DATABASE SYSTEMS CERTIFICATE
Total Credits: 16
Catalog Edition: 2025-2026

Program Description

This certificate curriculum provides training, skills, and knowledge that prepare students for employment as entry-level database programmers and designers, or provides current professionals with essential database programming and design skills. Students will create and manipulate Microsoft Access and web databases as well as write database user interfaces in the Visual Basic.Net environment.

This program can be completed either on campus or online.

Program Outcomes

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

- Create and manipulate relational databases.
- Demonstrate competency in basic database design concepts such as primary and foreign keys to create relationships.
- Create and manipulate objects to produce accurate results and data sets.

Program Advisors

Collegewide Coordinator

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For more information, please visit https://www.montgomerycollege.edu/academics/programs/computer-applications/database-systems-certificate.html

To view the Advising Worksheet, please visit https://www.montgomerycollege.edu/_documents/counseling-and-advising/advising-worksheets/current-catalog/238.pdf

2025-2026

Program Advising Guide
An Academic Reference Tool for Students

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DATABASE SYSTEMS
CERTIFICATE: 238

DATABASE SYSTEMS CERTIFICATE

Program Requirements

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

Program Requirements

CMSC 140 - Introduction to Programming *3 semester hours*

CMAP 245 - Database Applications *3 semester hours*

CMSC 246 - Introduction to SQL Using Oracle *3 semester hours*

TECH 272 - Website Development *4 semester hours*

Program Elective *3 semester hours* †

Total Credit Hours: 16

† Program elective courses are: TECH 273, TECH 274, TECH 276, TECH 282

This program can be completed either on campus or online.

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/

Related Careers

Some require a Bachelor's degree.
Database Administrator, Database Design Analyst, Database Manager, Database Architect.

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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