



Associate in Science in Engineering/Physics

Curriculum Code: 1619

Effective Fall 2016 -Summer 2021

Associate in Science in Engineering/Physics

This degree is designed for students who intend to transfer to a four-year college or university to pursue a baccalaureate degree in this subject area. Students completing this curriculum will also satisfy the [Michigan Transfer Agreement \(MTA\)](#) between two-year and four-year institutions in Michigan and qualify for an LCC [Transfer Studies Certificate of Achievement \(1482\)](#). Transfer students are **strongly** encouraged to apply for this certificate along with their degree, as it clearly announces to four-year colleges and universities that the student has successfully completed the MTA. General education and subject area requirements may vary from one college or university to another. In order to graduate with this degree, a student must earn a minimum grade of 2.0 in all courses. A minimum of 2.0 is required to transfer to other colleges (some colleges, and some programs within colleges, require a higher grade in a course). Click [here](#) for information on how to use and interpret this curriculum guide.

I. General Education - MTA:

MINIMUM: 30 credits

Complete [General Education - MTA Requirements](#) for the Associate of Science Degree

A. English Composition: One course

B. English Composition (second course) **or Communication:** One course – *Choose WRIT 122/132*

C. Humanities and Fine Arts: A total of 2 courses, each from a different discipline

D. Mathematics: One course from Quantitative Reasoning, College Algebra or Statistics – *Choose MATH 151 or MATH 161*

E. Natural Sciences: A total of 2 courses, each from a different discipline; one must be a lab course – *Choose PHYS 251 for one course.* (See Note 1)

F. Social Science: A total of 2 courses, each from a different discipline

II. Required Courses within the Major: (See Note 1)

Complete each of the following courses:

Course Code	Title	Credits
MATH 253	Calculus III	4
PHYS 252	Physics II: Electrom/Wave/Optic	5
Choose one of the following courses:		
MATH 152	Calculus II	4
MATH 162	Honors Calculus II	4
Choose one of the following courses:		
MATH 254	Intro to Differential Equations	4
MATH 260	Linear Algebra	4
Choose one of the following courses:		
CHEM 151	General Chemistry Lecture I	4
CPSC 131	Numerical Methods and MATLAB	3
CPSC 230	Algorithms and Computing w/ C++	4

III. Electives: (See Note 2)

Complete courses as needed from the list of [Elective Courses](#) to reach the 60 credit minimum for this degree. Courses used to fulfill requirements in I. and II. above cannot be used as Elective courses.

MINIMUM TOTAL: 60 credits

Notes:

- 1) Students choosing CHEM 151 will also fulfill part of I.E. above.
- 2) It is recommended that students pursuing this degree consider taking the following courses when completing Electives: Students who plan to transfer to MSU are encouraged to enroll in HIST 211/212 to satisfy the IAH requirement.
- 3) It is recommended that students pursuing this degree consider the following Suggested Course Sequence when completing an Educational Development Plan (EDP):

<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>
GE: MATH 151/161	CHEM 151/CPSC 131/230	MATH 253	MATH 254/260
GE: ENG COMP	MATH 152/162	GE: PHYS 251	PHYS 252
GE: HUMS	GE: WRIT 122/132	GE: SOC SCI	GE: NAT SCI (IF TOOK CPSC 131/230)
GE: SOC SCI	GE: HUMS	ELECTIVE	ELECTIVE