

# Business Information Systems

## Introduction

The Business Information Systems Program is a unique combination of computing domain and the business sector that is developed to equip the students with competencies of managing IS (Information System), information technology, entrepreneurship, business process, and project management. Its graduates will play an important role of delivering technology solution to the market place by systematically recognizing and translating the business needs into technical IT (Information Technology) requirements.

The ability of being the link between technology and the people / customer is of rare expertise in IT industry nowadays. Combined with focus on international quality higher education system, embedded entrepreneurship and innovation subjects, the program opens to its graduate endless opportunities from being a world class Information System professional into a well-equipped business start-up entrepreneur.

The double degree offered in partnership with Queensland University of Technology (QUT), Auckland University of Technology (AUT), Northumbria United Kingdom, and Cologne Business School Germany, would enhance students' ability to compete in an international marketplace. The program aims to prepare students for either immediate entry into the global marketplace or for more advanced study in either business or information technology.

## Vision

The Program of Business Information Systems strives to become a reputable and leading Information Systems international program for developing world-class professionals and entrepreneurs with excellent skills in Information System and Business.

## Mission

The Program of Business Information Systems exists to prepare globally competitive Information System graduates through innovative and growth-oriented curriculum by providing academic and service excellence, promoting international exposure, building strong corporate connections, and gaining international recognitions.

The students will be equipped with problem-solving, information technology, leadership, entrepreneurial knowledge and skills through high quality education and research in the area of Business Information Systems.

## Program Objectives

The objectives of the Business Information Systems program are:

1. To equip the students with latest data science capability and knowledge on the technology based solution of web and mobile applications, business process re-engineering, infrastructure architecture, and database; to meet management needs for information systems and decision support.
2. To equip students with various thinking skill in the area of strategic planning, strong analytical, critical, and design thinking in developing innovative technology solutions.
3. To equip student with leadership, entrepreneurial, ethical professional skill related to the Information System industry.

4. To equip student with openness and awareness of diversity across cultures and to prepare them with effective communication skills to enter international market as global citizen.

### **Student Outcomes**

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

1. Identify the problem of information systems through investigation, analysis, interpretation of data and information, so as to formulate solutions based information system framework to meet organization goals.
2. Mastering the contemporary technology in Information Systems of cloud based, mobile, analytics, and Internet of things.
3. Mastering project management concepts such as initiation, planning, execution, control and closure of projects to practice information-based systems.
4. Mastering the concept of business processes, systems analysis, systems development, database, programming, and project management that are necessary to support the development of information systems.
5. Mastering the principles and current issues in business and technology in general in order to adapt with the technological development.
6. Able to choose and utilize the resources of analysis, design, and implementation of information systems based on information technology and computing that are appropriate for information systems engineering activities within an organization.
7. Able to build information systems using the principles of information systems development SDLC (system development life cycle) to solve information system engineering problems in an organization.
8. Able to make creative business plan and to construct, innovate and evaluate digital based business start-up.

### **Prospective Career of the Graduates**

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. IS graduates may enter the marketplace through many career paths, including, but not limited to:

- Data Scientist
- Corporate Information Systems Designer
- Database Administrator (DBA)
- E-Business Entrepreneur
- Enterprise System Administrator
- Enterprise Resource Planning (ERP) Consultant
- Information Technology based Entrepreneur
- IS Project Manager
- IT/IS Consultant
- IS Auditor
- Programmer Analyst
- System Tester and Integrator

This program provides an internship program wherein they 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 leverages their ability to cope with the international working 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](http://www.binuscareer.com).

### **Award/Degree**

- Sarjana Komputer (S.Kom) from BINUS University
- Dual Degree with Bachelor of Information Technology (B.I.T.) from Queensland University of Technology at Queensland, Australia
- Dual Degree with Bachelor of Computer and Information Sciences (BCIS) from Auckland University of Technology at Auckland, New Zealand
- Dual Degree with a Bachelor of Art (B.A.) from Cologne Business School at Cologne, Germany
- Dual Degree with a Bachelor of Science (BSc. - Hons) in Business Information Systems from Northumbria University, Newcastle, United Kingdom.
- Dual Degree with a Master of Commerce in Information System and Technology (M.Com) from Macquarie University, Australia.

### **Major and Streaming**

Streaming	Degree				Partner
	Single	Title	Double	Title	
Business Information Systems	√	S.Kom			
International Business major in International Trade			√	S.Kom. & B.A.	Cologne Business School, <b>Germany</b>
International Business major in European Management			√	S.Kom. & B.A.	Cologne Business School, <b>Germany</b>
Business Information Systems (Honours)			√	S.Kom. & BSc. (Hons)	Northumbria University, Newcastle, <b>United Kingdom</b>

Information Technology			√	S.Kom. & B.I.T	Queensland University of Technology, <b>Australia</b>
Computer and Information Sciences			√	S.Kom. & BCIS	Auckland University of Technology, <b>New Zealand</b>
Master of Commerce in Information System and Technology			√	S.Kom. & M.Com	Macquarie University, <b>Australia</b>

*Title: S.Kom (Sarjana Komputer)*  
*B.A. (Bachelor of Arts)*  
*B.Sc. (Hons). (Bachelor of Science (Honours))*  
*B.I.T (Bachelor of Information Technology)*  
*M.Com. (Master of Commerce)*

### **Single Degree Program**

There are three streaming available in this program on the 6<sup>th</sup> and 7<sup>th</sup> semesters. The three streams are: Business Start-up, Enterprise Systems Management, and Research in Information Systems.

