



ESCUELA SUPERIOR POLITÉCNICA DEL LITORAL
Faculty of Electrical and Computer Engineering
COURSE SYLLABUS
Information System

1. CODE AND NUMBER OF CREDITS

CODE	FIEC02105	
NUMBER OF CREDITS: 4	Theoretical: 4	Practical: 0

2. COURSE DESCRIPTION

The course will cover introductory concepts of information systems at the organizational, administrative and technological levels. These concepts will enable students to integrate their technological understanding of databases and programming and integrate them with requirements and information management that organizations require. The content of this course helps the student to have a better link between their technical knowledge and the management of any organization.

3. PRE-REQUISITES AND CO-REQUISITES

PRE-REQUISITES	FIEC05553 DATABASE SYSTEMS I
CO-REQUISITES	

4. CORE TEXT AND OTHER REQUIRED REFERENCES FOR THE TEACHING OF THE COURSE

CORE TEXT	1. Laudon and Laudon, Management Information Systems, Tenth Edition, 2010, Prentice Hall
REFERENCES	None

5. COURSE LEARNING OUTCOMES

At the end of the course the student will be able to:

1. Identify basic concepts of information systems.
2. To analyze cases of application to identify possible ways of solution extrapolating knowledge to another situations or different cases.

6. COURSE PROGRAM

- I. INFORMATION MANAGEMENT IN A GLOBAL ECONOMY. (4 SESSION - 8 HOURS).
 - What is information and its role in organizations
 - The role of information technology and information management with information systems.
 - How the administration of information has changed the way of doing business in companies.
 - Describe the use of information managers in their work.
 - How to identify and solve problems in the management of information
 - How to diagnosing, evaluating, designing and implementing information systems.
- II. INFORMATION SYSTEMS IN BUSINESS (4 SESSIONS - 8 HOURS).
 - Business Processes
 - ERP, CRM, TPM. SCM and points of sales.
- III. THE ORGANIZATION AND MANAGEMENT OF INFORMATION (4 SESSIONS - 8 HOURS).
 - Business context, information requirements of organizations.
 - The projects in information systems
 - The role of information systems in organizations
- IV. KNOWLEDGE ECONOMY (4 SESSIONS - 8 HOURS).
 - Impact on resources, triangle change.
 - Measurement of firms and the importance of intangible
 - The process of learning and knowledge.
 - The new industry



V.	INFORMATION SYSTEMS CONCEPTS (1 SESSIONS - 2 HOURS).
	<ul style="list-style-type: none"> Types of information systems Detail and impact of each type Examples of each type.
VI.	INTRODUCTION TO ELECTRONIC COMMERCE AND E-BUSINESS. (2 session - 4 hours).
	<ul style="list-style-type: none"> Concepts.
VII.	THE INTERNET AND WEB 2.0, 3.0. (2 SESSION - 4 HOURS).
	<ul style="list-style-type: none"> Social networking
VIII.	UNDERSTANDING THE BUSINESS VALUE AND MANAGEMENT OF CHANGE (2 SESSIONS - 4 HOURS).
	<ul style="list-style-type: none"> Understanding the value of business; models of traditional capital budgeting, the importance of administrative change in the success or failure of information systems.
IX.	ETHICS IN INFORMATION SYSTEMS. (2 SESSION - 4 HOURS).
	<ul style="list-style-type: none"> Code of ethics The values in the implementation of information systems Ethics and resources in information systems
X.	SECURITY IN INFORMATION SYSTEM (3 SESSIONS - 6 HOURS).
	<ul style="list-style-type: none"> The importance of information security Business and computer security Information systems regarding safety.

7. WORKLOAD: THEORY/PRACTICE

4 hours a week. With two daily sessions of two hours.

8. CONTRIBUTION OF THE COURSE TO THE EDUCATION OF THE STUDENT

Having this course relationship with management, organization and technology, it allows students to relate what they learn in their computing classes and subtly apply the required changes required in their jobs, using group techniques, new technologies for group work within their organizational needs.

BASIC TRAINING	PROFESSIONAL TRAINING	SOCIAL SKILLS DEVELOPMENT
	X	

9. THE RELATIONSHIP BETWEEN THE LEARNING OUTCOMES OF THE COURSE AND THE LEARNING OUTCOMES OF THE DEGREE PROGRAM

LEARNING OUTCOMES OF THE DEGREE PROGRAM*	CONTRIBUTION (High, Medium, Low)	LEARNING OUTCOMES OF THE COURSE**	THE STUDENT MUST:
a) An ability to apply knowledge of computing and mathematics appropriate to the discipline	Low	2	Apply knowledge of computer and mathematics in their decision taking
b) An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution	High	2	Managing knowledge to solve problems related to information technologies
(c) An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs	Medium	1	Know about computer networks, hardware and software types that exist in the market
(d) An ability to function effectively on teams to accomplish a common goal	High	1	Teaming up with his companions, solving problems.
(e) An understanding of professional, ethical, legal,	High	1	Resolving the ethical dilemmas presented in professional



security and social issues and responsibilities			
(f) An ability to communicate effectively with a range of audiences	Low	1,2	The student must during the 4 months to develop the ability to speak in public, express ideas consistently correct and polite, with an emphasis on expressing the opinion
(g) An ability to analyze the local and global impact of computing on individuals, organizations, and society	Low	1, 2	Organizational and administratively can identify the strengths of many computational technologies and how are you can change your existence to those who use
(h) Recognition of the need for and an ability to engage in continuing professional development	Low	1, 2	Identify new information, the day to identify new developments, and how they can affect what currently exists
(i) An ability to use current techniques, skills, and tools necessary for computing practice.	Low	1, 2	Identify different software tools that enable the management of different entities in information systems
(j) Ability to lead, manage and undertake projects.	Low	1, 2	Submit two class projects, to identify these skills developed

10. EVALUATION IN THE COURSE

Evaluation activities	
Exams	X
Tests	X
Homework/tasks	X
Projects	X
Laboratory/Experiments	
Class participation	X
Visits	
Other	X

11. PERSON RESPONSIBLE FOR THE CREATION OF THE SYLLABUS AND THE DATE OF ITS CREATION

Created by	Lenin Freire
Date	25 FEB 2013

12. APPROVAL

ACADEMIC SECRETARY OF THE ACADEMIC DEPARTMENT	DIRECTOR OF TECHNICAL ACADEMIC SECRETARY
NAME: Sra. Leonor Caicedo G.	NAME: Ing. Marcos Mendoza V.
SIGNATURE:	SIGNATURE:
Date of approval by the Directive Council: 2013-334 2013-08-12	Ing. Marcos Mendoza V. DIRECTOR DE LA SECRETARIA TÉCNICA ACADÉMICA

13. VALIDITY OF THE SYLLABUS

RESOLUTION OF THE POLYTECHNIC BOARD:	13-10-269
DATE:	2013-10-17