Information Systems

Vision

The School of Information Systems strives to become a reputable and leading information system school for developing world-class professionals with excellent skills in both business and information system and technology to innovatively solve business problems.

Mission

The School of Information System exists to prepare globally competitive Information System graduates through innovative and growth-oriented curriculum by meeting the stake-holder expectations, providing academic and service excellence, promoting high quality research, building strong corporate connections, and gaining international recognitions and accreditations. They will be equipped with the necessary leadership, entrepreneurial, technological, problem-solving skills, and analytical knowledge through the high quality education and research in the area of information systems provided in the program.

Program Description

The School of Information Systems offers students to become professionals in either business or technology area. The double degree program offered in partnership with Queensland University of Technology (QUT), Auckland University of Technology (AUT) and Cologne Business School would enhance students' ability to compete in an international marketplace. Single degree programs are also available, with options of IS General, Project Management and IS Audit and Assurance. In addition to the single and double degree program, the school also provides master track program. The school aims to prepare students for either immediate entry into the global marketplace or for more advanced study in either business or technology.

The objectives of the Information Systems program are:

- To provide students with a basic foundation of mathematical, management, and computing knowledge that will be needed in IT practices, which comply with global standards.
- To provide students with solid knowledge and skills on information system and technology to succeed in various industries
- To prepare students to have effective communication skills in both written and verbal forms
- To complement students with leadership, entrepreneurial, social and ethical professional skills in order to compete globally
- To complement students with strong analytical, critical, and creative thinking skills in developing innovative solutions and show passion for continuous improvement in IT solutions

Award/Degree

- Sarjana Komputer (S.Kom) from BINUS University
- Dual Degree with Bachelor of Arts from Curtin University of Technology at Perth, Australia
- Dual Degree with Bachelor of Information Technology from Queensland University of Technology at Queensland, Australia
- Dual Degree with Bachelor of Computer and Information Sciences from Auckland University of Technology at Auckland, New Zealand
- Dual Degree with a Bachelor of Commerce from Cologne Business School at Cologne, Germany

Graduate Competencies

Upon successful completion of this 4-year program, students are expected to be able to:

1. apply knowledge of computing, management, and mathematics appropriate to the discipline.
2. identify and analyze user requirements and business process in the selection, creation and evaluation of information systems.
3. apply the processes that support the delivery and management of information systems within a specific application environment.
4. effectively integrate IT solutions aligned with organizational goals.
5. explain and apply best practices and standards in order to produce good quality of information.
6. communicate effectively with a range of audience.
7. understand professional, ethical, legal, security and social issues and responsibilities.
8. analyze the local and global impact of computing on individuals, organizations and society.
9. analyze the needs and engagement for continuous improvement, including professional development.
10. design and implement innovative problem solution to adapt to dynamic IT environment and growth.

Study Completion Requirements

To complete a major in Information Systems program with either a single or dual degree(s) at BiNus International, students must complete a minimum of 146 SCUs of academic credit. These 146 SCUs are comprised of:

- 122 SCU of IS Mandatory Courses, required for all students taking a major in IS, which meet either BINUS INTERNATIONAL requirements or mandated by the Indonesian Ministry of Education.
- Single degree programs also require the 6-unit thesis in the final year, thus totaling 128 Mandatory units.
- Additional courses that are determined by the School of Information Systems which vary based on the specific program study selected by the student;
- Elective courses chosen by the students

IS Double Degree Program

The Double Degree programs are offered in partnership with Queensland University of Technology (Brisbane, Australia), Auckland University of Technology (Auckland, New Zealand), and Cologne Business School (Cologne, Germany). In addition to the Sarjana Komputer (S.Kom) degree from BINUS University, students who complete this program will be awarded with a Bachelor of Information Technology (B.I.T) degree from QUT, Bachelor of Computer and Information Sciences (BCIS) from AUT and Bachelor of Arts (B.A.) degree from Cologne Business School. The

first three years of study follow a prescribed set of courses agreed between BINUS and AUT/QUT/Cologne. The final year of study is undertaken at the partner campus.

IS Single Degree Program

There are three streaming available in this program. The three streams are IS General, Project Management, and Information Systems Audit and Assurance.

IS General Stream (Single Degree)

The IS General option is aimed to provide graduates with a broad ground in both business and technology subjects. In addition to the core of business and technology related courses. Please refer to course descriptions to check any pre-requisites for electives.

Project Management Stream (Single Degree)

The Project Management stream includes more advanced courses in project management related topics. In addition to the core of business and technology related courses, 18 SCUs are determined by the School. Please refer to course descriptions to check any pre-requisites for electives.

IS Audit and Assurance Stream (Single Degree)

The IS Audit and Assurance stream provides students to focus more on information systems governance. In addition to the core of business and technology related courses, 20 units are chosen by the School of IS. Please refer to course descriptions to check any pre-requisites for electives.

Master Track Program

The Master Track program is designed to allow students to complete their Sarjana Komputer (S.Kom) degree at Binus International in 7 (seven) semesters, and then continue with a graduate program for 2 (two) semesters at Macquarie University to obtain Master Degree.

