



## **Business Information System Courses Description**

### **1903101 Fundamentals of Information Technology: (Prerequisite none)**

Information Technology components, computer hardware: memory, CPU, machine cycle. numbering system: decimal, binary, octal, hexadecimal, operations, data representation, coding. communications and networks multimedia, E-business, system software and applications, information system: analysis and development, problem solving : algorithm, flowchart, pseudo code.

Weekly practice in the lab.

### **1903121 Web Application Development –1 (Prerequisite none)**

The course introduces students to the tools and techniques used for building Web-based applications. Students will gain an understanding of the fundamental workings of the Web. Students will be taught how to develop web applications using client-side tools such as HTML and Java Script and server-side tools such as ASP.

### **1903222 Management of Information Centers: (Prerequisite 1631101)**

End-user computing: training and education, application development, network requirement, Technical Assistant: directing security and control issues, Selection of hardware and software, evaluation of application, file backups and recovery; General support services

### **1903232 Management Information Systems (MIS): (Prerequisite 1903101)**

Fundamentals of Information Systems; Types and levels of MIS; IT in Business; Business Application of Information Technology; Managing Information Technology: global management, planning and information change; Security and protection issues. Weekly practice in the lab.



**1903235 Information Resources Management: (Prerequisite 1903101)**

Roles of information systems in the overall strategy and management of organizations; Organization management; Information resources: Personnel, planning and control, technological trends, management implications, managing MIS department; Outflow of information; Documents generation and distribution; Team management; New issues in MIS. Weekly practice in the lab.

**1903251 Manufacturing Information Systems ( Prerequisite 1903232)**

The field of stud deals systems that meet specific needs. Components include computer aided manufacturing (CAM), computer aided design (CAD), material requirements planning (MRP), master production schedule (MPS), capacity requirements planning (MRP), master production schedule (MPS), capacity requirements planning (CRP), production activity control (PAC), computer integrated manufacturing (CIM), and flexible manufacturing systems (FMS will be covered.

**1903322 Electronic Business (Prerequisite 1903352)**

Introduction to electronic commerce; Hardware and Software requirements; Internet and Intranet Connectivity; Browsers; Electronic-mail; Electronic Data Interchange; Electronic Advertising; Electronic Fund Transfer; Security Protocols; Telecommuting; Teller machines; Electronic Commerce Applications; Business-to-Customer Commerce; Business-to-Business Commerce; Electronic Payments and security; E-commerce programming with XML and ASP. Weekly practice in the lab.



**1903332 Decision Support Systems (DSS): (Prerequisite 1902321)**

Definition; DSS Framework; Modeling and model management; Modeling process; Characteristics and capabilities of DSS; Component of DSS; DSS Hardware and Software; Constructing a DSS; DSS development tools; Group DSS; Executive DSS; Hybrid DSS; Distributed DSS; case study. Weekly practice in the lab.

**1903341 Operations Research: (Prerequisite 1901215)**

Operations research: origin and scope; General linear Programming problem: mathematical modeling , General solution methods: Graphical, Simplex, Sensitivity analysis: status of resources, change in coefficients, Duality Theory: properties, dual simplex; Special problems: transportation and assignment, Other applications: CPM-PERT Project management and game theory. Weekly practice in the lab.

**1903345 Computer Ethics: (Prerequisite 1903101)**

Identifying ethical problems; Reaching decisions; Legal constraints; professional organization and codes of conduct; Systems management and hacking; Ethical, social, political, legal and economic aspects of the application of computers; Customer rights; Copy rights; Ownership; Protocols and agreements; Security and ethical issues; Viruses detection; Protection and ethical issues; Internet and ethical implications; Computer crimes. Weekly practice in the lab.

**1903352 Web Publishing: (Prerequisite 1903121)**

Introduction to concepts and techniques for WWW information services; WWW design support; Production and evaluation of WWW information services; Developing strategies for locating resources; HTML (Hyper Text Markup Language); Publishing information; Web Page Design (Microsoft Front Page); Publishing HTML pages using HTML Tags and HTML Tools; Java Script; Java Applets and XML. Weekly practice in the lab.



