

ISE

Information Systems

ISE 503: Data Management

This course provides an understanding of the issues in managing database systems as an essential organizational resource.

Students learn the enterprise data architecture components, data storage configurations, and information retrieval methods. It expands from the relational model to the multidimensional model, object-relational techniques, and web accessed data. The course includes concepts, principles, issues, and techniques for managing corporate data resources. Techniques for managing the design and development of large database systems including logical data models, concurrent processing, data distribution, database administration, data warehousing, data cleansing, and data mining. Students will use current methods and tools for database design and development. Limited to CSE/ISE graduate students; others, permission of instructor.

3 credits, Letter graded (A, A-, B+, etc.)

ISE 506: Quantitative Computer Architecture

Explores the physical structure of a computer; machine representation of information; architecture and organization of various mainframe, mini-, and microcomputers; primary and secondary storage; and input and output communication. Architectural choices are compared and used to determine resulting function and performance. Architectural trade-offs are also identified.

3 credits, Letter graded (A, A-, B+, etc.)

ISE 507: Project Management

The course focuses on both the technical aspects of project management as well as the human aspects. Technical components include project definition, work breakdown structure development, and the use of optimization techniques for planning a project and optimizing schedules. Graphical approaches to project definition are addressed, as are needs analysis, preliminary design, and detailed design and implementation. Human aspects of project management include forming a project team, managing performance, and resolving conflicts.

3 credits, Letter graded (A, A-, B+, etc.)