# **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:

- 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 students with the expertise and solid basic knowledge about system development that will be needed as a professional in the field of information systems, as well as increasing the skills and knowledge of educators in the information systems field.

- 2. To prepare students with proficiency and in-depth knowledge of innovative information systems related to IT-Business Innovation.
- 3. To equip students with the ability to use knowledge of applied business applications for specific industrial purposes
- 4. To equip the community with expertise and knowledge through the use of information system solutions
- 5. To provide education to the public regarding the use and application of information systems.

## **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
- 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 <u>www.binuscareer.com</u>

#### 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**

Ctra and			Partner		
Stream	Single Title		Double	Title	
Business Information Systems	$\checkmark$	S.Kom.			
International Business			$\checkmark$	S.Kom. & B.A.	Cologne Business School, <b>Germany</b>
Information Technology Management for Business (Honors)			$\checkmark$	S.Kom. & BSc. (Hons)	Northumbria University, Newcastle, <b>United</b> <b>Kingdom</b>
Information Technology			$\checkmark$	S.Kom. & B.I.T	Queensland University of Technology, Australia
				S.Kom. & Master of Science in selected concentration*	Macquarie University, <b>Australia</b>
Master Track				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.InfSystMngt)

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 scu's (academic credits).

Sem	Code	Course Name	SCU	Total	
	ISYS6093003	Information Systems Concept	4		
	COMP6178003	Introduction to Programming	4		
	ISYS6677003	Information Systems Analysis and Design	7		
1	ENGL6171001	Academic English I	3	20	
	Pancasila Courses*				
	CHAR6013001	Character Building: Pancasila	2		
	CHAR6039001	Pancasila and Indonesian Culture	2	1	
	ACCT6425003	Introduction to Financial Accounting	2		
	ENTR6091005	5 Project Hatchery			
2	ISYS6676003	Advanced Information Systems Analysis and Design		20	
	ISYS6478003	Research Methods in Information Systems	2	1	
	ISYS6633003	Programming Mastery			
	ENTR6486005	Entrepreneurship Hatchery	3		
	ISYS6779003	Cloud Technology	2		
	ISYS6675003	Information Technology Infrastructure	2		
2	ISYS6123003	Introduction to Database Systems	4		
3	ENGL6172001	Academic English II	3	- 22	
	ISYS6197003	Business Application Development	4	1	
	ISYS6338003	Testing and System Implementation	2	1	
	CHAR6014001	Character Building: Kewarganegaraan		1	

#### **Course Structure**

Sem	Code	Course Name	SCU	Total		
	LANG6027001	Indonesian				
	ISYS6186003	Business Process Fundamental	4			
4	ISYS6674003	Knowledge Management	2	22		
4	ISYS6596003	User Experience Research and Design	6	22		
	CHAR6015001 Character Building: Agama		2			
	ISYS6538003	Advances in Business Application Development	6			
	ISYS6198003	Data and Information Management	4			
5	ISYS6256003	Information System Project Management	4	16		
5	ISYS6126003	Enterprise Systems	4	10		
	ISYS6381003 Technology Consulting in the Community		4			
6	Enrichment Pro	gram I	20	20		
7	Enrichment Program II		20	20		
8	ISYS6268003	Thesis	6	6		
	TOTAL CREDITS 146 SCU					

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

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

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

# **Enrichment Track Scheme**

Treels			Seme	ster 6	;				Semester 7			
Track	Ι	RS	ENTR	CD	SA	IS	I	RS	ENTR	CD	SA	IS
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	
15						V	V					
16						V		V				
17						V			V			
18						V					V	
19	V											V
20		V										V
21			V									V
22					V							V

#### Notes:

- I : Certified Internship
- RS : Certified Research
- ENTR : Certified Entrepreneurship
- CD : Certified Community Development
- SA : Certified Study Abroad
- IS : Certified Independent Study

