

Management Information Systems Minor

Dr. Jill O'Sullivan, Chair
Computer Systems Department
Jill.Osullivan@farmingdale.edu
631-420-2190
School of Business

The Management Information Systems minor is available for students who wish to develop a deeper understanding and practical skill sets in information systems. Students selecting this Management Information Systems minor will take 18 credit hours of coding and computer applications courses.

Student Learning Outcomes:

- Students will gain skills in programming, develop algorithms using top-down stepwise refinement including competencies in arrays, pointers, strings, classes, data abstraction, inheritance, composition and overloading.
- Students will have hands on experience with excel spreadsheets, access databases and SQL (Structured Query Language).
- Students will understand practical skill in MIS regarding the strategic role of information systems and the organizational, managerial and industrial changes driving e-business, globalization and the emerging digital firm.
- Students analyze the main function of the systems analyst, determine project feasibility and manage design activities.
- Students create and use data flow diagrams, explain how a database management system works and describe, plan, and document system requirements. They conduct project planning, scheduling, monitoring, and reporting.

About Academic Minors

Farmingdale State College students are invited to enhance their studies with an "Academic Minor." A minor is a cluster of thematically related courses drawn from one or more departments. In addition to department based minors (e.g. computer programming & info systems), interdisciplinary minors are also available (e.g. legal studies).

Academic minors are approved by the College-Wide Curriculum Committee and the Provost. Students must make application for an academic minor through the department offering the minor in conjunction with the Registrar's Office. Specific course work must be determined in consultation with a faculty member in the department offering the minor. A statement of successful completion of the academic minor will appear on the student's transcript at the time of graduation.

- A minor is considered to be an optional supplement to a student's major program of study.
- Completion of a minor is not a graduation requirement and is subject to the availability of the courses selected. However, if the requirements for a minor are not completed prior to certification of graduation in the major, it will be assumed that the minor has been dropped. Consequently, the student will only be certified for graduation in their primary major.
- Only students in 4 year baccalaureate programs can apply for a minor.
- A minor should consist of 15 to 21 credits.
- At least 12 credits must be in courses at the 200 level or higher.
- At least 9 credits must be residency credits.
- Specific requirements for each minor are determined by the department granting the minor.
- Students must maintain a minimum cumulative GPA of at least 2.0 in their minor. Some minors may require a higher GPA.

- Students are prohibited from declaring a minor in the same discipline as their major (e.g. one cannot combine an applied math minor with an applied math major).
- Academic minors may not apply to all curricula.**
- Students are permitted to double-count courses.
 - Students are only permitted to take more than one minor with appropriate written approval of their department chair or curriculum Dean.

Fall 2019 - Subject to Revision

Required:

BCS 120 Foundations of Computer Programming I

BCS 160 Computers, Society, and Technology

BCS 260 Introduction to Database Systems

BCS 300 Management Information Systems

BCS 301 Systems Analysis & Design

BCS 405 IS Development Project Management

Course Descriptions

BCS 120 Foundations of Computer Programming I

This course introduces the C++ Programming Language as a means of developing structured programs. Students will be taught to develop algorithms using top-down stepwise refinement. Students will be introduced to the concept of Object Oriented programming. In addition, students will get a thorough exposure to C++ syntax and debugging techniques. Credits: 3

BCS 160 Computers, Society, and Technology

This is an introductory course that provides students with the knowledge to stay current and informed in a technology-oriented, global society. Students will receive instruction in basic computer concepts and terminology, the fundamentals of the Windows operating system and have hands-on experience at the beginning to intermediate level using Microsoft Excel and Access. The Internet will be used to supplement textbook and lecture materials. Note: Students taking this course may not receive credit for BCS 102 or 202. Credits: 3

BCS 260 Introduction to Database Systems

This course provides the fundamental knowledge of database concepts. Topics studied will include the history and advantages of database systems, and the process of database design including entity-relationship diagrams and database normalization. Students will have hands-on experience using SQL (Structured Query Language). Prerequisite(s): BCS 120 and BCS 160 all with a grade of C or higher Credits: 3

BCS 300 Management Information Systems

Managers have increasing responsibility for determining their information system needs and for designing and implementing information systems that support these needs. Management information systems integrate, for purposes of information requirements, the accounting, finance, and operations management functions of an organization. This course will examine the various levels and types of software and information systems required by an organization to integrate these functions. Prerequisite(s): BUS 109 or BUS 111 or BCS 160 or BCS 109 Credits: 3

BCS 301 Systems Analysis & Design

This course explores the major issues in the analysis and design of a system, including methods of data collection, information requirements analysis, and the analysis process are discussed. Emphasis is placed on the importance of the user in the design process and focuses on approaches that improve the successful implementation of a computer system. Topics include general systems theory, Systems Development Life Cycle, data flow diagrams, data dictionary, hardware and software evaluation, feasibility analysis, CASE tools and prototyping. Students are required to demonstrate their skill in using project management and diagramming application software. Note: Credit cannot be given for both BCS 265 and BCS 301. Prerequisite(s): BCS 120 with a grade of C or higher and Junior Level Status. Credits: 3

BCS 405 IS Development Project Management

This course will cover Project Management tools and techniques for Systems Development projects. Students will learn Project Management, Scope Management, Time Management, Cost Management, Quality Management, Human Resource Management and Communications Management all in the context of running successful information systems development and implementation projects. MS project will be used as a tool to managing all of these areas. Prerequisite(s): BCS 300 with a grade of C or higher. Credits: 3

Admission to Farmingdale State College - State University of New York is based on the qualifications of the applicant without regard to age, sex, marital or military status, race, color, creed, religion, national origin, disability or sexual orientation.