Information Systems

Introduction

The need for Information Technology (IT) in the business industry has shifted into an environment that is more outward looking in order to compete in the free market. Information Technology is closely related to Information Systems (IS) in their joint support of the organization. They facilitate excellent procedures of the whole organization and strengthen its competitiveness.

As a discipline, Information systems has been making positive contributions to wide range of organizations, especially in this era of digital information where information can be accessed and distributed easily. Information systems helps organization in managing data as an asset, either collected or presented by information systems, which are possible to be implemented for problem solving and management decisions making.

The Information Systems Study Program was founded in response to the progressive demand for skilled human resources in the field of information systems. The scope of study in the Program includes Information Systems: information systems development including information systems analysis, design and implementation (programming), management information systems, business process analysis and design, enterprise systems, database analysis and design, and information system project management.

Vision

A study program of choice that excels in providing high-level Information system education is specialized in business-IT, recognized internationally, and champions innovation. We produce graduates with international qualifications.

Mission

The mission of Information System Department is to contribute to the global community through the provision of world-class education by:

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. Improving the quality of life of Indonesians and the international community through leveraging Information system solutions.

Program Objective

The objectives of the program are:

1. To provide students with a solid foundation of system development skills and knowledge that they will need as a system analyst;

2. To prepare students with skills and in depth knowledge of information systems related to business intelligence, e-business and strategic information systems;

3. To provide students with the ability to use applied business knowledge for specific industry purposes.

Student Outcomes

After completing the study, graduates are:

1. Able to identify and formulate the root cause of information system performance through data and information analysis on business process;

2. Able to identify the database needs to build information system;

3. Able to design, create and manipulate and implement computer-based information systems through the study of information systems to develop a strategic plan for organizations;

4. Able to design, create, manipulate and implement computer based information system for new business model and process;

5. Able to communicate alternative solutions development and implementation of information systems based on theory either independently or in groups in writing, designing, and prototyping;

6. Able to manage, integrate and add value to the results of data analysis to generate quality information for organization needs;

7. Able to identify needs, design and implement system and ICT to build a web based business application for the organization;

8. Able to evaluate business process integration and corporate strategy for designing an integrated information system in an organization.

Prospective Career of the Graduates

Graduates will have the necessary skills to work as:

1. System Analyst
2. Business Analyst
3. Business Process Analyst
4. Digital Business Specialist
5. Enterprise Resource Planning (ERP) Specialist
6. IT Architect
7. IT Consultant
8. System Designer
9. Database Administrator
10. Database Analyst
11. Data Scientist
12. User Experience Designer
13. IT/IS Consultant
14. Application Developer
15. Web-Developer/Web-Designer

Curriculum

The Information Systems Study Program curriculum is designed by refering to the curriculum recommended by Association for Computing Machinery (ACM) and Association for Information Systems (AIS) for model curriculum and guidelines for undergraduate degree program in Information Systems. In addition, the curriculum has been influenced by foreign universities with the reputation of qualified Information Systems Study Programs.

The curriculum for the next four years, will prominently consists of:

1. Information Systems, Business Process and Enterprise Systems.
2. Database, Information and Knowledge Management.
3. Information Systems Analysis and Design.
4. Programming, Testing, and Implementation.
5. Financial Accounting, Business Statistics, Research Methodology.
6. Concentration Subject: Strategic Information System, Business Intelligence, Digital Business, Applied Database and Applied Enterprise Resource Planning (ERP).

Course Structure

Sem	Code	Course Name	SCU	Total
1	CHAR6013	Character Building: *Pancasila*	2	20
	ACCT6133	Introduction to Financial Accounting	4	
	ISYS6186	Business Process Fundamental*&**	4	
	ISYS6093	Information System Concept*&**	4	
	COMP6178	Introduction to Programming	2/2	
	English University Courses I			
	ENGL6128	English in Focus	2	
	ENGL6130	English for Business Presentation	2	
2	ISYS6123	Introduction to Database Systems*&**	2/2	21
	STAT6140	Business Statistics	2	
	ISYS6189	Management Information Systems*&**	4	
	ENTR6509	Entrepreneurship: Ideation	2	
	ISYS6537	User Experience**	4/2	
	LANG6061	Indonesian	1	
	English University Courses II			
	ENGL6129	English Savvy	2	
	ENGL6131	English for Written Business Communication	2	
3	CHAR6014	Character Building: *Kewarganegaraan*	2	22
	ISYS6535	Information Systems Analysis and Design**&****	4/2	
	ISYS6536	Enterprise System*&**	2	
	ISYS6197	Business Application Development	2/2	
	ISYS6338	Testing and System Implementation*&**	2	
	ISYS6478	Research Methods in Information Systems	2	
	ISYS6198	Data and Information Management**	4	
4	CHAR6015	Character Building: *Agama*	2	22
	ISYS6542	Advanced Information System Analysis and Design**&****	4/2	
	ISYS6256	Information Systems Project Management*&**	4	

