

Business Information Systems

Introduction

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

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

The double degree offered in partnership with Queensland University of Technology (QUT), Northumbria University in the United Kingdom, and Cologne Business School in Germany, will enhance students' ability to compete in the 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 System international program for developing world-class professionals with excellent skills in both business, Information System and Technology to innovatively solve business problems.

Mission

The missions of Business Information Systems Program are:

1. The Program of Business Information Systems exists to prepare globally competitive Information System graduates through innovative and growth-oriented curriculum by meeting the stakeholder expectations, providing academic and service excellence, promoting high quality research, building strong corporate connections, and gaining international recognitions and accreditation.
2. The students will be equipped with technological, leadership, entrepreneurial, problem-solving skills, and analytical knowledge through high quality education and research in the area of Business Information Systems in the program.

Program Objectives

The objectives of the Business Information Systems program are:

1. To equip the students with the latest data science capability and knowledge on technology-based solutions of web and mobile applications, business process re-engineering, infrastructure architecture, and databases; to meet management needs for information systems and decision support.

2. To equip students with various thinking skills in the area of strategic planning, strong analytical, critical, and design thinking in developing innovative technology solutions.
3. To equip students with leadership, entrepreneurial, ethical professional skills related to the Information Systems industry.
4. To equip student with openness and awareness of diversity across cultures and to prepare them with effective communication skills to enter the international market as global citizens.

Student Outcomes

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

1. Able to function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline,
2. Able to communicate effectively in a variety of professional contexts,
3. Able to analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions,
4. Able to design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline,
5. Able to recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles,
6. Able to support the delivery, use, and management of information systems within an information systems environment;
7. Able to apply the contemporary technology in Information Systems of cloud based, mobile, analytics, and Internet of things,
8. Able to implement strategic planning, critical thinking, and design thinking in developing innovative technology solutions,
9. Able to make creative business plan and to construct, innovate and evaluate digital based business start-up,
10. Able to apply project management concepts such as initiation, planning, execution, control and closure of projects to practice information-based systems in an international working environment,
11. Able to apply interdisciplinary knowledge and skills in developing alternative solutions for problem-solving.

Prospective Careers of the Graduates

A wide range of career opportunities in the information systems industry are introduced to students during their studies. 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 students' abilities to be involved in professional practices, and ethical and organizational responsibilities. Furthermore, the industrial internship program provides students with real experiences in the workplace and leverages their ability to cope with the international working environment. In addition, a series of study/field trips to visit professionals and industries will be conducted to give good grounds for having a broad overview of the industry. These experiences support individual career aspirations and may provide social and professional networks.

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

Awards/Degrees

- Sarjana Komputer (S.Kom.) from BINUS UNIVERSITY
- Double Degree with Bachelor of Information Technology (B.I.T.) from Queensland University of Technology in Queensland, Australia
- Double Degree with a Bachelor of Art (B.A.) from Cologne Business School in Cologne, Germany
- Double Degree with a Bachelor of Science (BSc. – Hons.) in Information Technology Management for Business from Northumbria University, Newcastle, United Kingdom.
- Double Degree with a Master of Management (M.Mngt) from Macquarie University, Australia.
- Double Degree with a Master of Commerce, specialisation in Accounting (M.Comm-Acct) from Macquarie University, Australia.
- Double Degree with a Master of Commerce, specialisation in Business Management and Organisations (M.Comm-BMO) from Macquarie University, Australia.
- Double Degree with a Master of Commerce, specialisation in Finance (M.Comm-Finance) from Macquarie University, Australia.
- Double Degree with a Master of Commerce, specialisation in Marketing (M.Comm-Mktg) from Macquarie University, Australia.
- Double Degree with a Master of Information Technology in Cyber Security (M.of IT – Cyber Security) from Macquarie University, Australia.

- Double Degree with a Master of Information Systems Management (M.InfSystMngt) from Macquarie University, Australia.
- Double Degree with a Master of Science in Computer Information Systems (MSCIS) from Boston University, Massachusetts
- Double Degree with a Master of Science in Criminal Justice (MSCJ) from Boston University, Massachusetts
- Double Degree with a Master of Science in Enterprise Risk Management (MSERM) from Boston University, Massachusetts
- Double Degree with a Master of Science in Supply Chain Management (MSSCM) from Boston University, Massachusetts
- Double Degree with a Master of Science in Project Management (MSPM) from Boston University, Massachusetts
- Double Degree with a Master of Science in Applied Business Analytics (MSABA) from Boston University, Massachusetts
- Double Degree with a Master of Science in Global Marketing Management (MSGMM) from Boston University, Massachusetts
- Double Degree with a Master of Science in Master of Financial Management (MSFM) from Boston University, Massachusetts

