DATA SCIENCE CERTIFICATE

Total Credits: 16
Catalog Edition: 2024-2025

Program Description

This certificate will provide students with experience in the field of data science including such areas as data management, data analysis, data collection, and data visualization. It is suitable for students who wish to begin work in the field, for those who wish to supplement their existing coursework with additional experiences in these data science areas, and for students who have obtained a bachelor's or other degree in any number of analytical and scientific fields and wish to upgrade or update their skills and training. **This program can be completed either on campus or online.**

Program Outcomes

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

- Assess different analysis and data management techniques and justify the selection of a particular model or technique for a given task.
- Execute analyses of large and disparate datasets and construct models necessary for these analyses.
- Demonstrate competency with programming languages and environments for data analysis.
- Summarize findings of complex analyses in a concise way for a target audience using both graphics and statistical measures.

Program Advisors

- Prof. Rachel Saidi, 240-567-5225, Rachel.Saidi@montgomerycollege.edu
- Prof. Mais Alraee, 240-567-7722, Mais.Alraee@montgomerycollege.edu

For more information, please visit https://www.montgomerycollege.edu/academics/programs/data-science/data-science-certificate.html

To view the Advising Worksheet, please visit https://www.montgomerycollege.edu/_documents/counseling-and-advising/advising-worksheets/current-catalog/256.pdf

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Program Requirements

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

Program Requirements

MATH 117 - Elements of Statistics *3 semester hours*

OR

MATH 217 - Statistics for Scientists *3 semester hours*

OR

BSAD 210 - Statistics for Business and Economics *3 semester hours*

DATA 101 - Introduction to Data Science *3 semester hours*

DATA 110 - Data Visualization and Communication *3 semester hours*

DATA 201 - Statistical Methods in Data Science *3 semester hours*

DATA 205 - Capstone Experience in Data Science *4 semester hours*

Total Credit Hours: 16

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.
Data Scientist, Data Analyst, Data Engineer, Data Science Generalist, Data Science Program Manager.

Data science is now transforming industries beyond the technology industry, in areas such as health care, energy, and transportation. With benefits of data becoming more numerous and widespread, demand for data science and analytics talent is projected to grow by 15 percent by 2020 (US Bureau of Labor).

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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