

CHEMISTRY, Associate in Science Degree - 3026

Science Department

The Chemistry AS program provides students with the necessary foundation in mathematics, science, and liberal arts to transfer and succeed in a baccalaureate degree program in Chemistry. This program also permits students to complete the pre-requisite courses for application to institutions offering degrees/programs in biochemistry, chemical engineering, environmental science, molecular-life science, or teaching. Because the requirements of transfer institutions and their degree programs may vary widely, it is recommended that students carefully review the program requirements of their chosen transfer institution and align their HACC course sequence with the program outlined in that institution's catalog. Students who complete HACC's Chemistry AS degree will be admitted at the Junior-level in Chemistry to any institution participating in Pennsylvania's statewide college credit transfer system. The complete program is available at the Harrisburg and Lancaster campuses.

Career or Transfer Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution. Courses in chemistry and related subjects are offered for students who expect to transfer to four-year college or university programs in chemistry, biochemistry, chemical engineering, environmental science, molecular-life science, or teaching.

Competency Profile

This curriculum is designed to prepare graduates of the program to:

- Transfer with the skills required for success in a Baccalaureate degree program in Chemistry
- Discuss and apply scientific principles and concepts
- Demonstrate an appreciation of scientific accomplishments and how they affect technology, politics, and society
- Apply the scientific method to solve scientific problems
- Demonstrate computer literacy in data manipulation and analysis
- Perform technician work in a typical laboratory while following appropriate safety procedures
- Demonstrate communication of results both orally and through written reports

PROGRAM REQUIREMENTS (TOTAL CREDITS = 61)

General Education		Major Requirements		Other Required Courses	
ENGL 101 English Composition I	3	CHEM 102 General Inorganic/Qual. Analysis	4	Transfer Electives**	12
ENGL 102 English Composition II (or)	3	CHEM 203 Organic Chemistry I	4		
ENGL 104 Technical Writing	(3)	CHEM 204 Organic Chemistry II	4		
COMM 101 Effective Speaking	3	PHYS 211 Physics for Engineers & Scientists I	4		
Humanities & Arts Elective*	3	PHYS 212 Physics for Engineers & Scientists II	4		
Mathematics Elective - MATH 121	4		20		
Mathematics or Science Elective - MATH 122	4				
Science w/ a Laboratory Elective - CHEM 101	4				
Social & Behavioral Science Elective	3				
First-Year-Seminar Elective (Rec: SCI 100)	1				
Wellness	1				
	29				

*Students are to select courses from the following: ART 181 or 182; ENGL 206; HUM 101, 115 or 201; MUS 104; PHIL 200; THTR 101; or a foreign language course.

**Students are to select transfer electives from the following courses: CPS 113; 115; 121 or 135; BIOL 102; 206; 212; 215; 221 or 250; any 100 level or higher.

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester I		Spring Semester I		Fall Semester II		Spring Semester II	
COMM 101	3	CHEM 102	4	CHEM 203	4	CHEM 204	4
CHEM 101	4	ENGL 102 or 104	3	PHYS 211	4	PHYS 212	4
ENGL 101	3	Humanities/Arts Elective*	3	Transfer Electives**	6	Transfer Electives**	6
FYS Elective	1	MATH 122	4			Wellness	1
MATH 121	4	Social/Behavioral Science Elective	3				