# Computer Information Systems

**Department of Computer Science and Information Systems**

**Department Chair:** Lisa Bain

**Computer Information Systems Program Faculty: Professor**Bain**; Associate Professor**Aydogdu; **Assistant Professor** Perry, Wood  
  
Students must consult with their assigned advisor before they will be able to register for courses.

Computer Information Systems B.S.

**Department of Computer Science and Information Systems**  
  
**Department Chair:** Lisa Bain

**Computer Information Systems Program Faculty: Professor**Bain;**Associate Professor** Hayden; **Assistant Professor** Perry

Students must consult with their assigned advisor before they will be able to register for courses.

Course Requirements

Courses

|  |  |  |  |
| --- | --- | --- | --- |
| ACCT 201 | Principles of Accounting I: Financial | 3 | F, Sp, Su |
|  |  |  |  |
| CIS 252 | Introduction to Information Systems | 4 | F, Sp, Su |
| CIS 301  CIS 320 | Introduction to Computer Programming in Business  Information Technology: Hardware and Software Systems | 4  4 | F, Sp  F, Sp |
| CIS 421 | Networks and Infrastructure | 4 | F, Sp |
| CIS 440 | Issues in Computer Security | 4 | F, Sp |
| CIS 455W | Database Programming | 4 | F, Sp |
| CIS 462W | Applied Software Development Project | 4 | F, Sp |
| ECON 214 | Principles of Microeconomics | 3 | F, Sp, Su |
|  |  |  |  |
| FIN 301 | Financial Management | 4 | F, Sp, Su |
| MGT 201W | Foundations of Management | 4 | F, Sp, Su |
| MKT 201W | Introduction to Marketing | 4 | F, Sp, Su |

TWO ADDITIONAL COURSES in computer information systems or computer science at the 300-level or above (for a total of 8 credits)

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |

COGNATES

|  |  |  |  |
| --- | --- | --- | --- |
| ENGL 230W | Workplace Writing | 4 | F, Sp, Su |
| MATH 177 | Quantitative Business Analysis I | 4 | F, Sp, Su |
| MATH 248 | Business Statistics I | 4 | F, Sp, Su |

Note: MATH 177: Fulfills the Mathematics category of General Education.

Note: MATH 248: Fulfills the Advanced Quantitative Scientific Reasoning category of General Education.

Note: ECON 215 may be subsituted for ECON 214 in consultation with advisor.

Total Credit Hours: 66

Computer Information Systems Minor

Students must consult with their assigned advisor before they will be able to register for courses.

Course Requirements

A minor in computer information systems consists of a minimum of 20 credit hours (five courses), as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| CIS 252 | Introduction to Information Systems | 4 | F, Sp, Su |
| CIS 440 | Issues in Computer Security | 4 | F, Sp |
| CIS 455W | Database Programming | 4 | F, Sp |

AND TWO ADDITIONAL courses from Computer Information Systems at the 300-level or above.

Total Credit Hours: 20

Data Analytics Minor

Students must consult with their assigned advisor before they will be able to register for courses.

Course Requirements

A minor in data analytics consists of a minimum of 24 credit hours (six courses), as follows:

Courses

|  |  |  |  |
| --- | --- | --- | --- |
| MATH 177 | Quantitative Business Analysis I | 4 | F, Sp, Su |
|  | -Or- |  |  |
| MATH 212 | Calculus I | 4 | F, Sp, Su |
|  |  |  |  |
| MATH 240 | Statistical Methods I | 4 | F, Sp, Su |
|  | -Or- |  |  |
| MATH 248 | Business Statistics I | 4 | F, Sp, Su |
|  |  |  |  |
| CIS 252 | Introduction to Information Systems | 4 | F, Sp, Su |
|  |  |  |  |
| CIS 301 | Introduction to Computer Programming in Business | 4 | F, Sp |
|  | -Or- |  |  |
| CSCI 157 | Introduction to Algorithmic Thinking in Python | 4 | F, Sp |
|  |  |  |  |
| CIS 470 | Introduction to Data Analytics | 4 | F |
| CIS 472 | Data Visualization | 4 | As needed |

Total Credit Hours: 24

# CIS - Computer Information Systems

CIS 252 - Introduction to Information Systems (4)

Information systems are an integral part of all business activities and careers. This course introduces students to contemporary information systems and demonstrates how these systems are used throughout global organizations. (Formerly CIS 352 Management Information Systems.)

