CHEMISTRY, Associate in Science Degree - 3026
Science Department
CIP Code: 40.0501

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 prerequisite 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. This program can be completed at the Harrisburg, Lancaster and York campuses provided students take some of their required coursework through multiple modalities (e.g. Blended, Online and/or Remote Learning).

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
ENGL 101 English Composition I 3
ENGL 102 English Composition II (or) 3
ENGL 104 Technical Writing 3
COMM 101 Effective Speaking 3
Mathematics Elective - MATH 121 3
Mathematics or Science Elective - MATH 122 4
Science w/ a Laboratory Elective - CHEM 101 4
FYS Elective 1
Wellness 1
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Major Requirements
CHEM 102 General Inorganic/Qual. Analysis 4
CHEM 203 Organic Chemistry I 4
CHEM 204 Organic Chemistry II 4
PHYS 211 Physics for Engineers & Scientists I 4
PHYS 212 Physics for Engineers & Scientists II 4

Other Required Courses
Transfer Electives** 12

*Students are to select courses from the following: ART 181 or 182; ENGL 206; FMTH 101; HUM 101, 115 or 201; MUS 104; PHIL 200; 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

Updated 3/16/23 ERS