

**PRE-PHARMACY**  
Associate in Science (AS) Degree

**Minimum Credits: 61.0**  
**Contact Hours: 75.0**

**INTRODUCTION:** This is a suggested program of study which may be altered to meet individual goals and transfer plans. Students should refer to the description of Alpena Community College graduation requirements and AS degree distribution requirements and consult with an academic advisor concerning specific course selection. A minimum total of 60 credits is required for the Associate in Science degree.

**GENERAL EDUCATION COURSES ( MEETS GRADUATION REQUIREMENTS AND MTA )**

COURSE	TITLE	CREDITS	CONTACT HOURS
ENG 111 or ENG 121	English Composition I or Advanced English Composition I	3.0	3.0
ENG 112 or ENG 122	English Composition II or Advanced English Composition II	3.0	3.0
MTH 131	Analytic Geometry & Calculus	5.0	5.0
ECN 231	Economics (Micro)	3.0	3.0
PSY 101 or SOC 123	General Psychology or Introduction to Sociology	3.0	3.0
SPE 121 or SPE 123	Speech Communication or Public Communication	3.0	3.0
	Humanities/Fine Arts (200 level) Elective	3.0-4.0	4.0-5.0
BIO 114 or BIO 210	Introduction to Biological Science or Introduction to Botany	4.0	5.0
CEM 121	General & Inorganic Chemistry	<u>4.0</u>	<u>7.0</u>
<b>GENERAL EDUCATION CREDITS/CONTACT HOURS:</b>		31.0-32.0	36.0-37.0

**CORE PROGRAM COURSES ( MEET WITH ACADEMIC ADVISOR TO DETERMINE CORE PROGRAM COURSES FOR CONCENTRATION AND TRANSFER )**

COURSE	TITLE	CREDITS	CONTACT HOURS
BIO 227	Microbiology	4.0	6.0
CEM 122	Inorganic Chemistry & Qualitative Analysis	4.0	7.0
CEM 221	Organic Chemistry	4.0	6.0
CEM 222	Organic Chemistry	4.0	6.0
HST 221	U.S. History	3.0	3.0
HST 222	U.S. History	3.0	3.0
MTH 223	Statistical Methods	<u>4.0</u>	<u>4.0</u>
<b>CORE PROGRAM CREDITS/CONTACT HOURS:</b>		26.0	35.0

**SUGGESTED ELECTIVES ( MEET WITH ACADEMIC ADVISOR TO DETERMINE ELECTIVES FOR CONCENTRATION AND TRANSFER )**

Electives will change depending on area of concentration and the specific 4-year transfer institution's requirements. Consult your ACC academic advisor.

**TOTAL MINIMUM PROGRAM CREDITS/CONTACT HOURS:** 61.0 75.0

**SUGGESTED SEQUENCING OF COURSES**

YEAR 1 (FALL SEMESTER) <u>16.0</u> CREDITS		CREDITS	CONTACT HRS	YEAR 1 (SPRING SEMESTER) <u>14.0</u> CREDITS		CREDITS	CONTACT HRS
ENG 111 or ENG 121 English Comp	3.0	3.0	ENG 112 or ENG 122 English Comp	3.0	3.0		
CEM 121 General & Inorganic Chemistry	4.0	7.0	CEM122 Inorganic Chemistry & Qualitative Analysis	4.0	7.0		
MTH 131 Analytic Geometry & Calculus	5.0	5.0	MTH 223 Statistical Methods	4.0	4.0		
BIO 114 or BIO 210 Intro to Biology or Intro to Botany	<u>4.0</u>	<u>5.0</u>	HST 221 U.S. History	<u>3.0</u>	<u>3.0</u>		
<b>TOTAL</b>	16.0	20.0	<b>TOTAL</b>	14.0	17.0		
YEAR 2 (FALL SEMESTER) <u>14.0</u> CREDITS		CREDITS	CONTACT HRS	YEAR 2 (SPRING SEMESTER) <u>16-17</u> CREDITS		CREDITS	CONTACT HRS
CEM 221 Organic Chemistry	5.0	7.0	CEM 222 Organic Chemistry	4.0	6.0		
ECN 231 Economics	3.0	3.0	PSY 101 or SOC 123 Gen Psychology or Intro to Sociology	3.0	3.0		
BIO 227 Microbiology	4.0	6.0	SPE121 or SPE123 Speech Communication or Public Communication	3.0	3.0		
HST 222 U.S. History	<u>3.0</u>	<u>3.0</u>	Humanities/Fine Arts (200 level) Elective	3.0-4.0	4.0-5.0		
<b>TOTAL</b>	15.0	19.0	<b>TOTAL</b>	<u>3.0</u>	<u>3.0</u>		
				16.0-17.0	19.0-20.0		

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