

Computer Science A.S.

Career Community: Science and Mathematics

Curriculum Code: 0169

Effective: Fall 2025 - Summer 2030

Purpose of the Major

This degree is designed for students who plan to transfer to a four-year university to pursue a Bachelor's of Science degree in Computer Science with a variety of concentrations. Students completing this degree will also satisfy Michigan Transfer Agreement (MTA) requirements for General Education and may qualify for an LCC Transfer Studies Certificate of Achievement. This degree includes a set of courses common to all Science and Math majors and all transfer institutions. Students are encouraged to work with an academic advisor and program advisor to explore transfer opportunities.

Not all courses in this pathway transfer to all colleges. Students who wish to transfer to a four-year institution should select coursework indicated for that institution.

Milestone

In addition to the required General Education courses in Math and English, completion of CPSC 230 and MATH 151 with a 2.0 or higher is a key component for success in completing this program. Knowledge obtained in these courses is the foundation for learning in other required courses. Students are encouraged to contact their faculty if they need additional assistance with learning the concepts presented in these courses.

Additional Information

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

CPSC 260 and MATH 260 are only offered during Spring semester.

Contact Information

For further information, including career options, course substitutions and waivers, etc., contact the Science Department, Arts and Sciences Building, Room 3203, telephone number 517-483-1092.

Major Required Courses - Some courses meet General Education requirements for Michigan Transfer Agreement (MTA). 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.)

Course Code	Course Title	Credit / Billing Hours
ACAD 100	First-Year Experience	1/1
BIOL 127 or	Cell Biology	4/6
PHYS 251	Physics I with Calculus	5/7

Course Code	Course Title	Credit / Billing Hours
CHEM 151	General Chemistry Lecture I	4/4
CHEM 161	General Chemistry Lab I	1/3
COMM 120 or	Dynamics of Communication	3/3
COMM 130 or	Fundamentals Public Speaking	3/3
COMM 200 or	Small Group Communication	3/3
COMM 240 or	Interpersonal Communication	3/3
COMM 260 or	Non-Verbal Communication	3/3
ENGL 122 or	Composition II	4/4
ENGL 132	Honors Composition II	4/4
CPSC 101	Intro to Computer Science	3/3
CPCS 230	Algorithms and Computing with C++	4/4
CPSC 231	Computing and Data Structures	4/4
CPSC 260	Computer Science Structures	4/4
ENGL 121 or	Composition I	4/4
ENGL 131	Honors Composition I	4/4
MATH 151	Calculus I	4/4
MATH 152	Calculus II	4/4
MATH 253	Calculus III	4/4

Notes:

ACAD 100 may be waived when students meet one of the following College-approved waiver criteria:

- Completion of 12 college-level credits with minimum grades of 2.0 shown on the LCC transcript (including transfer, if applicable), or
- Employment in the field of, or a field related to, the degree being sought, or
- For Health Careers students, successful completion of CHSE 100.

Students wishing to waive ACAD 100 should contact their advisor.

CPSC 260 is only offered in Spring semester.

Major Required Courses, Limited Choice – Humanities and Fine Arts - Select two courses from different disciplines, from <u>LCC General Education, Transfer Degrees (MTA)</u>, <u>Humanities and Fine Arts</u>.

Note: PHIL 151 is highly recommended for one of the courses.

Major Required Courses, Limited Choice – Social Sciences - Select two from <u>LCC</u> <u>General Education, Transfer Degrees (MTA), Social Sciences</u>, from different disciplines.

General Education – Transfer Degrees (MTA)

- English Composition
 Major Required Courses meet this requirement.
- English Composition (second course)/Communication Major Required Courses meet this requirement.
- Humanities and Fine Arts
 Major Required Courses meet this requirement.
- Mathematics
 Major Required Courses meet this requirement.
- Natural Sciences
 Major Required Courses meet this requirement.
- Social Sciences
 Major Required Courses meet this requirement.

Elective Courses, Recommended Choices — Select courses as needed to reach the minimum 60 credits required for the degree. For information on preferred courses for specific concentrations identified by transfer institutions, consult with a Program Advisor. (For the full list of options, see AA and AS Degree Electives)

Course Code	Course Title	Credit / Billing Hours
MATH 254	Intro to Differential Equation	4/4
MATH 260	Linear Algebra	4/4
STAT 215	Intro to Probability and Stats	4/4

Note: Math 260 is highly recommended for transfer students.

Minimum Total Credit Hours

60 credits / 64 billing hours

Recommended Course Sequence

Semester I (Fall)
ACAD 100
CHEM 151
CHEM 161
ENGL 121 or ENGL 131
MATH 151 – Milestone course

Semester II (Spring)	
COMM 120 or COMM 130 or COMM 200 or COMM 240 or COMM 260 or ENGL 122 or ENGL 132	
CPCS 101	
MATH 152	
Limited Choice – Social Sciences	

Semester III (Suggested for Summer)	
BIOL 127 or PHYS 251	
Limited Choices – Humanities and Fine Arts	

Semester IV (Fall)	
CPSC 230 – Milestone course	
MATH 253	
Limited Choice – Social Sciences	

Semester V (Spring)	
CPSC 231	
CPSC 260	
Limited Choices – Humanities and Fine Arts	
Electives as needed (MATH 260 is highly recommended)	

LCC makes every effort to limit revisions to the pathways during their effective timeframe. However, the College reserves the right to update certificate and degree titles, and make course changes as needed, without prior notice. The College also reserves the right to discontinue programs when warranted.