Howard University School of Business MBA

Information Systems

In addition to the core course curriculum requirement, a student must complete 15 credit hours of elective/concentration courses. The requirements for an MBA with a concentration in Information Systems (IS) are: GIST-503, GIST-590 and two additional IS courses.

GIST-503. Strategic Information Systems Management and Technology. 3 crs.

This course covers analysis of strategic and management-related issues in information systems development, implementation, and application. The enabling role and the use of information technologies (IT) in transforming business and work group and individual processes to achieve competitive advantage, efficient operations, and effective decision making. Topics include: gaining competitive advantage through IT applications; identifying high pay-off IT applications, and leading the process of IT-induced change process, knowledge management and the technology infrastructure for knowledge creation and sharing for strategic advantage. Prerequisite: GIST-500.

GIST-504. Telecommunications: Technology, Applications, Operations and Management. 3 crs.

Addresses the challenges posed to managers by the development of new telecommunication and network technologies, new trends in telecommunication operations; and the cost of implementing telecommunication systems, including a perspective in electronic commerce and its underlying infrastructure. The course covers basic concepts, applications, and issues of today's communication networks, such as regulation and public policy. Technical topics include basics of data communication, media characteristics, local and wide area networks (LANs and WANs), Ethernet, frame relay, ATM, network management, Internet, Intranet, TCP/IP, OSI, HTTP, and the web. Students will learn how to design and cost basic networking solutions for organizations and assess the tradeoffs associated with various network configurations and technologies.
Prerequisites: GIST-500 or instructor approved equivalents.

GIST-505. Information Systems Modeling. 3 crs.

Students study Information Modeling in an organization from an integrated system perspective. Topics include: data acquisition, storage, processing, and retrieval; data file organization; characteristics of computerized information-handling equipment; techniques of data analysis,

design, and processing; input/output analysis; object-oriented analysis; information flow modeling; and management of information as an organizational resource; and transmission of information to decision-makers. The course will require the development of specifications for a functional information system, such as for finance, e-commerce, supply chain, production, inventory, accounting, marketing, and distribution. It will incorporate other nonfunctional requirements, such as performance, reliability, environmental conditions, and end-user training. Development tools such as CASE tools (e.g. Oracle) will be used in this course. Prerequisite: GIST-500, Programming experience in a high level language (C, Visual Basic, Visual C++, Java, etc.).

GIST-506. Database Management Systems. 3 crs.

This course covers the theory, architecture, and the environment of database design. It includes data modeling using the entity-relationship (ER) data model and relational query languages such as the industry standard structured query language (SQL). Emphasis will be on the implementation of DBMS technology, e.g., transactions, query processing, and business integrity constraints, and their impact on applications development, physical database design and file processing issues, including a study of sequential files, indexing and hashing. Advances that build upon the core DBMS technology may be explored as time permits. A project to develop an extensive database for business application using Oracle or other industrial DBMS is required.
Prerequisites: GIST-500, GIST-505 or instructor approved equivalents.

GIST-507. Electronic Business and E-Commerce. 3 crs.

This is an introduction to electronic business and e-commerce. The topics will include redefining the enterprise information systems and inter-organizational information systems, enabling technologies (WWW Concepts and Technologies, Intranet, Extranets, EDI, Electronic Payment Systems), Security, Economics of Electronic Marketplace and Conducting Business on the Internet. Each student or student team will be required to complete an e-commerce project that focuses on a particular business concept or industry.
Prerequisites: GIST-500 or instructor approved equivalents.
GIST-508. Information Security. 3 crs.

An advanced course in information technology, emphasizing the philosophies, principles, and practices of security management and impact of privacy legislation and other public policy issues on computer-based systems. It will cover risk assessment (internal and external), trends in the information security field, state-of-the-art counter-measures, the roles of the various levels of management and technological staff, and Issues in Information Audit, and Hacking and Fraud Control in organizational systems and in inter-organizational systems and e-commerce.
Prerequisite: MBA candidate and final semester.

GIST-509. Software Project Management. 3 crs.

This course is an introduction to concepts of project management and techniques for planning and controlling of resources to accomplish specific project goals. The focus is on information systems projects, but the principles discussed are applicable to project management in general. Prerequisite: GIST-500, GIST-502.

GIST-510. Seminar: Emerging Information Technologies. 3 crs.

This is a seminar course discussing the latest and future information technology trends, emerging IT strategies and management issues and challenges, Advance IT Topics. Prerequisite: MBA candidate and final semester.

GIST-590. Applied IT Development, Infrastructure, Architecture and IT Consulting. 3 crs.

This is an Intensive Hands-on IT seminar of Advance IT Topics; IT consulting issues and practice; IT entrepreneurship. This course is for MBA Candidates Only. Students will be provided with real life projects from industry or well define projects with the aid of the instructor and must develop and prototype an IT related business idea with the aid of the instructor. An IT deliverable output is required.
Prerequisite: MBA candidate and final semester.