Majors and Streams

Stream	Degree				Partner
	Single	Title	Double	Title	
Business Information Systems	√	S.Kom.			
International Business			√	S.Kom. & B.A.	Cologne Business School, Germany
Information Technology Management for Business (Honors)			√	S.Kom. & BSc. (Hons)	Northumbria University, Newcastle, United Kingdom
Information Technology			√	S.Kom. & B.I.T	Queensland University of Technology, Australia
Master Track				S.S.Kom. & Master of Science in selected concentration*	Macquarie University, Australia
				S.Kom & Master of Science in selected concentration*	Boston University, Massachusetts

*) Master's degree Selection in Boston University:

- Master of Science in Financial Management (MSFM)
- Master of Science in Global Marketing Management (MSGMM)
- Master of Science in Applied Business Analytics (MSABA)
- Master of Science in Project Management (MSPM)
- Master of Science in Supply Chain Management (MSSCM)
- Master of Science in Enterprise Risk Management (MSERM)
- Master of Science in Computer Information Systems (MSCIS)
- Master of Science in Criminal Justice (MSCJ)

*) Master's degree selection in Macquarie University:

- Master of Management (M.Mngt)
- Master of Commerce, specialisation in Marketing (M.Comm-Mktg)
- Master of Commerce, specialisation in Business Management and Organisations (M.Comm-BMO)
- Master of Information Technology in Cyber Security (M.of IT – Cyber Security)
- Master of Commerce, specialisation in Finance (M.Comm-Finance)
- Master of Information Systems Management (M.InfSystMngt)
- Master of Commerce, specialisation in Accounting (M.Comm-Acct)

Title:

S.Kom. (Sarjana Komputer)

B.A. (Bachelor of Arts)

B.Sc. (Hons.) (Bachelor of Science (Honors))

B.I.T. (Bachelor of Information Technology)

M.Infotech. Cyber.Sec. (Master of Information Technology in Cyber Security)

M.I.S.M. (Master of Information Systems Management)

M.Com. (Master of Commerce)

Single Degree Program

There are three streams available in this program in the 6th and 7th 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), 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, 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 /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 UNIVERSITY INTERNATIONAL in the 7th (seven) semesters, and then continue with a graduate program for 1 – 2 years (depending on the chosen concentration) at Macquarie University or Boston University to obtain a 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 in 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 analyses of case studies, laboratories, and individual/group work projects. In addition, innovation habits will be developed through course assessments that emphasize 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 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 activities.

All coursework is assessed through a variety of assessment tasks such as reports, presentations, assignments, individual and group projects, and thesis/final project reports, 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 encouraged 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 designing problem-solving methods is introduced at different levels of the 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 UNIVERSITY INTERNATIONAL, students must complete a minimum of 146 SCUs (academic credits).

Course Structure

Sem	Code	Course Name	SCU	Total	
1	ISYS6466	Contemporary Management Information Systems and Algorithm	8	20	
	ISYS6496	Applied Project Management	4		
	LANG6027	Indonesian	2		
	ACCT6133	Introduction to Financial Accounting	4		
	Pancasila Courses				
	CHAR6013	Character Building: Pancasila	2		
	CHAR6039	Pancasila and Indonesian Culture	2		
2	ENGL6171	Academic English I	3	20	
	ENTR6091	Project Hatchery	2		
	ISYS6497	Cloud Technology	4		
	MATH6115	Applied Research and Linear Algebra	4		
	ISYS6633	Programming Mastery	7		
3	ENTR6486	Entrepreneurship Hatchery	3	22	

Sem	Code	Course Name	SCU	Total
	ENGL6172	Academic English II	3	
	ISYS6412	Data Management and Analytics	8	
	CHAR6014	Character Building: Kewarganegaraan	2	
	ISYS6535	Information Systems Analysis and Design	6	
4	ISYS6413	Object Oriented Information Systems	6	18
	ISYS6415	Enterprise Resource Planning Systems	6	
	ISYS6541	Advanced Programming and Testing	6	
5	ISYS6632	E-Commerce, IOT and Mobile Systems	6	20
	ISYS6631	Consulting for Digital Based Business Startup	2	
	ISYS6596	User Experience Research and Design	6	
	CHAR6015	Character Building: Agama	2	
	ISYS6472	Information Systems Architecture	4	
6	Enrichment Program I		20	20
7	Enrichment Program II		20	20
8	ISYS6268	Thesis	6	6
			TOTAL CREDITS 146 SCU	

Enrichment Program I (6th Semester) & Enrichment Program II (7th Semester):

