

PHYSICS
Associate in Science (AS) Degree

Minimum Credits: 61.0
Contact Hours: 74.0

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 I	5.0	5.0
PLS 221 or PLS 222 or HST 221 & HST 222	American Government Requirement	3.0-6.0	3.0-6.0
	Humanities/Fine Arts & Social Science Requirement	3.0-4.0	4.0-5.0
	Humanities/Fine Arts Requirement	3.0-4.0	4.0-5.0
CEM 121	General & Inorganic Chemistry	4.0	7.0
PHY 221	Physics	<u>5.0</u>	<u>7.0</u>
GENERAL EDUCATION CREDITS/CONTACT HOURS:		29.0-34.0	36.0-41.0

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

COURSE	TITLE	CREDITS	CONTACT HOURS
CEM 122	Inorganic Chemistry & Qualitative Analysis	4.0	7.0
MTH 132	Analytic Geometry & Calculus II	5.0	5.0
MTH 221	C++ Programming	3.0	4.0
MTH 231	Analytic Geometry & Calculus III	5.0	5.0
MTH 232	Differential Equations	4.0	4.0
PHY 222	Physics	<u>5.0</u>	<u>7.0</u>
CORE PROGRAM CREDITS/CONTACT HOURS:		26.0	32.0

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.

ELECTIVE CREDITS/CONTACT HOURS:	<u>6.0</u>	<u>6.0</u>
TOTAL MINIMUM PROGRAM CREDITS/CONTACT HOURS:	61.0	74.0

SUGGESTED SEQUENCING OF COURSES

YEAR 1 (FALL SEMESTER) <u>15.0-16.0</u> CREDITS		CREDITS	CONTACT HRS	YEAR 1 (SPRING SEMESTER) <u>15.0</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	3.0	3.0
CEM 121 General & Inorganic Chemistry	4.0	7.0	CEM122 Inorganic Chem & Qual Analysis	4.0	7.0	4.0	7.0
MTH 131 Analytic Geometry & Calculus I	5.0	5.0	MTH132 Analytic Geometry & Calculus II	5.0	5.0	5.0	5.0
Non-Science Elective	<u>3.0-4.0</u>	<u>3.0-4.0</u>	MTH 221 C++ Programming	<u>3.0</u>	<u>4.0</u>	<u>3.0</u>	<u>4.0</u>
TOTAL	15.0-16.0	18.0-19.0	TOTAL	15.0	19.0	15.0	19.0
YEAR 2 (FALL SEMESTER) <u>16.0-20.0</u> CREDITS		CREDITS	CONTACT HRS	YEAR 2 (SPRING SEMESTER) <u>15.0-17.0</u> CREDITS		CREDITS	CONTACT HRS
American Government Requirement	3.0-6.0	3.0-6.0	MTH 232 Differential Equations	4.0	4.0	4.0	4.0
MTH 231 Analytic Geometry & Calculus	5.0	5.0	PHY 222 Physics	5.0	7.0	5.0	7.0
PHY 221 Physics	5.0	7.0	Non-Science Elective	3.0-4.0	3.0-4.0	3.0-4.0	3.0-4.0
Humanities/Fine Arts Requirement	<u>3.0-4.0</u>	<u>4.0-5.0</u>	Humanities/Fine Arts & Social Science Req	<u>3.0-4.0</u>	<u>4.0-5.0</u>	<u>3.0-4.0</u>	<u>4.0-5.0</u>
TOTAL	16.-20.0	19.0-23.0	TOTAL	15.0-17.0	18.0-20.0	15.0-17.0	18.0-20.0

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