

## **Information Systems**

### **Introduction**

The need for Information technology 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 in their joint support of the organization. They facilitate the smooth running of the whole organization and strengthen its competitiveness.

Information Systems supports staff, records, communication, and the information technology that together helps develop the business operation as well as assisting with problem solving and management decision making.

The Information Systems Study Program was founded to meet the demand for skilled human resources in the field of information systems. The scope of study in the Program includes Information Systems: development, methods and equipment (language programming and database) and also information system 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. Fostering students and lecturers to become a 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 strategic 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 strong foundation of system development skills and knowledge that they will need as an information systems professional, and improve lecture skills and knowledge in information systems.
2. To provide students with skills and in depth knowledge of information systems related to business intelligence, digital business and strategic information systems.
3. To provide students with the ability to use applied business knowledge for specific industry purposes.
4. To educate the community about the usage and implementation of information systems.
5. To provide community with skills and knowledge by using information system solutions.

## Graduate Competency

At the end of the program, graduates will be able to :

1. Graduates will be able to illustrate an understanding of Information System Framework
2. Graduates will be able to analyze information requirements and business processes.
3. Graduates will be able to design systems that are aligned with organizational goals.
4. Graduates will be able to manage and integrate data to produce good quality information.
5. Graduates will be able to analyze, design, implement and evaluate strategic corporate information systems.
6. Graduates will be able to analyze, design and implement E-business technology and applications.
7. Graduates will be able to deploy business application effectively.
8. Graduates will be able to analyze accounting information and business processes requirements.
9. Graduates will be able to evaluate accounting process in industry specifically.
10. Graduates will be able to calculate IT investment based on IT best practices in the industry.
11. Graduates will be able to construct an information technology budget and portfolio for an enterprise and assess information technology investment performance.
12. Graduates will be able to recommend integrated business systems.
13. Graduate will be able to demonstrate knowledge necessary to provide information system (IS) audit services in accordance with IS audit standards, guidelines and best practices to assist the organization in ensuring that its information technology and business systems are protected and controlled.
14. Graduate will be able to demonstrate knowledge of protection the information assets, business continuity and disaster recovery in ensuring confidentiality, integrity, availability of information assets and timely resumption of IT services while minimizing the business impact.
15. Graduates will be able to analyze financial and valuation of information technology.

## Prospective Career of the Graduates

Graduates will have the necessary skills to work in the following:

1. Corporate Information Systems
2. Database and E-Business
3. Information System Department
4. Information System Development Project
5. Programmer Analyst
6. System Support
7. System Design
8. Database Administrator
9. IT/IS Consultant
10. Web-Developer/Web-Designer

## Curriculum

The Information Systems Study Program curriculum is designed in such a way as to refer to the curriculum recommended by ACM - namely ISSC'99 (Information System-Centric Curriculum '99 for educating the Next generation of Information Systems Specialists, in collaboration with industry), IS 2002 (Model curriculum and guidelines for undergraduate degree program in Information system) ACM and AIS, MSIS 2000 (Model curriculum and guidelines for undergraduate degree program in Information System) ACM and AIS, Computing

Curricula 2005 and A Cooperative Project of ACM, AIS, IEEE-CS. In addition the curriculum has been influenced by foreign universities with a reputation for quality Information Systems Study Programs.

The curriculum for the next four years therefore consists of:

1. Information Systems/Information Technology
2. Organization, Management, and Character Building
3. Information Systems Development and its Implementation
4. Mathematics and Research
5. Concentration Subject: Strategic Information System, Business Intelligence, E-Business, Applied ERP, Applied Database, Accounting Information Systems, IT Investment, and Information Systems Audit.

