



2024-2025 Academic Year

Physics

Associate in Science Degree in Liberal Arts and Sciences (A.S.)

B-STEM Division

Business, Science, Technology, Engineering and Math

[609.570.3482](tel:609.570.3482) admiss@mccc.edu

The **Physics** option of the Liberal Arts and Sciences program prepares students to enter the junior level of a baccalaureate degree program leading to careers in the fields of physics and engineering.

This program conforms to the provisions of the New Jersey Statewide Transfer Agreement. An A.S. degree in Physics from Mercer County Community College will be fully transferable as the first two years of a baccalaureate degree program at New Jersey public four-year institutions. Students also have transferred to other four-year institutions throughout the country.

Students may complete the degree in two years, and in less time by taking advantage of summer courses.

PROGRAM OUTCOMES

- Understand the basic laws and principles of physics and engineering;
- Demonstrate working knowledge of scientific instruments through hands-on laboratory experience;
- Exhibit strong problem-solving and critical thinking skills;
- Communicate effectively both with the scientific community and the general public.

DEGREE CURRICULUM

2024-2025 Academic Year

PHYSICS.AS
CIP 240101

The course sequence below represents a recommended example of how this degree program can be completed in two years, presuming a Fall Term start and satisfaction of all Developmental Studies (foundation courses) requirements and prerequisites. Actual approaches toward completion depend on each student's anticipated transfer institution, career objectives, or other individual circumstances.

Students are encouraged to meet regularly with an academic advisor or Success Coach to consider options, establish plans, and monitor progress.

Code	Course (lecture/lab hours)	Credits	To Do This Semester
FIRST SEMESTER			
<u>CSW 100</u>	College Success and Personal Wellness (2/0) <ul style="list-style-type: none"> Some exemptions apply. Consult academic advisor for details. 	2	✓ Meet with your faculty advisor to complete an academic plan. Make sure you are aware of any course prerequisites you may need to take, and how long it will take to complete your degree.
<u>ENG 101</u>	English Composition I (3/0)	3	✓ Use your online tools: Check
<u>MAT 151</u>	Calculus I for the Mathematical and Physical Sciences (4/0)	4	your <u>MercerMail</u> daily, utilize features of Office 365, and get to know <u>Student Planning</u> .
<u>PHY 115</u>	University Physics I (3/3)	4	✓ Take advantage of <u>Learning Centers</u> or <u>Online Tutoring</u> to support your studies and assignments.
— —	<u>Humanities general education elective</u>	3	
SECOND SEMESTER			
<u>COS 101</u>	Introduction to Computer Science (3/2)	4	✓ Transitioning to college can be challenging. Meet with your <u>Success Coach</u> for guidance and support.
<u>ENG 102</u>	English Composition II (3/0)	3	✓ Apply for <u>financial aid</u> by May 1.
<u>MAT 152</u>	Calculus II for the Mathematical and Physical Sciences (4/0)	4	
<u>PHY 215</u>	University Physics II (3/3)	4	✓ Contact professors with questions and use their office hours to develop a connection. ✓ Apply for Continuing Student scholarships

at www.mccc.edu/m-scholarships.

✓ Begin attending college transfer events and visit campuses. Be sure to visit the [Transfer Services](#) and [Career Services](#) offices to get to know how the transfer process works and to explore career options.

✓ Plan for how you will complete transfer applications while finishing your classes.

THIRD SEMESTER

[CMN 111](#) Speech: Human Communication (3/0)

OR

3

✓ Keep in contact with each professor and your faculty advisor. Make sure you are on track to graduate.

[CMN 112](#) Public Speaking (3/0)

[MAT 251](#) Calculus III (4/0)

4

✓ Complete your applications to desired transfer institutions.

— — Science elective

4

✓ Develop team and leadership skills by getting involved in [activities and clubs](#).

- Select from CHE 101, 102; BIO 101, 102, 201, 202, 203, 204, 208.

— — [Social Science general education elective](#)

3

✓ Manage your stress! Take advantage of the MCCC pool, [Fitness Center](#), free yoga and Zumba. Reach out for [counseling](#) or other support if you need it. Your [Success Coach](#) can connect you with resources.

FOURTH SEMESTER

<u>MAT 252</u>	Differential Equations (4/0)	4	<p>✓ Apply for financial aid by May 1.</p> <p>✓ Talk to your faculty advisor and the Transfer office for advice on how to successfully transition to a new school.</p> <p>✓ Apply for Graduating Student scholarships at www.mccc.edu/m-scholarships.</p>
— —	Science elective	4	
	<ul style="list-style-type: none"> Select from CHE 101, 102; BIO 101, 102, 201, 202, 203, 204, 208. 		
— —	Science elective	4	
	<ul style="list-style-type: none"> Select from CHE 101, 102; BIO 101, 102, 201, 202, 203, 204, 208. 		
— —	<u>Social Science or Humanities general education elective</u>	3	
		60	