



MASTER IN INFORMATION SYSTEMS

The Master in Information Systems (MIS) is a graduate degree program intended to prepare students for industrial practice in project management, information systems planning, design, development and management of technical personnel.

OBJECTIVES

At the end of the program, students should be able to:

1. plan and use information technology properly and effectively to help solve business problems, and improve or reengineer business processes of organizations;
2. demonstrate theoretical and practical knowledge on various information systems planning;
3. describe and explain the technical concepts behind the implementation of information systems;
4. demonstrate broad sense of strategic systems integration and project management of information systems; and
5. analyze and decide on the moral and ethical issues pertaining to information technology and information systems.

CURRICULUM

Core Courses	=	18 units
Major Courses (Concentration)	=	18 units
Capstone Project	=	6 units
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		42 units

OFFERINGS

Core Courses (18 units)

- MIS 101 IS Organization, Management, and Administration (3 units)
- MIS 102 IT Project and Change Management (3 units)
- MIS 103 Advanced Financial and Managerial Accounting (3 units)
- MIS 104 IS Policy and Strategy (3 units)
- MIS 105 Computer Ethics (3 units)
- MIS 106 Advanced Software Engineering (3 units)

Concentration: Consulting & Research (18 units)

- MIS 201 Knowledge Management (3 units)
- MIS 202 Enterprise Resource Planning (3 units)
- MIS 203 Networks & Telecommunications (3 units)
- MIS 204 IS Research (3 units)
- MIS 205 Statistical Research Methods (3 units)
- MIS 206 Programming Principles and Tools for Research (3 units)

Capstone Project (6 units)

- MIS 301 Seminar & Capstone Project Proposal (prerequisite: Comprehensive Exam) 1 unit
- MIS 302 Capstone Project Implementation (prerequisite: MIS 301) 5 units

ADMISSION REQUIREMENTS:

Applicants for the MIS program must submit the following:

1. Accomplished application forms for admission (Application Form and Two (2) Confidential Letter of Reference)
2. Two copies of official transcript of record
3. Transfer credentials (honorable dismissal)
4. A two-page essay of the applicant's academic career goals, indicating reasonably definite statement of interests, including motivations in seeking the degree and career ambitions upon completion of the degree.
5. Official copy of B-Certificate issued by NSO.
6. One latest 2" x 2" or passport size picture.

Other requirements are found at <http://beta.su.edu.ph/page/26-Application-Procedure>

QUALIFICATION FOR ADMISSION:

1. Bachelor's degree from an accredited college or university in any of the following:
 - a. Computer Science, Information Technology, Information Management/Information Systems
 - b. Allied Information Technology Education (ITE) Degree programs like BS in Mathematics, BS in Computer Engineering, BS in Electronics and Communications Engineering, BS Applied Mathematics, BS Statistics and BS Industrial Engineering.
 - c. Other preparatory fields like communications, accounting, management and other business-related fields, which provide a substantial background in computing.

Applicant must have a grade point average (GPA) rating of at least "3.0" or its equivalent and with no failing mark in any subject. Otherwise, the applicant must take at least 9 units in any of the undergraduate courses prior to MIS program as identified by the IS Department Chairperson and to be approved by the Dean.

2. Non-ITE or non-computer related degrees from an accredited college or university but must have all of the following:
 - a. Bachelor's degree with a grade point average (GPA) rating of at least "3.0" or its equivalent and with no failing mark in any subject;
 - b. Must demonstrate proficiency in at least one (1) high-level programming language;



- c. Have a general knowledge in Information Systems equivalent to the following:
 - i. Accounting and Financial Systems
 - ii. Applications Development
 - iii. Business Process and Analysis of Business Performance
 - iv. Database Management System
 - v. IT Project Management and Quality Assessment
 - vi. Network and Internet Technology
 - vii. Systems Analysis and Design

If the above requirements are not met, the applicant must take a minimum of eighteen (18) units undergraduate orientation in any of the ITE courses offered in the university as identified by the IS Department Chairperson and to be approved by the College Dean.

3. Applicants who do not meet the above requirement but who show evidence of academic potential as determined by the admissions committee may be allowed to enroll on a probation status and may be admitted as regular students after taking a total of 12 units and maintaining the required grade point average "3.0".
4. Transferees who can present the necessary transfer credentials may be admitted for a graduate degree program upon the recommendation of the IS Department Chairperson and approval by the CCS Dean, provided that the transferees come from an accredited school or university and have obtained a grade point average of at least "3.0" or its equivalent. The transferees may be required to take additional academic units from the undergraduate courses as recommended by the IS Department Chairperson and to be approved by the CCS Dean.
5. Applicants must be proficient in English. Non-English speaking applicants shall be required to undergo at least one semester of English orientation before admission into the MIS program.
6. All applicants must take an Aptitude Test (Verbal Reasoning, Numerical Ability, Math Proficiency, Abstract Reasoning, Clerical Speed Accuracy, Mechanical Reasoning, Space Relations, Spelling, Language Usage) and submit his/her self for an interview with the Committee on Admissions.