Sem	Code	Course Name	SCU	Total
4	**Streaming : Business Intelligence**			22
	ISYS6283	Business Intelligence**	4	
	ISYS6210	Data Visualization*	2	
	ISYS6190	Advance in Data & Information Management	4	
	Streaming : Strategic Information System			
	ISYS6146	Information System Security*	2	
	ISYS6206	IS Strategy, Management and Acquisition**	4	
	ISYS6284	Analytical Information System	4	
	Streaming : e-Business			
	ISYS6211	Web Based Application Development	2/2	
	ISYS6285	Digital and New Media*&**	2	
	ISYS6204	e-Business Design	4	
	Streaming : Applied ERP			
	ISYS6146	Information System Security*	2	
	ISYS6442	Applied ERP: Fundamental	4	
	ISYS6206	IS Strategy, Management and Acquisition**	4	
	Streaming : Applied Database			
	ISYS6283	Business Intelligence**	4	
	ISYS6210	Data Visualization*	2	
	ISYS7155	Applied Database I	4	
5	ISYS8108	Knowledge Management*&**	4	24
	ENTR6511	Entrepreneurship: Market Validation	2	
	ISYS6538	Advanced in Business Application Development**	4/2	
	Streaming: Business Intelligence			
	ISYS6200	Data Warehouse**	4/2	
	ISYS6199	Data & Text Mining	4	
	ISYS6196	Business Analytics*	2	
	Streaming : Strategic Information System			
	ISYS6205	Enterprise Architecture**	4	
	ISYS8066	Business Process Management	4	
	ISYS6202	Social Informatics*	4	
	Streaming : e-Business			
	ISYS6187	Business Web Solution**	4	
	ISYS6289	Collaborative Computing*	4	
	ISYS6203	Mobile Applications Development	2/2	
	Streaming : Applied ERP			
	ISYS6205	Enterprise Architecture**	4	
	Elective Courses of Applied ERP Stream**			
	ISYS6443	Applied ERP: Business Process in Sales and Distribution*	4	
	ISYS6444	Applied ERP: Business Process in Procurement	4	
	ISYS6445	Applied ERP: Business Process in Human Capital Management	4	
	ISYS6446	Applied ERP: Business Process in Financial Accounting*	4	

Sem	Code	Course Name	SCU	Total
5	**Streaming : Applied Database**			24
	ISYS6201	Data Warehouse and Data Mining**	4	
	ISYS7156	Applied Database II	4	
	ISYS7157	Applied Database III*	4	
6	**Enrichment Program I**		15	15
7	**Enrichment Program II**		16	16
8	ISYS6117	Thesis	6	6
			TOTAL CREDITS 146 SCU	

*) This course is delivered in English

**) Global Learning System Course

***) Entrepreneurship Embedded

****) Elective Courses of Applied ERP Stream: Students in Applied ERP Stream will choose 2 courses (ISYS6443 and ISYS6444; or ISYS6445 and ISYS6446) from elective course list on 5th semester

English University Courses:

-) For 1st Semester: English University Courses I, student with score BINUS UNIVERSITY English Proficiency Test less than 500 will take English in Focus, and student with score test greater than or equal to 500 will take English for Business Presentation

-) For 2nd Semester: English University Courses II, student with score BINUS UNIVERSITY English Proficiency Test less than 500 will take English Savvy, and student with score test greater than or equal to 500 will take English for Written Business Communication

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

-) Student will take one of enrichment program tracks (off campus). See enrichment appendix for the tracks detail.

Enrichment Track Scheme

Track	Semester 6						Semester 7					
	IN	RS	EN	CD	SA	etc	IN	RS	EN	CD	SA	etc
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	

Notes:
IN   : Internship
RS   : Research
EN   : Entrepreneurship
CD   : Community Development
SA   : Study Abroad
etc   : Study Program Special Purposes

Notes:
Student will take one of enrichment program tracks

Enrichment Internship Track

Code	Course Name	SCU	Total
Enrichment Program I			
ISYS6215	Experience in Industry	8	15
COMM6225	Business Communication	3	
ISYS6192	Requirement and Solution for Information Systems	4	
Enrichment Program II			
ISYS6347	Professional Program in Industry	8	16
BUSS6057	Business Ethic	4	
ISYS6193	Design and Evaluation for Information Systems	4	