#### **Enrichment Certified Internship Track**

Code	Course Name	SCU	Total	
Enrichment Program I				
ISYS6503003	Industry Experience	8		
ISYS6641003	ISYS6641003 Human Factor in Information Systems and Management		20	
ISYS6422003 Managing Across Cultures		4		
Enrichment Prog	jram II			
ISYS6504003	Professional Experience	8	20	
ISYS6642003	ISYS6642003 Corporate Information Systems Management		20	
ISYS6425003	Information Technology Service Delivery	4		

#### **Enrichment Certified Entrepreneurship Track**

Code	Course Name	SCU	Total	
Enrichment Program I				
ENTR6092003				
ENTR6588003	Product and Service Development	8	20	
ENTR6097003	Managing Team and Culture	4		
Enrichment Prog	jram II			
ENTR6093003	Sustainable Startup Creation	8	20	
ENTR6587003	ENTR6587003 Business Presentation and Negotiation		20	
ENTR6098003	Business Networking	4		

#### **Enrichment Certified Research Track**

Code	Course Name	SCU	Total
RSCH6063003	Reasearch Exposure	8	
RSCH6602003	Formulating Research Topic and Data Collection	8	20
RSCH6076003	Research Tools and Applications	4	

\*) This list of courses can be selected as Enrichment Program I or Enrichment Program II.

# Enrichment Certified Study Abroad Track\*

Code	Code Course Name				
Enrichment Prog	gram I	•			
GLOB6085003	Elective Course for Study Abroad 1	4			
GLOB6086003	Elective Course for Study Abroad 2	4			
GLOB6087003	Elective Course for Study Abroad 3	4			
GLOB6088003	Elective Course for Study Abroad 4	4			
GLOB6089003	Elective Course for Study Abroad 5	4			
GLOB6043003	Elective Course for Study Abroad 1	2			
GLOB6044003	Elective Course for Study Abroad 2	2			
GLOB6117003	Elective Course for Study Abroad 3	2			
GLOB6046003	Elective Course for Study Abroad 4	2			
GLOB6047003	Elective Course for Study Abroad 5	2			
GLOB6048003	Elective Course for Study Abroad 6	2	20		
GLOB6049003	Elective Course for Study Abroad 7	2			
GLOB6050003	Elective Course for Study Abroad 8	2			
GLOB6051003	Elective Course for Study Abroad 9	2			
GLOB6052003	Elective Course for Study Abroad 10	2			
GLOB6241003	Elective Course for Study Abroad 1	3			
GLOB6242003	Elective Course for Study Abroad 2	3			
GLOB6243003	Elective Course for Study Abroad 3	3			
GLOB6075003	Elective Course for Study Abroad 4	3			
GLOB6076003	Elective Course for Study Abroad 5	3			
GLOB6260003	Elective Course for Study Abroad 6	3			
GLOB6261003	Elective Course for Study Abroad 7	3			
Enrichment Prog		1			
GLOB6382003	Elective Course for Study Abroad 6	4			
GLOB6383003	Elective Course for Study Abroad 7	4			
GLOB6384003	Elective Course for Study Abroad 8	4			
GLOB6385003	Elective Course for Study Abroad 9	4			
GLOB6386003	Elective Course for Study Abroad 10	4			
GLOB6053003	Elective Course for Study Abroad 11	2			
GLOB6054003	Elective Course for Study Abroad 12	2			
GLOB6387003	Elective Course for Study Abroad 13	2			
GLOB6388003	Elective Course for Study Abroad 14	2	00		
GLOB6389003	Elective Course for Study Abroad 15	2	20		
GLOB6390003	Elective Course for Study Abroad 16	2			
GLOB6391003	Elective Course for Study Abroad 17	2			
GLOB6392003	Elective Course for Study Abroad 18	2			
GLOB6393003	Elective Course for Study Abroad 19	2			
GLOB6394003	Elective Course for Study Abroad 20	2			
GLOB6395003	Elective Course for Study Abroad 8	3			
GLOB6396003	Elective Course for Study Abroad 9	3			
GLOB6397003	Elective Course for Study Abroad 10	3			
GLOB6398003	Elective Course for Study Abroad 11	3			

