

Physics

Associate in Science Degree in Liberal Arts and Sciences

Program **PHYSICS.AS**
CIP 240101



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.

Curriculum

Code	Course (lecture/lab hours)	Credits
FIRST SEMESTER		
ENG 101	English Composition I (3/0)	3
MAT 151	Calculus I (4/0)	4
— —	Science elective ¹	4
— —	Social Science general education elective	3
SECOND SEMESTER		
ENG 102	English Composition II (3/0)	3
MAT 152	Calculus II (4/0)	4
PHY 115	University Physics I (3/3)	4
— —	Science elective ¹	4
— —	Technology elective ²	4
THIRD SEMESTER		
CMN 111	Speech: Human Communication (3/0) OR	3
CMN 112	Public Speaking (3/0)	
HPE 110	Concepts of Health and Fitness (1/2)†	2
MAT 251	Calculus III (4/0)	4
PHY 215	University Physics II (3/3)	4
— —	Humanities general education elective	3
FOURTH SEMESTER		
MAT 252	Differential Equations (4/0)	4
PHY 225	University Physics III (3/3)	4
— —	Science elective ¹	4
— —	General Education elective ³	3
		64

¹ Select from CHE 101, 102, 201, 202, 205; BIO 101, 102, 201, 202, 203, 204, 208; or other course by advisor approval.

² Select COS 101 or 102 or other technology course as appropriate for intended transfer institution.

³ Select course from either Social Science or Humanities general education categories.

†CSW 100 is a preferred alternative; HPE 111 is an acceptable alternative.

NOTE: All program listings are subject to periodic updates. Please consult your program advisor, academic division, or www.mccc.edu/programs_degree