

GENERAL STUDIES AA: STUDIES IN SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS AREA OF CONCENTRATION (STEM CORE)

Total Credits: 60
Catalog Edition: 2024-2025

Program Description

The Studies in Science, Technology, Engineering, and Mathematics major allows students to develop an interdisciplinary course of study emphasizing the science, technology, engineering, and/or mathematics disciplines. The STEM area of concentration is designed to allow students to pursue a general exploration of these disciplines while deepening knowledge through a selected academic focus.

Program Outcomes

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

- Construct graphic and analytical models.
- Express conclusions and implications from scientific experiments using a variety of methods and appropriate scientific language.
- Analyze and resolve real-world and abstract quantitative situations.
- Communicate, interpret, and justify results with clarity and coherence, demonstrating effective digital, written, oral and graphic communication skills.
- Utilize and apply multi-disciplinary methods of inquiry from the sciences, technology, engineering, and mathematics in response to a problem, task, or experience.
- Reflect on and assess their own learning as it applies to themselves as scholars and engaged citizens rooted in the sciences, technology, engineering, and mathematics.

Program Advisors

- Prof. Mais Alraee (Data Science Certificate), 240-567-7722, Mais.Alraee@montgomerycollege.edu
- Prof. Pallavi Bhale (Mathematics Focus), 240-567-1935, Pallavi.Bhale@montgomerycollege.edu
- Prof. Bryant Davis (Professional & Technical Writing Certificate), 240-567-7747, Bryant.Davis@montgomerycollege.edu

- Prof. Christina Gentile (General Studies Program Collegewide Chair), 240-567-7425, Christina.Gentile@montgomerycollege.edu
- Dr. Cory Newman (Chemistry Focus), 240-567-1413, Cory.Newman@montgomerycollege.edu
- Dr. Ishrat Rahman (Biology Focus), 240-567-5476, Ishrat.Rahman@montgomerycollege.edu
- Dr. Aubrey Smith (Biology Focus), 240-567-5480, Aubrey.Smith@montgomerycollege.edu

For more information, please visit <https://www.montgomerycollege.edu/academics/programs/general-studies/science-technology-engineering-and-mathematics-core/index.html>

To view the Advising Worksheet, please visit <https://www.montgomerycollege.edu/documents/counseling-and-advising/advising-worksheets/current-catalog/611b-stem.pdf>

2024-2025

Program Advising Guide

An Academic Reference Tool for Students

GENERAL STUDIES AA: STUDIES IN SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS AREA OF CONCENTRATION (STEM CORE)

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) ‡

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

General Education Institutional Requirement 3 semester hours (GEIR)

Elective 3 semester hours

Third Semester

[Arts Distribution](#) 3 semester hours (ARTD or HUMD)

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

STEM Core Course 1 3 semester hours

STEM Core Course 2 3 semester hours

[General Education Institutional Requirement](#) 3 semester hours (GEIR)

Second Semester

[English Foundation](#) 3 semester hours (ENGF) ‡

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

[Humanities Distribution](#) 3 semester hours (HUMD)

[Natural Sciences Distribution with or without Lab](#) 3 semester hours (NSD)

Elective 3 semester hours

Fourth Semester

STEM Core Course 3 3 semester hours

STEM Core Course 4 3 semester hours

STEM Core Course 5 3 semester hours

Elective 3 semester hours ‡‡‡

Elective 2 semester hours ‡‡‡

Total Credit Hours: 60

* ENGL 101/ENGL 011 if needed for ENGL 102/ENGL 103, or select an elective.

** Behavioral and social sciences distribution (BSSD) courses must come from different disciplines.

‡ Students should attempt ENGL and MATH foundation requirements within completion of the first 24 credits of college-level work or at the completion of any prerequisite or required non-credit coursework.

‡‡ Consult a counselor or program advisor for NSND/science course selection. Students potentially interested in science, health or engineering transfer programs should consider a 4-credit lab science course.

‡‡‡€ Any credit hours beyond the minimum General Education credit hours (31) or core courses are counted toward elective credit hours.

NOTE: Exact semester credit counts may vary based on specific course selections.

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

The General Studies degree provides opportunities for students to develop and hone their critical thinking, analytical, team-building and problem-solving skills. Students with General Studies degree will be able to successfully apply these skills in a wide range of careers

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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