Code	Course Name	SCU	Total
GLOB6399003	Elective Course for Study Abroad 12	3	
GLOB6400003	Elective Course for Study Abroad13	3	
GLOB6401003	Elective Course for Study Abroad 14	3	

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

# Enrichment Certified Specific Independent Study\*

Code	Course Name	SCU	Total
MICR6033003	Course Certification I	3	
MICR6034003	Technical Skill Enrichment I	4	
MICR6035003	Industrial Project I	9	
MICR6036003	Soft Skill Enrichment I	4	
MICR6001003	Elective Course for Specific Independent Study 1	8	
MICR6002003	Elective Course for Specific Independent Study 2	8	
MICR6003003	Elective Course for Specific Independent Study 3	6	
MICR6004003	Elective Course for Specific Independent Study 4	6	
MICR6005003	Elective Course for Specific Independent Study 5	6	
MICR6006003	Elective Course for Specific Independent Study 6	5	
MICR6007003	Elective Course for Specific Independent Study 7	5	
MICR6008003	Elective Course for Specific Independent Study 8	5	
MICR6009003	Elective Course for Specific Independent Study 9	5	
MICR6010003	Elective Course for Specific Independent Study 10	4	
MICR6011003	Elective Course for Specific Independent Study 11	4	
MICR6012003	Elective Course for Specific Independent Study 12	4	
MICR6013003	Elective Course for Specific Independent Study 13	4	20
MICR6014003	Elective Course for Specific Independent Study 14	4	
MICR6015003	Elective Course for Specific Independent Study 15	3	
MICR6016003	Elective Course for Specific Independent Study 16	3	
MICR6017003	Elective Course for Specific Independent Study 17	3	
MICR6018003	Elective Course for Specific Independent Study 18	3	
MICR6019003	Elective Course for Specific Independent Study 19	3	
MICR6020003	Elective Course for Specific Independent Study 20	3	
MICR6021003	Elective Course for Specific Independent Study 21	2	
MICR6022003	Elective Course for Specific Independent Study 22	2	
MICR6023003	Elective Course for Specific Independent Study 23	2	
MICR6024003	Elective Course for Specific Independent Study 24	2	
MICR6025003	Elective Course for Specific Independent Study 25	2	
MICR6026003	Elective Course for Specific Independent Study 26	2	
MICR6027003	Elective Course for Specific Independent Study 27	2	
MICR6028003	Elective Course for Specific Independent Study 28	2	

Code	Course Name	SCU	Total
MICR6029003	Elective Course for Specific Independent Study 29	1	
MICR6030003	Elective Course for Specific Independent Study 30	1	
MICR6031003	Elective Course for Specific Independent Study 31	1	
MICR6032003	Elective Course for Specific Independent Study 32	1	

\*) This list of courses can be selected as Enrichment Program I or Enrichment Program II.

## The Table of Prerequisite for Business Information Systems Program

Course		SCU	Sem	Course P	rerequisite	SCU	Sem
ISYS6197003	Business Application Development	4	3	ISYS6633003	Programming Mastery	7	2
ISYS6198003	Data and Information Management	4	5	ISYS6478003	Research Methods in Information Systems	2	2
ISYS6198003	Data and Information Management	4	5	ISYS6123003	Introduction to Database Systems	4	3
ISYS6186003	Business Process Fundamental	4	4	ISYS6093003	Information Systems Concept	4	1
ISYS6538003	Advanced in Business Application Development	6	4	ISYS6197003	Business Application Development	4	3
ISY6126003	Enterprise Systems	4	5	ISYS6093003	Information Systems Concept	4	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	В
2	ENTR6486003	Entrepreneurship Hatchery	С
3	ISYS6677003	Information Systems Analysis and Design	С
4	ISYS6198003	Data and Information Management	С
5	ISYS6186003	Business Process Fundamental	С
6	ISYS6126003	Enterprise Systems	С
7	ISYS6256003	Information Systems Project Management	С
8	ISYS6123003	Introduction to Database Systems	С