



Associate in Science in Engineering/Physics

Curriculum Code: 1619

Effective Fall 2015 -Summer 2020

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.

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):

I	II	III	IV
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