

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, project management, and digital business transformation. 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, by leveraging advanced information technologies such as cloud computing, internet of things, UX design and technology, cybersecurity, AI and data analytics.

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 La Trobe University in Australia and Queensland University of Technology (QUT) and the Master degree track program in partnership with Macquarie University in Australia and Boston University in United States 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

A world class information system study program specialized in IT-business, recognized internationally, and champions innovation for fostering and empowering the society.

Mission

The missions of Business Information Systems Program are:

1. Nurturing students and lecturers with creative and value-adding talents in Information System by creating a suitable environment
2. Educating students in information systems, covering knowledge and skills in analyzing, designing and implementing information systems for improving business processes and to be able to create an innovative and valuable information system solution, through intensive learning process, research activities and collaboration with global industries.
3. Providing integrated knowledge to pursue further studies and create outstanding professionals, entrepreneurs, and leaders for a global community.
4. Providing professional services in Information System with an emphasis on the application of knowledge to society.
5. Fostering the quality of life of Indonesians and the international community through leveraging Information system solutions.

Program Objectives

The objectives of the Business Information Systems program are:

1. Program graduates will possess effective communication, teamwork, and leadership skills with ethical considerations in solving problems for an organization and creating benefits for society.
2. Program graduates will apply accurate skills and knowledge in system development that will be needed as a professional in information systems.
3. Program graduates will maintain in-depth knowledge of information system methodologies and technologies to address the critical needs of an organization.

Student Outcomes

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

1. Able to analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions.
2. 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.
3. Able to communicate effectively in a variety of professional contexts.
4. Able to recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles
5. Able to function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline
6. Able to support the delivery, use, and management of information systems within an information systems environment.

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
- Business Analyst
- Digital Transformation Manager
- Cybersecurity Risk Assurance Consultant
- 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 Quality 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 Computer Science (B.Com.Sc.) from La Trobe University in Australia
- Double Degree with Bachelor of Information Technology (B.I.T.) from Queensland University of Technology in Queensland, Australia
- Double Degree with Bachelor of Science with Honours (BSc Hons) from Edinburgh Napier University, 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	
Software Engineering			√	S.Kom. & B.Comp.Sc. La Trobe University, Australia
Information Technology			√	S.Kom. & B.I.T Queensland University of Technology, Australia
Commerce and Technology			√	S.Kom. & BSc (Hons) Edinburgh Napier University, United Kingdom
Master Track				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 Business Management and Organisations (M.Comm-BMO)
- Master of Commerce, specialisation in Finance (M.Comm-Finance)
- Master of Commerce, specialisation in Accounting (M.Comm-Acct)
- Master of Commerce, specialisation in Marketing (M.Comm-Mktg)
- Master of Information Technology in Cyber Security (M.of IT – Cyber Security)
- Master of Information Systems Management (M.InfSystemMngt)

Title:

S.Kom. (Sarjana Komputer)

B.Comp.Sc. (Bachelor of Computer Science)

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

BSc (Hons) Bachelor of Science with Honours

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)

Double Degree Program

The Double Degree programs are offered in partnership with La Trobe University (Australia), Queensland University of Technology (Brisbane, Australia), and Edinburgh Napier University (ENU, UK). In addition to the Sarjana Komputer (S.Kom) degree from BINUS UNIVERSITY, students who complete this program will be awarded a Bachelor of Computer Science (B.Comp.Sc.) degree from La Trobe University, a Bachelor of Information Technology (B.I.T.) degree from Queensland University of Technology (QUT), and a Bachelor of Science with Honours (BSc Hons) from Edinburgh Napier University (ENU).

In cooperation with La Trobe University, this unique program allows students to gain two degrees while staying full time in Jakarta. In the first part of the program, students undertake courses offered by BINUS and in the second part of the program, students undertake the La Trobe University courses either in Jakarta or have an option to study in Melbourne for at least one semester. This new arrangement of indicates that Binus students are entitled to received two bachelor certificates from Binus University International and La Trobe University WITHOUT traveling to Australia. Upon satisfactory completion of all course requirements, students are awarded a Bachelor of Science in Computer Science Major in Software Engineering degree from La Trobe University, Melbourne, Australia and a Sarjana Komputer (S.Kom) degree from BINUS UNIVERSITY.

In cooperation with QUT, the first three years of study follow a prescribed set of courses agreed upon between BINUS and QUT. The final year of study is undertaken at QUT's campus in Brisbane, Australia. Upon completion of this program, students will receive a Bachelor of Information Technology (B.I.T.) degree from QUT and a Sarjana Komputer (S.Kom) degree from BINUS UNIVERSITY.