Enrichment Entrepreneurship Track

Code	Course Name	SCU	Total
Enrichment Program I			
ENTR6325	Business Start Up	8	15
ENTR6048	Business Model & Validation for Information Systems Project	2	
ENTR6049	Launching New Ventures for Information Technology Business	2	
ENTR6376	EES in New Information Systems Business	3	
Enrichment Program II			
ENTR6353	Growing a Business	8	16
ENTR6065	Lean Start Up & Business Plan for Information Technology Business	2	
ENTR6066	Venture Capital for Information Technology Business	2	
ENTR6364	EES in Information Systems Business Experience	4	

Enrichment Research Track

Code	Course Name	SCU	Total
Enrichment Program I			
RSCH6275	Research Experience	8	15
RSCH6110	Scientific Writing in Information Systems Research	4	
RSCH6295	EES in Information Systems Research	3	
Enrichment Program II			
RSCH6412	Information Systems Research Experience	8	16
RSCH6413	Scientific Writing in Information Systems	4	
RSCH6414	Global Employability and Entrepreneurial Skills in Information Systems Research	4	

Enrichment Community Development Track

Code	Course Name	SCU	Total
Enrichment Program I			
CMDV6156	Community Outreach Project Implementation	8	15
CMDV6035	Community Outreach Project Design in Information Systems	4	
CMDV6200	Employability and Entrepreneurial Skills in Information Systems Community	3	
Enrichment Program II			
CMDV6156	Community Outreach Project Implementation	8	16
CMDV6035	Community Outreach Project Design in Information Systems	4	
CMDV6175	Employability and Entrepreneurial Skills in Information Systems Community	4	

Enrichment Study Abroad Track

Code	Course Name	SCU	Total
Elective courses list for study abroad*			
Enrichment Program I			
GLOB6005	Elective Course for Study Abroad 1	4	15
GLOB6006	Elective Course for Study Abroad 2	4	
GLOB6007	Elective Course for Study Abroad 3	4	
GLOB6008	Elective Course for Study Abroad 4	4	
GLOB6009	Elective Course for Study Abroad 5	2	
GLOB6010	Elective Course for Study Abroad 6	2	
GLOB6011	Elective Course for Study Abroad 7	2	
GLOB6012	Elective Course for Study Abroad 8	2	
GLOB6013	Elective Course for Study Abroad 9	2	
GLOB6014	Elective Course for Study Abroad 10	2	
GLOB6015	Elective Course for Study Abroad 11	2	
GLOB6016	Elective Course for Study Abroad 12	2	
GLOB6041	Elective Course for Study Abroad 25	3	
GLOB6042	Elective Course for Study Abroad 26	1	
Enrichment Program II			
GLOB6005	Elective Course for Study Abroad 1	4	16
GLOB6006	Elective Course for Study Abroad 2	4	
GLOB6007	Elective Course for Study Abroad 3	4	
GLOB6008	Elective Course for Study Abroad 4	4	
GLOB6009	Elective Course for Study Abroad 5	2	
GLOB6010	Elective Course for Study Abroad 6	2	
GLOB6011	Elective Course for Study Abroad 7	2	
GLOB6012	Elective Course for Study Abroad 8	2	
GLOB6013	Elective Course for Study Abroad 9	2	
GLOB6014	Elective Course for Study Abroad 10	2	
GLOB6015	Elective Course for Study Abroad 11	2	
GLOB6016	Elective Course for Study Abroad 12	2	

*)Transferred courses will be transferred based on credit transfer policies on study program with total of 15 credits for Enrichment Program I and 16 credits for Enrichment Program II.

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

No	Course Code	Course Name	Minimal Grade
1.	CHAR6013	Character Building: *Pancasila*	B
2.	ENTR6511	Entrepreneurship: Market Validation	C
3.	ISYS6536	Enterprise System	C
4.	ISYS6535	Information Systems Analysis and Design*	C
5.	ISYS6198	Data and Information Management*	C
6.	ISYS6256	Information Systems Project Management	C
Stream : Business Intelligence			
7.	ISYS6283	Business Intelligence*	C
8.	ISYS6200	Data Warehouse	C
Stream : Strategic Information System			
7.	ISYS6206	IS Strategy, Management and Acquisition	C
8.	ISYS6205	Enterprise Archtecture*	C
Stream : e-Business			
7.	ISYS6204	e-Business Design*	C
8.	ISYS6187	Business Web Solution	C
Stream : Applied ERP			
7.	ISYS6206	IS Strategy, Management and Acquisition	C
8.	ISYS6205	Enterprise Archtecture*	C
Stream : Applied Database			
7.	ISYS6283	Business Intelligence*	C
8.	ISYS6201	Data Warehouse & Data Mining	C

*) Tutorial & Multipaper