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

Enrichment Track Scheme

Track	Semester 6						Semester 7					
	I	RS	ENTR	CD	SA	Other	I	RS	ENTR	CD	SA	Other
1	V						V					
2	V							V				
3	V								V			
4	V										V	
5		V					V					
6		V							V			
7		V									V	
8			V				V					
9			V					V				
10			V						V			
11			V								V	
12					V			V				
13					V				V			
14					V						V	

Notes:

I : Internship

RS : Research

ENTR : Entrepreneurship

CD : Community Development

SA : Study Abroad

Other : Program's specific needs

Enrichment Internship Track

Code	Course Name	SCU	Total
Enrichment Program I			20
ISYS6503	Industry Experience	8	
ISYS6641	Human Factors in Information Systems and Management	8	
ISYS6422	Managing Across Cultures	4	
Enrichment Program II			20
ISYS6504	Professional Experience	8	
ISYS6642	Corporate Information Systems Management	8	
ISYS6425	Information Technology Service Delivery	4	

Enrichment Entrepreneurship Track

Code	Course Name	SCU	Total
Enrichment Program I			20
ENTR6092	Business Model Innovation	8	
ENTR6588	Product and Service Development	8	
ENTR6097	Managing Teams and Cultures	4	
Enrichment Program II			20
ENTR6093	Sustainable Startup Creation	8	
ENTR6587	Business Presentation and Negotiation	8	
ENTR6099	Business Story Telling	4	

Enrichment Research Track

Code	Course Name	SCU	Total
RSCH6063	Research Exposure	8	20
RSCH6602	Formulating Research Topic and Data Collection	8	
RSCH6076	Research Tools and Applications	4	

Enrichment Study Abroad Track*

Course Name	SCU	Total	
GLOB6085	Elective Course for Study Abroad 1	4	20
GLOB6086	Elective Course for Study Abroad 2	4	
GLOB6087	Elective Course for Study Abroad 3	4	
GLOB6088	Elective Course for Study Abroad 4	4	
GLOB6089	Elective Course for Study Abroad 5	4	
GLOB6043	Elective Course for Study Abroad 1	2	
GLOB6044	Elective Course for Study Abroad 2	2	
GLOB6117	Elective Course for Study Abroad 3	2	
GLOB6046	Elective Course for Study Abroad 4	2	
GLOB6047	Elective Course for Study Abroad 5	2	
GLOB6048	Elective Course for Study Abroad 6	2	
GLOB6049	Elective Course for Study Abroad 7	2	
GLOB6050	Elective Course for Study Abroad 8	2	
GLOB6051	Elective Course for Study Abroad 9	2	
GLOB6052	Elective Course for Study Abroad 10	2	

GLOB6241	Elective Course for Study Abroad 1	3	
GLOB6242	Elective Course for Study Abroad 2	3	
GLOB6243	Elective Course for Study Abroad 3	3	
GLOB6075	Elective Course for Study Abroad 4	3	
GLOB6076	Elective Course for Study Abroad 5	3	
GLOB6260	Elective Course for Study Abroad 6	3	
GLOB6261	Elective Course for Study Abroad 7	3	

*)The elective courses for study abroad will be transferred to Binus University International's SCU systems based on credit transfer policies.

The Table of Prerequisite for Business Information Systems Program

Subject		SCU	Sem	Prerequisite		SCU	Sem
ISYS6541	Advanced Programming and Testing	6	4	ISYS6633	Programming Mastery	7	3
ISYS6412	Data Management and Analytics	8	3	MATH6115	Applied Research and Linear Algebra	4	2
ISYS6415	Enterprise Resource Planning Systems	6	4	ISYS6466	Contemporary Management Information Systems & Algorithm	8	1
ISYS6632	E-Commerce, IOT and Mobile Systems	6	5	ISYS6541	Advanced Programming and Testing	6	4
ISYS6472	Information Systems Architecture	4	4	ISYS6466	Contemporary Management Information Systems & Algorithm	8	1
Streaming: Business Information Systems (Northumbria); Information Technology (QUT).							
ISYS6471	Wearable Technology	2	5	ISYS6541	Advanced Programming and Testing	6	4

Student should pass all of these quality controlled courses as listed below :

No	Course Code	Course Name	Minimal Passing Grade
1	CHAR6013	Character Building: Pancasila	B
2	ENTR6486	Entrepreneurship Hatchery	C
3	ISYS6472	Information Systems Architecture	C
4	ISYS6535	Information Systems Analysis and Design	C
5	ISYS6412	Data Management and Analytics	C
6	ISYS6496	Applied Project Management	C
7	ISYS6633	Programming Mastery	C
8	ISYS6497	Cloud Technology	C