Similarly, in cooperation with Edinburgh Napier University (ENU), students complete the first three years of their studies at BINUS UNIVERSITY, following a curriculum jointly developed by BINUS and ENU. In their final year, students will study at ENU's campus in Edinburgh, UK. Upon successful completion of the program, students will be awarded a Bachelor of Science with Honours (BSc Hons) from ENU, along with the Sarjana Komputer (S.Kom) degree from BINUS UNIVERSITY.

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 scu's (academic credits).

Course Structure

Sem	Code	Course Name	SCU	Total
1	ISYS6896003	Information Systems Management, Strategy and Acquisition	4	20
	ISYS6898003	Algorithm and Programming - (AOL)	4	
	ISYS6892003	Database Fundamental - (AOL)	6	
	ISYS6897003	Digital Innovation - (AOL)	2	
	COSC6011003	Foundations of Artificial Intelligence	2	
	Pancasila Courses*			
	CHAR6013001	Character Building: Pancasila	2	

Sem	Code	Course Name	SCU	Total
	CHAR6039001	Pancasila and Indonesian Culture	2	
2	ENGL6171001	Academic English I	3	20
	ISYS6893003	Information Systems Analysis and Design - (AOL)	6	
	ISYS6902003	Research Methods in Information Systems - (AIE)	4	
	ISYS6633003	Programming Mastery	7	
3	ISYS6779003	Cloud Technology	2	20
	ISYS6894003	IT Infrastructure & Emerging Technology	4	
	ISYS6900003	IT Governance & Security	4	
	LANG6027001	Indonesian	2	
	CHAR6014001	Character Building: Kewarganegaraan	2	
	COSC6050003	Programming for Business - (AIE)	4	
	ISYS6338003	Testing and Systems Implementation - (AOL)	2	
4	ISYS6901003	Enterprise Business Process - (AOL)	4	21
	ENGL6172001	Academic English II	3	
	ISYS6596003	User Experience Research and Design - (AOL)	6	
	CHAR6015001	Character Building: Agama	2	
	ENTR6091005	Project Hatchery	2	
	ISYS6899003	Minor Project in Information Systems - (AOL & AIE)	4	
5	ISYS6815003	Project Management - (AOL)	4	19
	ISYS6895003	Data Modelling	4	
	COMP6976003	Data Visualization - (AOL)	4	
	COMP6973003	Algorithms and Data Structures	4	
	ENTR6486005	Entrepreneurship Hatchery	3	
6	COMP6974003	Computational Intelligence for Data Analytics	4	16
	ISYS6818003	Professional Software Development	4	
	COMP6977003	Mobile Application Development	4	
	COMP6975003	Artificial Intelligence Fundamentals	4	
7	ISYS6819003	Software Measurement and Testing	4	18
	COMP6978003	Cloud-Based Web Application	4	
	ISYS6817003	Professional Practices and Entrepreneurship in Information Technology	4	
	ISYS6821003	Capstone Project	6	
8	Internship Program**			
	ISYS6840003	Industry Experience A	8	12
	ISYS6841003	Human Factors in Information Systems (Part of Internship/Industry Experience A)	4	
			TOTAL CREDITS 146 SCU	

*) For **Character Building: Pancasila** course is offered for Indonesian citizen students, while **Pancasila and Indonesian Culture** course is offered for foreign students.

**) Courses under the internship program will be conducted concurrently

-) AOL - Assurance of Learning Process System

-) AIE - Artificial Intelligence Embedded Course

The Table of Prerequisite for Business Information Systems Program

Course		SCU	Sem	Course Prerequisite		SCU	Sem
COSC6050003	Programming for Business	4	3	ISYS6633003	Programming Mastery	7	2
ISYS6900003	IT Governance & Security	4	3	ISYS6896003	Information Systems Management, Strategy and Acquisition	4	1
ISYS6901003	Enterprise Business Process	4	4	ISYS6896003	Information Systems Management, Strategy and Acquisition	4	1
ISYS6895003	Data Modelling	4	5	ISYS6902003	Research Methods in Information Systems	4	2
ISYS6895003	Data Modelling	4	5	ISYS6892003	Database Fundamental	6	1

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

No	Course Code	Course Name	Minimal Passing Grade
1	CHAR6013001	Character Building: Pancasila	B
2	ENTR6486005	Entrepreneurship Hatchery	C
3	ISYS6892003	Database Fundamental	C
4	ISYS6893003	Information Systems Analysis and Design	C
5	ISYS6901003	Enterprise Business Process	C
6	ISYS6899003	Minor Project in Information Systems	C
7	COMP6976003	Data Visualization	C
8	ISYS6815003	Project Management	C