Prerequisite: Completion of 15 college credits.

Offered: Fall, Spring, Summer

CIS 301 - Introduction to Computer Programming in Business (4)

Introductory course using an object-oriented programming language to solve business problems. Topics include: algorithm concepts and development; object-oriented programming methodologies; graphical interface design and event based programming.

Prerequisite: CIS 252 or CIS 251.

Offered: Fall, Spring.

CIS 302 - Intermediate Computer Programming in Business (4)

Prerequisite: CIS 255, CIS 256, CIS 257, or CIS 301.

Offered: As needed.

CIS 320 - Information Technology: Hardware and Software Systems (4)

The evolution of the major subsystems of computer hardware, technical knowledge of the integration of hardware, and selected operating systems software are examined.

Prerequisite: CIS 251 or CIS 252 or consent of department chair.

Offered: As needed.

CIS 324 - Dynamic Web Development (4)

Students are introduced to basic concepts, issues, and techniques related to designing, developing, and deploying websites. Technology will include current practice and tools for server-side programming. Programming projects are required. Students cannot receive credit for both CIS 324 and CSCI 324.

Prerequisite: CSCI 157 or CIS 301, or consent of department chair.

Offered: Fal..

CIS 350 - Special Topics (4)

New courses are offered by faculty to present latest computer information materials.

Prerequisite: CIS 251 or CIS 252 or consent of department chair.

Offered: As needed.

CIS 351 - Advanced Office Applications for Business (4)

Advanced applications of Office Suite software are examined. Applications include database, spreadsheet, word processing, and presentation graphics.

Prerequisite: CIS 251 or CIS 252 or consent of department chair.

Offered: As needed.

CIS 358 - Mobile Application Development (4)

Students are introduced to mobile application design concepts and programming components. These concepts and components include simple mobile programs (e.g. canvas, animation and games); global variables and conditionals; procedures; and procedures with parameters, lists and tiny database.

Prerequisite: CIS 251 or CIS 252 and completion of 60 college credits.

Offered: As needed.

CIS 416 - Web Design (4)

Students are introduced to concepts, issues and techniques related to designing website interfaces using a variety of tools. Study includes HTML, CSS, and JavaScript. Students cannot receive credit for both CIS 416 and CSCI 416.

Prerequisite: CSCI 157 or CIS 301.

Offered: Spring.

CIS 421 - Networks and Infrastructure (4)

Both computer and systems architecture and communications networks are presented with a focus on the services and capabilities that information technology infrastructure solutions enable in an organizational context.

Prerequisite: CIS 252 or CIS 352 and completion of 60 college credits, or consent of department chair.

Offered: Fall, Spring.

CIS 440 - Issues in Computer Security (4)

Students evaluate organizational and technological methods employed to provide security for computer software, hardware, and data. Topics include controlling for error, natural disaster, and intentional attacks.

Prerequisite: CIS 252 or CIS 352 and completion of 60 college credits, or consent of department chair.

Offered: Fall, Spring.

CIS 453 - This course has been deleted. See program director for substitute course. (Systems Analysis and Design) (3)

CIS 455W - Database Programming (4)

The basic components of file and communication systems as they support information systems are surveyed. This is a Writing in the Discipline (WID) course.

Prerequisite: CIS 252 and CIS 301 or consent of department chair.

Offered: Fall, Spring.

CIS 462W - Applied Software Development Project (4)

This is a practicum in the application of programming and systems-development concepts, resulting in a comprehensive systems-development project. This is a Writing in the Discipline (WID) course.

Prerequisite: ONE from CIS 255, CIS 256, CIS 257, or CIS 301, and CIS 455 or CIS 455W, or consent of department chair.

Offered: Fall, Spring.