



## Computer Science A.S.

Curriculum Code: 0169

Effective: Fall 2020 – Summer 2025

### Description

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).

### Additional Information

A student must earn a minimum grade of 2.0 in all courses.

PHIL 151 is recommended for one of the Humanities and Fine Arts courses.

It is highly recommended that transfer students wishing to pursue a degree in theoretical computer science take MATH 260, Linear Algebra, for one of the required courses.

### Contact Information

Contact the Mathematics and Computer Science Department, Arts and Sciences Building, Room 3203, telephone number 517-483-1073, or the Academic Advising Department, Gannon Building – Star Zone, telephone number 517-483-1904.

### General Education - Transfer (MTA) Courses, Recommended Choices

(For the full list of options, see [General Education](#))

- English Composition – *Select one*  
ENGL 121, Composition I, 4 credits / 4 billing hours  
ENGL 131, Honors Composition I, 4 credits / 4 billing hours
- English Composition (second course) or Communications – *Select one*  
ENGL 122, Composition II, 4 credits / 4 billing hours  
ENGL 132, Honors Composition II, 4 credits / 4 billing hours
- Humanities and Fine Arts – *Select two, each from a different discipline*  
HIST 211, U.S. History to 1877, 4 credits / 4 billing hours  
HIST 212, U.S. History: 1877 to Present, 4 credits / 4 billing hours  
HUMS 214, World Civilizations from 1600, 4 credits / 4 billing hours  
MUSC 240, Musical Cultures to 1750, 4 credits / 4 billing hours  
MUSC 241, Musical Cultures 1750-Present, 4 credits / 4 billing hours  
PHIL 151, Intro to Logic & Critical Thinking, 4 credits / 4 billing hours  
PHIL 211, Philosophy: Ancient & Medieval, 4 credits / 4 billing hours  
PHIL 212, Philosophy: Modern & Contemporary, 4 credits / 4 billing hours

- Mathematics  
Program of Study Required Courses fulfills this requirement
- Natural Sciences – *Select two, each from a different discipline, one must be a lab course*  
BIOL 120, Environmental Science, 4 credits / 6 billing hours  
CHEM 151 and 161, General Chemistry I Lecture and Lab, 5 credits / 7 billing hours total  
GEOL 221, Physical Geology, 4 credits / 6 billing hours  
PHYS 251, Physics I with Calculus, 5 credits / 7 billing hours
- Social Science – *Select two, each from a different discipline*  
ECON 120, Power, Authority and Exchange, 4 credits / 4 billing hours  
GEOG 200, World Regional Geography, 4 credits / 4 billing hours  
POLS 260, Comparative Political Systems, 3 credits / 3 billing hours  
PSYC 200, Introduction to Psychology, 4 credits / 4 billing hours  
SOCL 120, Introduction to Sociology, 4 credits / 4 billing hours

### Program of Study Required Courses

Course Code	Course Title	Credit / Billing Hours
CPSC 230	Algorithms and Computing w/C++	4 / 4
CPSC 231	Computing and Data Structures	4 / 4
CPSC 260	Computer Science Structures	4 / 4
MATH 151	Calculus I	4 / 4
MATH 152	Calculus II	4 / 4
MATH 253	Calculus III	4 / 4

### Program of Study Required Courses – Limited Choice – *Select two*

Course Code	Course Title	Credit / Billing Hours
CPSC 131	Numerical Methods and MATLAB	3 / 4
MATH 254	Intro to Differential Equations	4 / 4
MATH 260	Linear Algebra	4 / 4
STAT 215	Intro to Probability and Stats	4 / 4

### Total Credit Hours

62-66 credits / 67-70 billing hours

## Recommended Course Sequence

Semester I	Semester II
MTA English Composition MTA Humanities and Fine Arts MATH 151 CPSC 230	MTA English Comp (2nd course) or Communications MTA Social Sciences CPSC 231 MATH 152
Semester III	Semester IV
MTA Natural Sciences MTA Social Sciences CPSC 260 MATH 253	MTA Humanities and Fine Arts MTA Natural Sciences Limited Choice Limited Choice