## Course Structure

Sem	Code	Course Name	SCU	Total
1	CB412	CB: Self Development	2	20
	A0354	Accounting	4	
	J0712	Introduction to Business	2	
	M0014	Information System Concept	4	
	T0622	Introduction to Information Technology	2	
	I0284	Statistics	4	
	G1372	English Entrant	2	
2	CB422	CB: Spiritual Development	2	20
	J0562	Management	2	
	M0034	Information and Business Process	4	
	T1446	Algorithm and Programming	2/4	
	G1382	English in Focus	2	
	M0054	Information System Development	2/2	
3	H0532	Computer Network	2	24
	M0892	Management Information System	2	
	G1392	English Savvy	2	
	EN001	Entrepreneurship I	2	
	M0086	Information System Analysis and Design	4/2	
	T1456	Object Oriented Programming	2/4	
	M0564	Introduction to Database Systems	2/2	
4	CB432	CB: Interpersonal Development	2	24
	T0084	Human and Computer Interaction	2/2	
	M1006	Advanced Information System Analysis and Design*	4/2	
	T1464	Programming for Business	2/2	
	<b>Stream : Business Intelligence</b>			
	M0724	Business Intelligence	4	
	M0174	Object Oriented Database	4	
	<b>Stream : Strategic Information System</b>			
	M0164	End-User Information System	4	
	M0154	Management Support System	4	
	<b>Stream : E-Business</b>			
	M0204	eBusiness Concept	4	
	M0284	Technology and Infrastructure of eBusiness	4	

Sem	Code	Course Name	SCU	Total
4	<b>Stream : Applied ERP</b>			24
	M0734	Business Process Reengineering	4	
	M0594	Enterprise System	4	
	<b>Stream : Applied Database</b>			
	M0724	Business Intelligence	4	
	M0174	Object Oriented Database	4	
	<b>Stream : Accounting Information Systems</b>			
	A1054	Cost Accounting	4	
	A1416	Accounting Information System	4/2	
	<b>Stream : IT Investment</b>			
	A0784	Information Technology Investment Strategy	4	
	M0594	Enterprise System	4	
	<b>Stream : Information Systems Audit</b>			
	A0294	Advanced Information System Audit	4	
	A0844	Introduction to IT Governance	4	
5	EN002	Entrepreneurship II	2	20
	M0114	Web-Based Programming	2/2	
	M1016	Information System Minor Project*	6	
	<b>Stream : Business Intelligence</b>			
	M0574	Decision Support System	4	
	M0754	Database Design	4	
	<b>Stream : Strategic Information System</b>			
	M0734	Business Process Reengineering	4	
	M0594	Enterprise System	4	
	<b>Stream : E-Business</b>			
	M0764	E-Business Marketing	4	
	M0294	eBusiness Analysis and Design	4	
	<b>Stream : Applied ERP</b>			
	M0954	Applied ERP I	4	
	M0244	Information System Strategic Planning	4	
	<b>Stream : Applied Database</b>			
	M0924	Applied Database I	4	
	M0754	Database Design	4	
	<b>Stream : Accounting Information Systems</b>			
	A0384	Taxation	2/2	
	A0934	Manufacturing Information System	4	
	A0554	Analysis and Design of Accounting Information System	4	
	<b>Stream : IT Investment</b>			
	A0814	Investment Analysis	4	
	A0774	Information Technology Capital Budgeting	4	
	<b>Stream : Information Systems Audit</b>			
	A1304	IS Control	4	
	M0844	Information System Security	4	
	A1314	Business Continuity and Disaster Recovery	4	

Sem	Code	Course Name	SCU	Total
6	I0192	Research Methodology	2	22
	M0134	Project Management	4	
	M1022	Advanced Topics in Information System	2	
	K0442	Quantitative Methods	2	
	M0232	Testing and Implementation	2	
	<b>Stream : Business Intelligence</b>			
	M0744	Database Management	2/2	
	M0774	Data Warehouse	4	
	M0782	Text Mining Concept	2	
6	<b>Stream : Strategic Information System</b>			22
	M0624	Information Technology Valuation	4	
	M0244	Information System Strategic Planning	4	
	M0792	Information System Security	2	
	<b>Stream : E-Business</b>			
	M0804	E-Learning	4	
	M0884	Advanced Web-Based Programming	2/2	
	M0812	E-Business Security	2	
	<b>Stream : Applied ERP</b>			
	M0962	Applied ERP II	2	
	M0972	Applied ERP III	2	
	M0792	Information System Security	2	
	M0304	Corporate Information System Management	4	
	<b>Stream : Applied Database</b>			
	M0934	Applied Database II	4	
	M0774	Data Warehouse	4	
	M0782	Text Mining Concept	2	
	<b>Stream : Accounting Information Systems</b>			
	A1424	Accounting Information System Minor Project*	4	
	A0854	IT Cost Management	4	
	<b>Stream : IT Investment</b>			
	A0824	Information Technology Investment Portfolio	4	
	A1434	IT/IS Investment Minor Project*	4	
	M1064	ERP Minor Project*	4	
	<b>Stream : Information Systems Audit</b>			
	A0862	Information System Audit - Advance Topic	2	
	A1322	Computer Assisted Audit Techniques	2	
	A0894	Information Quality Assurance	4	
7	CB442	CB: Professional Development	2	10
	M0224	Knowledge Management	4	
	<b>Stream : Business Intelligence</b>			
	M0824	Data Mining	4	
	<b>Stream : Strategic Information System</b>			
	M0304	Corporate Information System Management	4	
	<b>Stream : E-Business</b>			
	M0834	E-Business Strategy	4	
	<b>Stream : Applied ERP</b>			
	M0982	Applied ERP IV	2	
	M0992	Applied ERP V	2	
	<b>Stream : Applied Database</b>			
	M0944	Applied Database III	4	

