS0297, CSIS0401, CSIS0402 and CSIS0403) into practice. The output will be a distributed software system based on well-defined requirements. Software tools will be used and system programming is a compulsory part of the project.

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**CSIS0802. Software engineering project (12 credit-units)**

This is a team project, to be taken by students in the final year, which requires substantial contribution from every individual team member. The project will go through the common process of requirements, analysis, design, implementation, testing, etc. Project standards will be enforced. This may not be taken with CSIS0801 Year project.

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**CSIS1410. Industrial training (3 credit-units)**

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**Elective courses in Information Systems area offered by the School of Business****BUSI0014. Decision support systems (6 credit-units)**

This course studies how computer systems can be used to assist managers in making effective decisions, both structured and semi-structured, through the integrated application of model base management, knowledge base management, data base management, dialogue management and problem processing systems.

Prerequisite: BUSI1003 Introduction to management information systems or equivalent

**BUSI0046. Advanced information systems development (6 credit-units)**

This course studies how emerging information technologies affect both the information systems development process and the information systems. Topics include computer-aided software engineering tools, distributed systems, electronic data interchange, and web-based technologies. Students will carry out a field study of a new technology or new techniques.

Prerequisites: BUSI0048 Business applications development, and BUSI0052 Database development and management or equivalent

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**BUSI0053. Decision support and expert systems (6 credit-units)**

This course studies a range of modern decision technologies that can aid in decision making including decision support systems, group support systems, electronic meeting systems, artificial intelligence, expert systems, genetic algorithms and neural networks. Both technical and managerial issues related to the development and implementation of information systems using the above technologies will be discussed.

Prerequisites: BUSI0048 Business applications development, and BUSI0052 Database development and management or equivalent

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**BUSI0055. Electronic commerce and virtual businesses (6 credit-units)**

This course examines the progress of electronic commerce and focuses on the business opportunities and current technologies relevant to this emerging area of information technology. Students will learn how to set up a business on the Internet.

Prerequisites: BUSI1003 Introduction to management information systems, or CSIS1127 Introduction to information systems

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**BUSI0062. Information systems management and strategy (6 credit-units)**

This course examines issues related to managing information systems in an organization including role of the chief information officer, information planning and business strategy, and various frameworks for understanding the function of information systems in an organization.

Prerequisite: BUSI1003 Introduction to management information systems or equivalent

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**BUSI0063. Internet applications development (6 credit-units)**

This course studies how to develop an Internet-based business application. Resources, tools and services available on the Internet will be introduced. The JAVA programming language will be covered.

Prerequisites: BUSI0048 Business applications development, and BUSI0052 Database development and management or equivalent

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**BUSI0065. Management and security issues on the commercial internet (6 credit-units)**

This course studies two key issues in developing business applications on the commercial Internet: management of the web site and security of the information stored on and obtained from the site. Issues including updating, encryption and authentication will be discussed.

Prerequisite: BUSI1003 Introduction to management information systems or equivalent

**BUSI0066. Marketing on the commercial internet (6 credit-units)**

This course studies the progress of the Internet, World Wide Web and related technologies for the marketing, selling and distribution of goods and services. Both technology and business marketing issues will be discussed.

Prerequisites: BUSI1004 Marketing, and BUSI1003 Introduction to management information systems or equivalent

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**BUSI0068. Multimedia applications development (6 credit-units)**

This course introduces the various multimedia applications and the technologies based on which these applications are developed. Technologies that enable the achieving and retrieval of text, graphics, sound and video via optional storage devices will be examined.

Prerequisites: BUSI0048 Business applications development, and BUSI0052 Database development and management or equivalent

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**BUSI0074. Telecommunications policy and business (6 credit-units)**

This course provides an overview of recent developments of the telecommunications industries in Hong Kong and around the Asia-Pacific Region. Telecommunications infrastructure policies introduced by respective governments in the Region and the impacts of these policies on business operations will be examined.

Prerequisite: BUSI1003 Introduction to management information systems or equivalent

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**BUSI0076. Current topics in information systems (6 credit-units)**

Study of selected areas of information systems and information technology. Topics vary with recent developments and current interest.

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**Elective courses offered by the School of Business**

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**Elective courses offered by the CSIS Department**

- Level 2 and “Applications” courses offered by the CSIS Department.