INFORMATION SCIENCES AND SYSTEMS AREA OF CONCENTRATION, COMPUTER SCIENCE AND TECHNOLOGIES AA: 109

Total Credits: 60
Catalog Edition: 2021-2022

Program Description

This transfer degree area of concentration is for students who plan to transfer to a four-year program such as information systems or information management. The curriculum is designed to present a broad coverage of concepts applying to the theory and management of information, analytical techniques in the development of computer-based information systems, and practical experience with business programming.

Because of the variation in such programs at four-year institutions, students are urged to consult an advisor about specific course selections.

Program Outcomes

Upon completion of this program a student will be able to:

- Analyze components of the computer information systems.
- Analyze, design, and implement computer programs using a high level programming language.
- Demonstrate proficiency in analysis and design techniques.

Program Advisors

- **Email**: cs@montgomerycollege.edu
- **Phone**: 240-567-7737

For more information, please visit: https://www.montgomerycollege.edu/computerscience

To view the Advising Worksheet, please visit https://www.montgomerycollege.edu/_documents/counseling-and-advising/advising-worksheets/current-catalog/109.pdf

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Suggested Course Sequence

A suggested course sequence for full-time students follows. All students should review this advising guide and consult an advisor.

First Semester

ENGL 101 - Introduction to College Writing *3 semester hours* *

Mathematics Foundation*3 semester hours (MATF)*

CMSC 110 - Computer Concepts *3 semester hours* ‡

Arts Distribution *3 semester hours (ARTD)*

Behavioral and Social Sciences Distribution*3 semester hours (BSSD)* **

Third Semester

CMSC 243 - Systems Analysis and Design *3 semester hours*

Behavioral and Social Sciences Distribution*3 semester hours (BSSD)* **

Humanities Distribution*3 semester hours (HUMD)*

Program Elective *3 semester hours*†

Program Elective *3 semester hours*†

Second Semester

English Foundation*3 semester hours (ENGF)*

CMSC 140 - Introduction to Programming *3 semester hours*

Program Elective *3 semester hours*†

Arts or Humanities Distribution *(ARTD or HUMD)* or Health Course*(HLTH)* Distribution *3 semester hours (GEIR)* † †

Natural Sciences Distribution with Lab*4 semester hours (NSLD)*

Fourth Semester

COMM 108 - Foundations of Human Communication *3 semester hours* (GEIR)

OR

COMM 112 - Business and Professional Speech Communication *3 semester hours* (GEIR)

Program Elective *3 semester hours* †

Program Elective *2 semester hours* †

Program Elective *3 semester hours* †

Natural Sciences Distribution *3 semester hours (NSND)*

Total Credit Hours: 60

* ENGL 101/ENGL 101A, if needed for ENGL 102/ENGL 103, or elective.

** Behavioral and Social Science Distribution (BSSD) courses must come from different disciplines. Contact department advisor for transfer requirements for specific schools. Students applying to business schools should consider using economics as an elective because it meets transfer and BSSD requirements. If you have any questions, please see a department advisor.

‡ May be replaced by another CMSC course with departmental consent.

† List of program electives: CMSC, DATA, NWIT, 200-level CMAP; TECH 190, 200-level TECH courses; ACCT 221, ACCT 222, BSAD 101, ECON 201, ECON 202; MATH 165, MATH 150 or MATH 181, MATH 182, MATH 117 or BSAD 210; MGMT 101, MGMT 211. Four credits can be used to satisfy program electives.

Select program electives based on transfer institution requirements. See an advisor for assistance and use ARTSYS for Maryland transfer school requirements, http://artweb.usmd.edu . Note: There must be at least 12 credits total at the 200-level for an AA degree.

†† Please consult an advisor or the transfer institution before selecting institutional requirements.

Transfer Opportunities

Montgomery College has partnerships with multiple four-year institutions and the tools to help you transfer. To learn more, please visit https://www.montgomerycollege.edu/transfer or http://artsys.usmd.edu .

Get Involved at MC!

Employers and Transfer Institutions are looking for experience outside the classroom.

MC Student Clubs and Organizations: https://www.montgomerycollege.edu/life-at-mc/student-life/

Computer Science and Technologies Student Professional Groups: https://www.montgomerycollege.edu/computerscience

Related Careers

Some require a Bachelor's degree.
Computer Science Teacher, Computer Systems Engineer/ Architect, Computer/Information Research Scientist, Web Administrator, Mobile Developer, Game Programmer.

Career Services

Montgomery College offers a range of services to students and alumni to support the career planning process. To learn more, please visit https://www.montgomerycollege.edu/career

Career Coach

A valuable online search tool that will give you the opportunity to explore hundreds of potential careers or job possibilities in Maryland and the Washington D.C. metropolitan area. Get started today on your road to a new future and give it a try. For more information, please visit https://montgomerycollege.emsicc.com

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