### **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) and Northumbria University (Newcastle, UK). 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, Dual Degree with a Bachelor of Science (B.Sc. - Hons) in Business Information Systems from Northumbria University, 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/NU. The final year of study is undertaken at the partner overseas campus abroad.

### **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) years 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. 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).

**Study Completion Requirements**

To complete the program of Business Information Systems with either a single or double degree(s) at BINUS International, students must complete a minimum of 146 SCUs of academic credit. These 146 SCU comprised of:

- Single degree students are required accomplishing a total of 114 SCU of mandatory courses. At semester 6<sup>th</sup> and 7<sup>th</sup> student will need to choose from streaming of: Business Startup, Enterprise Systems Management, or Research in Information Systems. Each streaming's semester comprise of 16 SCU which is in total of 32 SCU within the two semesters.
- Double degree students are required accomplishing a total of 122 SCU of mandatory courses. At semester 7<sup>th</sup> and 8<sup>th</sup> students will need to accomplished their second degree at partners university abroad with a total of 24 BINUS International SCU.

**Course Structure**

Semester	Code	Course Name	SCU	Total
1	ISYS6407	Contemporary Management Information Systems & Algorithm	6	20
	ENGL6171	Academic English I	3	
	ENTR6091	Project Hatchery	2	
	CHAR6013	Character Building: Pancasila	2	
	ISYS6408	Applied Project Management	3	
	ACCT6240	Introduction to Financial Accounting	4	
2	ISYS6409	Programming Mastery	8	20
	MATH6115	Applied Research and Linear Algebra	4	
	ISYS6410	Information Systems Modelling	6	
	CHAR6014	Character Building: Kewarganegaraan	2	
3	LANG6061	Indonesian	1	22
	ISYS6411	Advanced Programming and Testing	7	
	ISYS6412	Data Management and Analytics	8	
	ENTR6094	Design Driven Entrepreneurship	3	
	ENGL6172	Academic English II	3	
4	ISYS6413	Object Oriented Information Systems	6	24
	ISYS6414	User Experience	4	
	ISYS6415	Enterprise Resource Planning Systems	6	
	CHAR6015	Character Building: Agama	2	
	ISYS6416	Cloud Technology	6	
5	ISYS6417	E-Commerce, IOT and Mobile Systems	8	22
	ISYS6418	Information Systems Architecture	8	
	ISYS6419	Technology Consulting in the Community	6	
6	<b>Enrichment Program I</b>		16	16
7	<b>Enrichment Program II</b>		16	16
8	ISYS6268	Thesis	6	6
			<b>TOTAL CREDIT 146 SCU</b>	

**Enrichment Program I (6<sup>th</sup> Semester) & Enrichment Program II (7<sup>th</sup> Semester):**

-) Student will take one of enrichment program tracks (off campus).

### Enrichment Track Scheme

Track	Semester 6						Semester 7					
	I	RS	ENTR	CD	SA	*etc	I	RS	ENTR	CD	SA	*etc
1	v						v					
2		v						v				
3			v						v			

Notes:

- I : Internship
- RS : Research
- ENTR : Entrepreneurship
- CD : Community Development
- SA : Study Abroad
- \*etc : Department specific needs

### Enrichment Internship Track

Code	Course Name	SCU	Total
<b>Enrichment Program I</b>			16
ISYS6420	Industry Experience I	8	
ISYS6421	Human factor in Information Systems	4	
ISYS6422	Managing Across Cultures	4	
<b>Enrichment Program II</b>			16
ISYS6423	Industry Experience II	8	
ISYS6424	Corporate IS Management	4	
ISYS6425	IT Service Delivery	4	

### Enrichment Entrepreneurship Track

Code	Course Name	SCU	Total
<b>Enrichment Program I</b>			16
ENTR6092	Business Model Innovation	8	
ENTR6096	Creative Business Planning	4	
ENTR6097	Managing Across Cultures	4	
<b>Enrichment Program II</b>			16
ENTR6093	Sustainable Startup Creation	8	
ENTR6098	Networking for Net Worth	4	
ENTR6099	Business Story Telling	4	

**Enrichment Research Track**

Code	Course Name	SCU	Total
<b>Enrichment Program I</b>			
RSCH6063	Field Research	8	16
RSCH6075	Formulating Research Topic	4	
RSCH6076	Research Tools and Applications I	4	
<b>Enrichment Program II</b>			
RSCH6064	Research Exposure	8	16
RSCH6077	Evaluating Research Resources	4	
RSCH6078	Research Tools and Applications II	4	

**The Table of Prerequisite for Business Information Systems**

Subject		SCU	Smt	Prerequisite	SCU	Smt
ISYS6411	Advanced Programming and Testing	7	3	ISYS6409	Programming Mastery	8 2
ISYS6412	Data Management and Analytics	8	3	MATH6115	Applied Research and Linear Algebra	4 2
ISYS6415	Enterprise Resource Planning Systems	6	4	ISYS6407	Contemporary Management Information Systems & Algorithm	6 1
ISYS6417	E-Commerce, IOT and Mobile Systems	8	5	ISYS6411	Advanced Programming and Testing	7 3
ISYS6418	Information Systems Architecture	8	5	ISYS6407	Contemporary Management Information Systems & Algorithm	6 1