

PRE-PHARMACY

SCIENCE (AS) DEGREE PRE-PHARMACY CONCENTRATION

For students considering a major in PRE-PHARMACY upon transferring to a four-year institution, the Associate of Science degree with a PRE-PHARMACY concentration from ACC offers a strong foundation, providing essential courses that serve as building blocks for advanced study.

A concentration in PRE-PHARMACY can lead to diverse career opportunities, including pharmacy, pharmaceutical research, pharmacology, healthcare administration, drug regulation, and clinical or hospital pharmacy.

Program Objectives

Upon graduating from ACC with an Associate of Science degree with a concentration in PRE-PHARMACY, students will:

1. **Demonstrate** a strong foundation in biological, chemical, and health sciences essential for pharmacy studies.
2. **Apply** practical experience through laboratory work and exposure to pharmaceutical practices.

It is strongly recommended that students consult with an ACC Academic Advisor in PRE-PHARMACY to ensure they meet specific program requirements, objectives, and transfer goals.

PROGRAM REQUIREMENTS (PR)

MTH 131	ANALYTICAL GEOMETRY & CALCULUS I (5/5)
BIO 161	GENERAL COLLEGE BIOLOGY (4/5)
BIO 162	GENERAL COLLEGE BIOLOGY II (4/5)
BIO 201	HUMAN ANATOMY (4/5)
BIO 203	HUMAN PHYSIOLOGY (4/5)
BIO 227	MICROBIOLOGY (4/6)
CEM 121	GENERAL & INORGANIC CHEMISTRY (4/7)
CEM 122	INORGANIC CHEM & QUALITATIVE ANALYSIS (4/7)
CEM 221	ORGANIC CHEMISTRY (5/7)
CEM 222	ORGANIC CHEMISTRY (5/7)
MTH 223	STATISTICAL METHODS (4/4)

GENERAL EDUCATION

DEGREE DISTRIBUTION REQUIREMENTS

GROUP 1 (G1) – ENGLISH COMPOSITION

Six (6) semester credits are required, including ENG 111 or 121 and 112, 122 or 123

GROUP 2 (G2) – SCIENCES/MATHEMATICS

Twenty (20) semester credits are required, including at least one laboratory science course. Courses will be taken in more than one academic discipline (course abbreviation/prefix). Note: Two (2) courses in Natural Sciences, including one with laboratory experience (from two disciplines), in addition to MTH 118 or MTH 121 or higher, are required to achieve the Michigan Transfer Agreement (MTA).

GROUP 3 (G3) – SOCIAL SCIENCES & HUMANITIES/FINE ARTS

Ten (10) semester credits are required in combination from both of these groups, with a minimum of three (3) credits from each group. Political Science or U.S. History courses used to satisfy the American Government requirement can be included. Courses will be taken in more than one academic discipline (course abbreviation/prefix). Note: Two (2) courses in Social Sciences (from two disciplines) and two (2) courses in Humanities and Fine Arts (from two disciplines and excluding studio and performance classes) are required for the Michigan Transfer Agreement (MTA).

ELECTIVE CREDITS (EC)

The remainder of credits for an AS degree with this concentration should be oriented toward additional courses in PRE-PHARMACY with prefixes **BIO, CEM, MTH, and PHY** when available in consultation with an ACC Academic Advisor in PRE-PHARMACY.

RECOMMENDED COURSES - SEQUENCE

GROUP 1-4 REQUIREMENTS + ELECTIVE CREDITS

Meets ACC degree distribution and MTA requirements
65 CREDITS - 81 CONTACT HOURS

YEAR 1 FALL	16 CREDITS
G1	ENG 111 ENGLISH COMPOSITION I (3/3)
G2 PR	BIO 161 GENERAL COLLEGE BIOLOGY I (4/5)
G2 PR	CEM 121 GENERAL & INORGANIC CHEMISTRY (4/7)
G2 PR	MTH 131 CALCULUS I (5/5)

YEAR 1 SPRING	17 CREDITS
G1	ENG 112 ENGLISH COMPOSITION II (3/3)
G2 PR	BIO 162 GENERAL COLLEGE BIOLOGY II (4/5)
G2 PR	CEM 122 INORGANIC CHEM & QUAL ANALYSIS (4/7)
G3	HUM/FA HUMANITIES/FINE ARTS (3/3)
G3	SOC SCI SOCIAL SCIENCE (3/3)

YEAR 2 FALL	15 CREDITS
G2 PR	CEM 221 ORGANIC CHEMISTRY (5/7)
G2 PR	BIO-201 HUMAN ANATOMY (4/5)
G3	PLS 221 AMERICAN GOVERNMENT & POLITICS (3/3)
G3	HUM/FA HUMANITIES/FINE ARTS (3/3)

YEAR 2 SPRING	17 CREDITS
G2 PR	CEM 222 ORGANIC CHEMISTRY (5/7)
G2 PR	BIO 203 HUMAN PHYSIOLOGY (4/5)
G2 PR	BIO 227 MICROBIOLOGY (4/6)
G2 PR	MTH 223 STATISTICAL METHODS (4/4)