

## **Master of Science in E-Business**

The course structure of the program is composed of two main components (core courses of 30 hours and elective courses of 12 hours) with a total of 42 credit hours.

### **Semester (1)**

<b>Code</b>	<b>Course Name</b>	<b>Hours</b>
MIS 502	Business Data Communication	3
MIS 503	Fundamentals of E-Business	3
Total		6

### **Semester (2)**

<b>Code</b>	<b>Course Name</b>	<b>Hours</b>
MIS 513	Enterprise Resource Planning	3
MIS 517	E-Business Strategy	3
Total		6

### **Semester (3)**

<b>Code</b>	<b>Course Name</b>	<b>Hours</b>
MIS 531	Advanced System Analysis and Business Development	3
MIS xxx	Elective Course	3
Total		6

### **Semester (4)**

<b>Code</b>	<b>Course Name</b>	<b>Hours</b>
MIS 514	Customer Relationship Management	3
MIS 541	E-Business Security Management	3
Total		6

**Semester (5)**

<b>Code</b>	<b>Course Name</b>	<b>Hours</b>
MIS 570	Research Methodology in E-Business	3
MIS xxx	Elective Course	3
Total		6

**Semester (6)**

<b>Code</b>	<b>Course Name</b>	<b>Hours</b>
MIS 561	Legal, Ethical, Social issue in E-Business	3
MIS xxx	Elective Course	3
Total		6

**Semester (7)**

<b>Code</b>	<b>Course Name</b>	<b>Hours</b>
MIS 599	Research Project in E-Business	3
MIS xxx	Elective Course	3
Total		6

**Core Courses**

<b>Code</b>	<b>Course Name</b>	<b>Cr Hrs</b>	<b>Cr Hrs (Total)</b>
MIS 503	Fundamentals of E- Business	3	<b>30</b>
MIS 502	Business Data Communications	3	
MIS 513	Enterprise Resource Planning (ERP)	3	
MIS 514	Customer Relationship Management (CRM)	3	
MIS 517	E-Business Strategy	3	
MIS 531	Advanced Systems Analysis and Business Development	3	
MIS 541	E-Business Security Management	3	
MIS 561	Legal, Ethical, and Social Issues in E-Business	3	
MIS 570	Rresearch Methodology in E- Business	3	
MIS 599	Research Project in E-Business	3	

### Elective Course

Code	Course Name	Cr Hrs	Cr Hrs (Total)
MIS 515	Advanced Electronic Commerce	3	Student Selects 12 CH
MIS 521	Business Inelegance	3	
MIS 522	Knowledge Management and Data Mining	3	
MIS 532	Web-based application	3	
MIS 544	E-Governments	3	
MKT 544	E-Marketing and its applications	3	
BUS 545	Leadership for the Technology Driven Enterprise	3	
MIS 555	E-business Project Management	3	
MIS 566	Advance Information Security Policies	3	
PA 582	E-business Healthcare	3	
MIS 591	Special Topics in E-business	3	
QUA 511	Business Statistical Analysis	3	
ECON587	E-Business Economics	3	

## Course Description

### Core Courses

#### **MIS 502 Business Data Communications**

**3 (3+0)**

This course is an introduction to the concepts of computer networks management and data communications. It covers network architecture, Internet models, data and signals, network types, network security management, design and management of networks.

#### **MIS 503 Fundamentals of E-Business**

**3 (3+0)**

This course is an introduction to key concepts in E-Business and the role of technology managers in both private- and public-sector organizations. Topics include an overview of the managerial, strategic and technical aspects of E-business functions, processes and interactions; how organizational entities can be structured and managed to respond effectively to dynamic changes caused by technology and international competition is examined, and overviews of the technologies that enable E-Business, including telecommunications technology, portals and search engines, Web site design and management, electronic payment systems, security, e-publishing and digital download features, mobile commerce and pervasive computing, are presented.

#### **MIS 513 Enterprise Resource Planning**

**3 (3+0)**

This course takes a generic approach to enterprise resource planning systems and their interrelationships, covering all functional areas of this new type of management challenge. It discusses the re-design of business processes, changes in organizational structure, and effective management strategies that will help to assure competitiveness, responsiveness, productivity, and global impact for many organizations in the years ahead.

**MIS 514 Customer Relationship Management****3 (3+0)**

This course presents innovative proven methods for determining whether a Customer Relationship Management (CRM) strategy for changing the way a company provides service by adding new technologies, processes, and procedures will realize the return on the investment projected. Throughout this course, students will recognize how CRM theory is successfully applied by various real-life companies. Student will learn the scientific reasons why people resist change, how to deal with it, how to measure the results in an on-going manner and how to tie those measure results to the bottom-line.

**MIS 517 E-Business Strategy****3 (3+0)**

This is a course focused on the business strategy implications of the digital economy. It is primarily a case based class where students learn to develop and use the managerial and strategic reasoning skills needed to guide their organizations in the turbulent digital market place. This is a technology class only to the extent that students can use the existing web infrastructure to facilitate their interactions with students, team members, and the professor. Students will have the opportunity to develop critical thinking skills to evaluate and react to changing market trends and align the E-Business strategy with business operations.

**MIS 531 Advanced Systems Analysis and Business Development****3 (3+0)**

This course introduces a range of methods, techniques and current issues of system analysis and design. The course covers topics such as problem definition and identification, system resources and needs, system design and documentation. It is designed to expand the student competence in the theoretical concepts of database system. Emphasis is on database theory. Some of the issues discussed are normalization theory, object oriented databases, distributed databases, concurrency control, security, and optimization.

**MIS 541 E-Business Security Management****3 (3+0)**

Topics covered by this course include: reviews the current security issues in terms of technical, managerial, and legal aspects in a scope of E-Business, with emphasis on management issues. Prevention and administration techniques for securing computers and networks will be discussed in terms of theory and practice.