**1903353 Web Application Development-2**

**(Prerequisite 1903121)**

Application of server-side scripting programming, Implementation of Web servers, SQL & MySQL, Database Interfaces (DBIs), Advanced ActiveX Data Objects (ADO.NET), Active Server Pages.NET (ASP.NET), Implementing Active Server Pages.NET using XML (Extensible Markup language), programming using Perl, Common Gateway Interface (CGI), PHP, Python, Java Servlets and JSP. Weekly practice in lab.

**1903375 Statistical Software Packages:**

**(Prerequisite 0301131)**

Hardware and software requirements; Computer packages cover the following: basic probability and descriptive statistics; Sampling techniques; Estimation and hypothesis testing; Simple and Multiple Regression; Correlation Analysis; Distribution; Applied Statistical Forecasting; Basic techniques in time-series analysis of trend, and other optional topics; Statistical Packages in decision making. Weekly practice in the lab.

**1903415 Database Languages and Tools :**

**(Prerequisite 1902321)**

A Selected DB Language such as Oracle or Access; Additional support tools for business applications: DDL and DML commands; Forms design; Reports design; Triggers; Case study.

\*Weekly practice in the lab, maximum 50 students

**1903435 Executive Information Support Systems (EISS):**

**(Prerequisite 1903332)**

Concepts and definitions; Distributed group support systems; Characteristics of EISS; Multidimensional analysis and presentation; Data access in EISS; Enterprise EISS; Comparing and Integrating EISS and DSS; EISS development; EISS installation and operation; Case study.

\*Weekly practice in the lab, maximum 50 students



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**1903442 Modeling and Simulation in Business : (Prerequisite 1903341)**

Introduction to computer simulation; Major characteristics; Modeling process; Trial and error; Optimization; Heuristics; The methodology of simulation; Problem definition; Construction of the simulation model; Testing and validating the model; Design of the experiments, evaluating applications; Types of simulation: conventional simulation, probabilistic simulation, time dependent vs time independent simulation, interactive visual simulation, prediction simulation, simulation of buying and selling; Stocks; Case study. Weekly practice in the lab.

**1903458 Certified Software Packages : (Prerequisite: none)**

In order to develop students skills which will enable them to get professional certificate This course will introduce students to some certified software packages like SAP/3, Merlin MRP, and Micro Soft Management Packages.

**1903471 Business Intelligent Systems (Prerequisite: 1903232)**

Business Intelligent Systems (BIS) focus on collecting, analyzing and converting raw business data into actionable information that drives business decisions. This course introduces BIS from both technical and managerial perspectives. Thus, techniques in data mining, data warehousing, online analytical processing (OLAP), data analysis, statistical reasoning and knowledge discovery will be examined from technical perspectives. Managerial perspectives discuss various applications in BIS, including customer behaviors analysis, risk analysis, financial, analysis, supply chains, and knowledge management. TO maintain successful intelligence program additional issues like strategic and tactical planning will be examined.



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**1903481 Quality Management: (Prerequisite 1902321 and 0301131)**

Introduction; Views of quality; Profiles; Management and improvement;; Quality management system; Human quality culture; The problem of user requirements ; Assurance; The ISO9001-2000 series: Standards, generic, guidance; Capability maturity models; individual levels of the CMM; Human resource quality; Training; Supplier quality; Quality assessment.

**1903485 Special Topics:**

Selected Topics in advance areas of Business Information Systems, Report and Documentation required. Weekly practice in the lab.

**1903495 Project:**

Project includes theoretical and practical aspects in Business Information Systems, related to the current problems and applications in IT, Research oriented, technical report, and presentation. Weekly practice in the lab.

**Training:**

A student is required to training according to the training regulations of Dean's council for KASIT Departments.