Physics
Associate of Science

General Program Information: 410 287-1000 or information@cecil.edu

This program prepares students to transfer to a four-year institution for continued study in physics. A physicist's work ranges from basic research into the subatomic realm to the dynamics of galaxies as well as the practical development of devices and instruments. Physics graduates have skills that are in high demand: problem solving, data analysis, ability to communicate complex ideas and an understanding of how the world works. Students with a bachelor's degree in physics may continue their education, or enter the workforce.

	General Education Requirements *(31 credits)*	*General Education Code*	*Credits*
ARTS/HUM	Arts and Humanities Electives[1]	H	3
EGL 101	College Composition	E	3
EGL 102	Composition and Literature	H	3
MAT 191	Precalculus[2]	M	4
MAT 201	Calculus I with Analytic Geometry	M	4
CHM 103 and CHM 113	General Chemistry I and General Chemistry I Lab	S	3 1
PHY 217	General Physics I with Lab	SL	4
SOC SCI	Social Science Electives	SS	6
	Program Requirements *(29 credits)*		
CSC 109	Introduction to Programming		3
CHM, CSC or PHE	Chemistry, Computer Science or Engineering Elective[3]		3
MAT 202	Calculus II with Analytic Geometry	M	4
MAT 203	Multivariable Calculus	M	4
MAT 240	Linear Algebra	M	4
MAT 246	Introduction to Differential Equations	M	3
PHY 218	General Physics II with Lab	SL	4
PHY 219	General Physics III with Lab	SL	4

Total Credits Required in Program: 60

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[1] Selection may not include EGL designation

[2] Students placed in MAT 201 or higher may replace MAT 191 with any elective(s)

[3] Consult with transfer institution to choose one of the following electives: CHM 104/114, CHM 203, CHM 204, CSC 205, CSC 218, CSC 230, PHE 211, PHE 212, PHE 213, PHE 221, PHE 225, PHE 285

Program Outcomes:

Upon successful completion of this program, students will be able to:

1. Apply basic principles of physics to problems of both fundamental and practical interest.
2. Utilize knowledge of mathematics to solve applied problems.
3. Identify how physical principles are applied in other scientific disciplines.
4. Design and conduct experiments utilizing the scientific method.
5. Analyze and interpret data.