COMMITTEE ON ADMISSIONS:

The CCS Committee on Admission will evaluate and decide on the applicant's capability or suitability to take graduate studies. It is also the task of the committee to ensure that academic advising is properly established. It is composed of the following members:

- ❖ College Dean
- ❖ IS Department Chairperson
- ❖ IT Department Chairperson
- ❖ CS Department Chairperson
- ❖ One Fulltime Faculty from MIS program

TRANSFER OF CREDITS:

No more than twelve (12) units excluding Capstone Project or its equivalent may be transferred from another university for the MIS program. Transfer of credits is subject to the recommendation by the IS Department Chairperson and approval of the CCS Dean.

MINIMUM GRADE, RESIDENCE, TIME LIMIT FOR COMPLETION, COURSE LOAD

1. An MIS student should not obtain a grade below than 3.0. If the students failed once, he/she is given a chance to either repeat the same subject or be given a replacement subject depending on the recommendation of the IS Department Chairperson with the approval of the CCS Dean, with the exception of the core subjects. He/She is only allowed to repeat the subject once, if he/she will fail for the second time, he/she will not be accepted in the program.
2. A minimum of two semesters' residence and five semesters or an equivalent combination of semesters is required for full-time and part-time students, respectively.
3. MIS Graduate students are classified as full-time if they have a minimum course load of 12 units per semester. Those with a course load of less than 12 units are classified as part-time students.

COURSE DESCRIPTIONS:

MIS 101: IS Organization, Management, and Administration

This course covers topics on information technology and organizations, information technology and individuals (privacy, ethics, job security, job changes), information technology and information security, information technology within the organization (technology introduction and implementation), business process engineering and information technology between organizations (electronic data interchange and electronic commerce). This course also covers the role of information systems in organizations and how they relate to organizational objectives and organizational structure. Basic concepts are introduced,

including the systems point of view and organization, information flows, and the nature of information systems.

MIS 102: IT Project and Change Management

This course covers topics on managing projects within an organizational context, including the processes related to initiating, planning, executing, controlling, reporting, and closing a project. It also covers topics on project integration, scope, time, cost, quality control, and risk management. Emphasis will be on managing the changes in organizations resulting from introducing or revising



information systems, and identifying project champions, working with user teams, training, and documentation.

MIS 103: Advanced Financial and Managerial Accounting

This course covers accounting with emphasis on preparation of financial statements for external parties (financial accounting) and accumulation of cost information to aid internal planning and control (managerial accounting). It will also include topics on measurement of assets and liabilities, revenues and expenses, the accounting cycle, financial statements, cost terminology, cost behavior, product costing, and relevant costs for decision making.

MIS 104: IS Policy and Strategy

This course covers topics for top management with strategic perspective for aligning competitive strategy, core competencies, and information systems. It will also discuss topics on the development and implementation of policies and plans to achieve organizational goals, and the definition of systems that support the operational, administrative, and strategic needs of the organization, its business units, and individual employees. It will put emphasis on approaches to managing the information systems function in organization, including examination of the dual challenges of effectively controlling the use of well-established information technologies, while experimenting with selected emerging technologies.

MIS 105 : Computer Ethics

This course demonstrates and discusses the moral and ethical issues in the field of Information and Communication Technology, its issues and right norms concerning hardware, software and people management. This course presents also several situations and cases for evaluation and discussion of its impact to the society. Topics include ethics in IT and computing, Computer and Internet Crime and its Abuse, Privacy, Intellectual Property and Software Development Issues.

MIS 106: Advanced Software Engineering

This course covers systematic approaches to software design, project management, implementation, documentation, and maintenance. It will also cover software design methodologies such as Systems Analysis and Design, Object-oriented Analysis and Design and Software Quality Assurance and Testing.

COMPREHENSIVE EXAMINATION

All students must have completed all core courses equivalent to 18 units and have completed 50% of the concentration courses equivalent to 9 units. The comprehensive exam is a requisite in taking MIS 301 (Seminar and CP Proposal).

CAPSTONE PROJECT (MIS 302)

The capstone project shall require active participation of the student in the industry who must hold key responsibilities towards its development. Its aim is to encourage students to develop information systems applications that are responsive to the demands in the community, public and to the national standards. It must be at least pilot tested and the result of the research study must be presented in a public forum. It is also encouraged that the capstone project be presented in a national or international conference.

MIS 201: Knowledge Management

The main objective of this course is to demonstrate the process through which organizations generate value from their intellectual and knowledge-based assets using innovations of Information Technology. Topics include dimensions of knowledge, its stages, access, drivers, technologies used, enablers and organizational structures, its success and failures, its support and applications of knowledge management.

MIS 202 - Enterprise Resource Planning

This course discusses the advanced process of planning the acquisition and transfer of business resources (e.g. materials and customers) from one state to another. In connection to this, topics involving the design and creation of an ERP or business support system will also be discussed.

MIS 203: Networks and Telecommunications

This course provides a broad overview of voice and data networking. It also discusses the fundamentals that are required for communications services, LAN, and the TCP/IP protocols used in the internet. Generally, this courses covers on voice networking, WANs, and LANs and Internetworking.

MIS 204: IS Research

This course demonstrates projects and research concepts in computing and information systems. It covers the concepts of research, choosing a research project and writing a proposal, research project planning and risk management, literature searching and reviews, software development methods, controlling research projects, presenting research projects and its final consideration.

MIS 206: Programming Principles and Tools for Research

This course deals with the study on the different programming techniques, methodologies, principles, approaches; its tools and solutions in solving research computing problems. Topics include understanding formal theory and techniques and models for understanding programs, programming languages and its abstractions, and development of related implementation technology solutions.