**MIS 561 Legal, Ethical, and Social Issues in E-Business****3 (3+0)**

This course addresses the legal, ethical, and social issues in E-Business and will equip students with the knowledge and analytic tools needed to spot those key issues. This course also covers intellectual property on electronic networks through trademarks, copyrights and patents. The other covered topics include privacy, liability, fraud and abuse, confidentiality, antitrust law, the Joint Commission, disclosure, and compliance programs.

**MIS 571 Research Methodology in E- Business****3 (3+0)**

The students will learn research methods and techniques, then choose a research topic in E-business, conduct research study, and write a research paper.

**MIS 599 Research Project in E-Business****3 (3+0)**

This course will enhance the student's research capabilities. It provides the student with the basic research concepts and an understanding of how to conduct research. The student is supposed to tackle a research-oriented problem (upon the approval of the department) in some aspect of E-Business and its applications and explore the feasibility of providing computer-based solutions to this problem.

**Elective Courses:****MIS 515 Advanced Electronic Commerce****3 (3+0)**

This course provides students with the necessary knowledge in building a successful e-commerce sites and guides students through the entire process of e-commerce from strategic planning to actual fulfilment. It emphasizes the three major driving forces behind e-commerce: technology change, business development, and social controversies in a comprehensive, managerial, and research based manner, which help students to realize how corporate business uses e-commerce.

**MIS 521 Business Intelligence****3 (3+0)**

this course provides knowledge on the interactive computer-based systems used to support managers. It emphasizes on the study of expert systems and artificial intelligence and the use of knowledge in making managerial decisions. The course includes designing user interface for decision support systems, and case study for using an expert system shell.

**MIS 522 Knowledge Management and Data Mining****3 (3+0)**

This course will cover data mining for business intelligence. Data mining refers to extracting or "mining" knowledge from large amounts of data. It consists of several techniques that aim at discovering rich and interesting patterns that can bring value or "business intelligence" to organizations. Examples of such patterns include fraud detection, consumer behaviour, and credit approval. The course will cover the most important data mining techniques: classification, clustering, association rule mining, visualization, prediction ;through a hands-on approach using XL Miner and other specialized software, such as the open-source WEKA software.

**MIS 532 Web-based E-Business applications****3 (3+0)**

The course presents the opportunities given by the Semantic Web technologies for the enterprise integration in the context of development of E-Business software applications. A more conceptual and straightforward approach can be applied to model and build complex e-business software applications.

**MIS 544 E-Governments****3 (3+0)**

This course introduces the ways in which internet technologies are affecting how people interact with government, and how governments, in turn, are using and managing these technologies to better provide information and services to the public. Course content is divided into several themes, and begins with an overview of development techniques and assessment methods for public web sites and on-line applications. Then, examine key policy issues relevant to implementation of e-government programs, as well as to the

broader use of information technology in the societies. Finally, present the skills and concepts needed to effectively manage e-government projects and programs.

**MIS 555 E-business Project Management 3 (3+0)**

This course covers the management of information technology projects. The content includes the project life cycle and the associated project knowledge area task management, scope, time, resource, risk management, and quality management.

**MIS 566 Advance Information Security Policies 3 (3+0)**

The course provides the knowledge, skills, and abilities needed to define, design, integrate, and manage information system security policies, processes, practices, and procedures within controlled information systems and networks. Specific focus is on identifying, implementing and integrating management and administrative solutions for maintaining the security of networks that process sensitive data.

**MIS 591 Special Topics in E-business 3 (3+0)**

This course may include special topics in E-Business related subjects such as advanced research and methodologies, strategic E-business modelling and simulation, private equity, and entrepreneurs, cyber law and other potential new topics.

**Courses from outside the department:**

**QUA 511 Business Statistical Analysis 3 (3+0)**

This course includes: the basic theories of probability, probability distributions for both the discrete random variables and related or continuing, and mathematical expectation and grits functions and probability distributions of random variables, sampling distributions and estimate the parameters of society and test hypotheses. It also covers non parameter statistical methods and their application in the field of business research (research work). Finally, this course includes the statistical software packages such as SPSS or SAS, which will be used in the analysis of data on the computer.

**ECON 587 E-Business Economics 3 (3+0)**

This course covers the study of the economics for E-Business. It focuses on evaluating the impact of the Web and related technologies on the creation and transformation of goods and services and on organizations, industries, and society in general. Analysis covers concepts drawn from economics, including information asymmetries, efficient markets, and transaction costs, switching costs, network externalities, adverse selection and contracts. Topics include auctions, digital cash and e-payment systems, innovation and intellectual property rights, and public good issues and valuation and financing of E-Business investments.

**PA 582 E-business Healthcare 3 (3+0)**

This course covers fundamental concepts and activities of information technology as applied to healthcare. Topics include computer-based medical records, knowledge-based systems, and telecommunication in healthcare, human-computer interfaces, and systems integration. This course emphasizes the role of information technology in healthcare through an investigation of the electronic health record (EHR), business, a core aspect of

the Health Insurance Portability and Accountability Act (HIPAA) and health information software applications.

**BUS 545 Leadership for the Technology Driven Enterprise 3 (3+0)**

This course teaches developing and balancing critical management competencies at the individual, interpersonal, team and organizational levels. Focus is on effective organization, motivation and leadership.

**MKT 544 E-Marketing and its application 3 (3+0)**

This course takes on a comprehensive method in viewing the world of Internet marketing in an understandable and accessible way. It explores key marketing concepts in the context of today's digital/Internet environment. The course is designed to explore the relationship between Internet and traditional marketing, building on prior learners' knowledge of positioning, target markets, and direct response marketing.