

**MAJOR GOALS AND LEARNING OUTCOMES FOR THE B.S. IN BUSINESS
ADMINISTRATION/INFORMATION SYSTEMS MAJOR PROGRAM**

I. Explain fundamental database concepts and be able to apply it to the design and development of relational databases.

Student Learning Outcomes:

SLO #1.1: Design a conceptual relational database in 3rd Normal Form.

SLO #1.2: Build a relational database using a common DBMS software package.

SLO #1.3: Write SQL statements to query a relational database consisting of at least two tables.

II. Learn the major steps pertaining to the planning and analysis phases of the systems development life cycle (SDLC) and demonstrate the ability to produce the associated deliverables.

Student Learning Outcomes:

SLO #2.1: Estimate and quantify the present value of tangible and intangible costs and benefits (including strategic benefits) arising from an information system investment.

SLO #2.2: Identify information system requirements and model the functionality of a requirements-compliant system.

III. Learn the major steps pertaining to the design and implementation phases of the system development life cycle (SDLC) and demonstrate ability to produce the associated deliverables.

Student Learning Outcomes:

SLO #3.1: Create data models to support the functionality of an information system.

SLO #3.2: Create a user-interface and architecture design to support the functionality of an information system.

SLO #3.3: Identify and evaluate alternative conversion and migration strategies for implementing an information system in an organization.

IV. Acquire fundamental working ability of a computer programming language, and be able to use it to write programs to solve common business problems.

Student Learning Outcomes:

SLO #4.1: Represent program logic in the form of a flowchart or pseudocode.

SLO #4.2: Develop a fully functional computer program from given specifications.

SLO #4.3: Use the logic of selection (decision) in procedures such as data validation.

SLO #4.4: Use the logic of iteration (looping) to process lists and arrays.

V. Explain fundamental capability (both theoretical and practical) of data communications, computer networking, and related hardware concepts.

Student Learning Outcomes:

SLO #5.1: Identify fundamental issues of networking, including networking devices, transmission media, and various interfaces.

SLO #5.2: Explain standard architectures (TCP/IP, OSI, and Hybrid) in terms of layer functions and PDUs.

SLO #5.3: Explain the Internet protocol (IP) and transport layer protocols (TCP & UDP) and associated concepts including IP addressing.

SLO #5.4: Describe Ethernet (802.3) and Wireless (802.11) LAN standards.

VI. Acquire ability of contemporary information systems issues, including the use of information technology for competitive advantage.

Student Learning Outcomes:

SLO #6.1: Analyze information systems management issues or information technology trends.

SLO #6.2: Identify and describe opportunities and challenges facing information systems executives in today's global economy.

SLO #6.3: Analyze the strategic impact of an organization's current information systems portfolio vis-à-vis the information systems under development.

VII. Demonstrate competence in communicating technical information effectively to both technical and non-technical audiences.

Student Learning Outcomes:

SLO #7.1: Create and deliver a structured walkthrough presentation that communicates the results of the analysis and design phases of the SDLC to a non-technical audience.

SLO #7.2: Construct and articulate an appropriate framework for exposing the inter-relationships in the analysis- and design-phase deliverables.

SLO #7.3: Present, explain and defend the analysis- and design-phase deliverables to an audience.

SLO #7.4: Present research findings geared towards a managerial audience on technological issues, including specific technologies and/or technological trends.