

## Science

The Associate in Science (A.S.) degree program is for students who wish to pursue baccalaureate studies in biological or physical sciences or who plan to continue with professional studies, such as prepharmacy, premedical or pre dental programs. This curriculum parallels the first two years of study offered in the science programs of other colleges and universities.

### STUDENT LEARNING OUTCOMES:

Upon completion of this program graduates will be able to:

- Successfully transfer into a science-based program at a four-year institution.
- Demonstrate an understanding of scientific principles and concepts and be able to apply this knowledge to the solution of problems and performance of experiments in one or more of the natural science disciplines.
- Competently perform laboratory tasks related to their scientific discipline.
- Communicate information in a manner appropriate to their scientific discipline using verbal, written and graphical means.

### PROGRAM ENTRY REQUIREMENTS:

Students who enter the program should have completed one year of high school biology, chemistry and physics. In addition, students should have completed one year of geometry and two years of algebra. Additional science and mathematics courses are desirable. Students without proper high school preparation can take appropriate basic college courses. Students who seek entrance into this select program must demonstrate competence at the ENGL 101 and MATH 161 level.

### PROGRAM OF STUDY AND GRADUATION REQUIREMENTS:

To qualify for the Associate in Science (A.S.) degree, students must successfully complete a minimum of 60 credit hours as prescribed and attain a grade point average of 2.0 ("C" average). All program core courses must be passed with a grade of "C" or better.

To ensure appropriate course selections, students must consult academic advisors resident in the various departments concerned.

Students wishing to transfer the A.S. degree to a particular college or university should, with the help of an advisor, review that institution's requirements and/or existing articulation agreements with the College so that program courses may be chosen appropriately.

## SCIENCE

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
<b>FIRST SEMESTER</b>			
ENGL 101 – English Composition I		3	ENGL 101
MATH 171 – Calculus I or MATH 165/166 – Differential Calculus I and II	MATH 162 or dept. head approval or placement	4	Mathematics
Natural Science with Lab Elective		4	Natural Science
CIS 103 – PC Applications		3	Tech Comp
<b>SECOND SEMESTER</b>			
ENGL 102 – English Composition II	ENGL 101	3	ENGL 102, Info Lit
MATH 172 – Calculus II or Natural Science with Lab Elective	MATH 171 or 166 or dept. head approval	4	
Natural Science with Lab Elective		4	
Humanities Elective		3	Humanities
Natural Science with Lab Elective		4	
<b>THIRD SEMESTER</b>			
Natural Science with Lab Elective		4	
Social Science Elective		3	Social Sciences
Humanities Elective		3	
General Elective		3	
Natural Science with Lab or General Elective		3/4	
<b>FOURTH SEMESTER</b>			
Natural Science with Lab or General Elective		3/4	
Social Science Elective		3	
General Elective		3	
General Elective		3	
<b>MINIMUM CREDITS NEEDED TO GRADUATE</b>		<b>60</b>	

### General Education Requirements

All General Education requirements are met through required courses (as indicated above) except for the Writing Intensive requirement, the Interpretive Studies requirement and the American/Global Diversity requirement. Therefore, in order to graduate, students in this program must choose one course that is designated Writing Intensive, one course that is designated Interpretive Studies and one course that is designated American/Global Diversity. The same course may be used to fulfill more than one of these requirements. A list of courses that fulfill these requirements and a more detailed explanation of the College's general education requirements appear elsewhere in this Catalog and on [www.ccp.edu](http://www.ccp.edu).

### For More Information Contact:

The Division of Math, Science and Health Careers, Room W2-7, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8430; or the College Information Center (215) 751-8010.