Sem	Code	Course Name	SCU	Total
7	<b>Stream : Accounting Information Systems</b>			10
	A0964	Information Technology Strategic Management	4	
	<b>Stream : IT Investment</b>			
	A0914	IT Investment Management	4	
	<b>Stream : Information Systems Audit</b>			
8	A0274	Managing Information System Audit Function	4	6
	M0336	Thesis	6	
	<b>Elective Courses</b>			
	G1402	English for Business Presentation	2	
	G1412	English for Written Business Communication	2	
<b>TOTAL CREDIT 146</b>				

\*) Entrepreneurship embedded

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

No	Code	Course Name	Minimum Grade
1	CB412	CB: Self Development	B
2	EN002	Entrepreneurship II	C
<b>Stream : Business Intelligence</b>			
3	M0014	Information System Concept*	C
4	M0086	Information System Analysis and Design*	C
5	M0564	Introduction to Database Systems	C
6	M0134	Project Management	C
7	M0724	Business Intelligence	C
8	M0754	Database Design*	C
<b>Stream : Strategic Information Systems</b>			
3	M0014	Information System Concept*	C
4	M0086	Information System Analysis and Design*	C
5	M0564	Introduction to Database Systems	C
6	M0134	Project Management	C
7	M0244	Information System Strategic Planning*	C
8	M0304	Corporate Information System Management	C
<b>Stream : E -Business</b>			
3	M0014	Information System Concept*	C
4	M0086	Information System Analysis and Design*	C
5	M0564	Introduction to Database Systems	C
6	M0134	Project Management	C
7	M0204	eBusiness Concept	C
8	M0294	eBusiness Analysis and Design*	C
<b>Stream : Applied ERP</b>			
3	M0014	Information System Concept*	C
4	M0086	Information System Analysis and Design*	C
5	M0564	Introduction to Database Systems	C
6	M0134	Project Management	C
7	M0594	Enterprise System	C
8	M0244	Information System Strategic Planning*	C

No	Code	Course Name	Minimum Grade
<b>Stream : Applied Database</b>			
3	M0014	Information System Concept*	C
4	M0086	Information System Analysis and Design*	C
5	M0564	Introduction to Database Systems	C
6	M0134	Project Management	C
7	M0724	Business Intelligence	C
8	M0754	Database Design*	C
<b>Stream : Accounting Information Systems</b>			
3	M0014	Information System Concept*	C
4	A1416	Accounting Information System*	C
5	M0086	Information System Analysis and Design*	C
6	M0034	Information and Business Process*	C
7	A0934	Manufacturing Information System	C
8	A0854	IT Cost Management	C
<b>Stream : IT Investment</b>			
3	M0014	Information System Concept*	C
4	A1416	Accounting Information System*	C
5	M0086	Information System Analysis and Design*	C
6	M0034	Information and Business Process*	C
7	A0914	IT Investment Management	C
8	A0824	Information Technology Investment Portfolio	C
<b>Stream : Information Systems Audit</b>			
3	M0014	Information System Concept*	C
4	M0086	Information System Analysis and Design*	C
5	A0844	Introduction to IT Governance*	C
6	M0844	Information System Security	C
7	A0294	Advanced Information System Audit	C
8	A0894	Information Quality Assurance*	C

\*) Tutorial & Multipaper