Teaching, Learning, and Assessment Strategy

The teaching and learning processes are conducted through lectures, tutorials, practical demonstrations and activities, small projects, with students' independent study required. It is the responsibility of the lecturer of a particular course to facilitate all students' learning on the course, who can be assisted by a tutor, if necessary. By having qualified lecturers and guest lecturers from professional industries, the students will be able to gain knowledge from both sides, i.e. theoretical and practical frameworks, through in-depth analysis of case studies, laboratories, and individual/group work projects. In addition, an innovation habit will be developed through course assessment that put weight on content comprehension and innovation. The innovation thinking, or commonly referred to Design Thinking on the other hand, will be developed through collaboration with BINUS INTERNATIONAL'S School of Art & Design. Students are required to translate their selected innovative ideas into a visible design to comprehend the end-to-end innovation process. This innovation thinking approach is implemented in the teaching, learning, and assessment process of several courses throughout the program.

Learning will be an exciting experience for students as they are provided with excellent facilities such as Internet access, computer laboratories and library resources. Specialized laboratories or access to specialized simulation software is needed for advanced students where group and individual projects are developed. Contemporary and emerging software development tools will be available to create the most current enterprise solutions. A good quality library is provided for the students to access books, journals and magazines for information and research activity.

All coursework are assessed through a variety of assessment tasks such as reports, presentations, assignments, individual and group projects, and thesis/final project report as well as mid-semester and final semester examinations. The feedback of the given assessment tasks is given in the class/tutorial, embedded in the scoring rubric/assessment criteria sheet and/or separate feedback forms. Students will also be provided to work together on team-oriented projects. The group skills developed in this mode are critical to a successful information systems professional. The complexity of course content in design problem-solving methods is introduced at different levels of study. A final project work and the written report must be submitted in Year 4 (semester 8).

Employability and Career Support

A wide range of career opportunities in information systems industry is introduced to students during their study. The integrated curriculum is designed and developed to support students in building on their technical and non-technical skills as well as engaging with the industry.

This program provides an internship program for each student wherein the student may conduct real projects as a practical study within industrial contexts. The program develops the student's ability to be involved in professional practices, and ethical and organizational responsibilities. Furthermore, the industrial internship program provides students with real experience in the workplace and teaches them to cope with the work environment. In addition, series of study/field trips to visiting professionals and industries will be conducted to give good grounds for having a broad overview of the industry. These experiences support individual career aspiration and may provide social and professional networks.

BINUS INTERNATIONAL also provides career support for students by disseminating information on the latest job vacancies, internships, and workshops. This support service can be accessed from www.binuscareer.com.

Program Structure

IS Mandatory Courses

Course Code	Course Name	SCU
AC101	Introduction to Financial Accounting	4
AC114	Economics Theory	4
AD403	Design Thinking	2
CS113	Programming Principles	4
CS115	Introduction to Programming	4
CS201	Data Structure and Algorithm Analysis	4
GS102	Academic English I	3
GS107	Character Building : Self Development	2
GS201	Academic English II	3
GS209	Character Building : Interpersonal Development	2
GS210	Character Building : Spiritual Development	2
GS207	Business Law	3
GS303	Character Building : Professional Development	2
IS101	Introduction to IT 100	2
IS105	Systems Thinking	2
IS109	Information Systems Concept	4
IS202	Software Development 1	4
IS203	Database Design	4
IS204	E-Business Concepts & Issues	4
IS211	Human Computer Interaction	4
IS220	Database Systems	4
IS226	IS Systems Analysis and Design	4
IS302	Business Computing Infrastructure and Communication	4
IS303	Corporate IS Management	4
IS304	Object Oriented Analysis, Modeling and Design	4
IS306	Testing and Implementation	4
IS314	Business Process Modeling and Simulation	4
IS403	Project Management	4
IS408	Enterprise Architecture	4
MK105	Marketing Fundamentals	4
MK107	Introduction to Business (Management and Leadership)	2
MK109	Business Communications	2
MK404	Entrepreneurship	2
MS102	Statistic and Probability	2
MS107	Discrete Mathematics	4
MS204	Linear Algebra for Economics & Business	3
MS401	Research Methodology	3

Additional Courses for Double Degree (Computer and Information Sciences – AUT)

Course Code	Course Name	SCU
-	Courses at Auckland University of Technology	24

Additional Courses for Double Degree (Information Systems & International Business – Cologne)***

Course Code	Course Name	SCU
AC205	Cost & Management Accounting	4
AC206	Financial Management for Business	4
AC220	Financial Statement Analysis	4
MK214	Human Resources Management	4
	Courses at Cologne	29

***** *not required: IS220, IS303, IS408 and MS107 (total 12 SCU)***

Additional Courses for Double Degree (Information Technology – QUT)

Course Code	Course Name	SCU
-	Courses at Queensland University of Technology	24

Additional Courses for Project Management

Course Code	Course Name	SCU
IS310	Client Relationship Management	3
IS313	Human Factors in Information Systems	3
IS320	Enterprise Resource Planning	3
IS323	IT Governance	3
IS410	Data Mining & Business Intelligence	3

Additional Courses for IS Audit and Assurance

Course Code	Course Name	SCU
AC210	Intermediate Financial Accounting	3
AC410	Auditing I	4
IS323	IT Governance	3
IS324	Protection of Information Assets	4
IS325	Business Continuity Planning	2
IS401	IT Service Delivery	3
IS402	IS Audit workshop	2