

# LANSING COMMUNITY COLLEGE

## CURRICULUM GUIDE

Computer Science  
Associate in Science Degree

Curriculum Code: 0169 (Effective Fall 2011 – Summer 2016)

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 MACRAO Transfer Agreement between two-year and four-year institutions in Michigan. General education and subject area requirements vary from one college or university to another.

Prior to beginning this curriculum, students should contact the Academic Advising Department, Room 212, Gannon Building, telephone number (517) 483-1904, to consult with an academic advisor and obtain an appropriate transfer guide. They are also available on the web at [www.lcc.edu/transfer/guides](http://www.lcc.edu/transfer/guides). Students should also contact the school to which they will transfer for specific transfer institution requirements. (See *Transfer Information* for a list of institutions for which transfer guides are available.)

### PREREQUISITES

Students should see *Course Descriptions* or *Course Offerings* for course prerequisite information. See the *Assessment and Placement Testing* section for skills assessment and advising information.

### INFORMATION

Contact the Mathematics & Computer Science Department, Arts & Sciences Building, Room 309, telephone number (517) 483-1073 (Website: [www.lcc.edu/mathematics/](http://www.lcc.edu/mathematics/)) or the Academic Advising Department, Gannon Building, Room 212, telephone number (517) 483-1904.

### REQUIREMENTS

CODE	TITLE	TOTAL: 17 CREDITS CREDIT HOURS
CPSC 231	Computing and Data Structures	4
CPSC 260	Computer Science Structures	4
MATH 253	Calculus III	4
PHYS 251	Physics I: Mechanics	5

### LIMITED CHOICE REQUIREMENTS

TOTAL: 43-52 CREDITS

Complete the indicated number of credits from **EACH CHOICE** listed below.

#### CHOICE 1: General Education MACRAO Requirements

16 Credits

(See *Transfer Information/MACRAO Transfer Agreement* for approved courses in each area.)

English Composition (See Note 1)	0
Science and Mathematics (See Note 2)	0
Social Science (See Note 3)	8
Humanities (See Note 3)	8

#### CHOICE 2: General Education Core Requirements

0-8 Credits

(See *General Education Core Requirements* for information on how to fulfill these requirements. Core area proficiency exams, where appropriate, are available for each core area. Meeting Core with a proficiency test may require additional MACRAO credits.)

Communication Core Area (See Note 3)	0-4
Global Perspectives and Diversity Core Area (See Note 3)	0-4
Mathematics Core Area (See Note 2)	0
Science Core Area (See Note 2)	0
Writing Core Area (See Note 1)	0

<b>CHOICE 3: Writing</b> (Complete one course from each Subchoice)	<b>8 Credits</b>
<b>Subchoice 3A</b>	
WRIT 121    Composition I	4
WRIT 131    Honors Composition I	4
<b>Subchoice 3B</b>	
ENGL 122    Writ About Literature & Ideas	4
ENGL 132    Honors Writ-Literature & Ideas	4
WRIT 122    Composition II	4
WRIT 132    Honors Composition II	4
<b>CHOICE 4: Mathematics</b> (Complete one course from each Subchoice)	<b>8 Credits</b>
<b>Subchoice 4A</b>	
MATH 151    Calculus I	4
MATH 161    Honors Calculus I	4
<b>Subchoice 4B</b>	
MATH 152    Calculus II	4
MATH 162    Honors Calculus II	4
<b>Subchoice 5</b>	
CPSC 230    Algorithms and Computing w/C++	4
CPSC 227    Algorithms and Computing with Python	4
<b>CHOICE 6: Related Courses</b>	<b>7-8 Credits</b>
MATH 254    Intro to Differential Equation	3
MATH 260    Linear Algebra	3
PHYS 252    Physics II:Electrom/Wave/Optic	5
STAT 215    Intro to Probability and Stats	4
<b>MINIMUM TOTAL</b>	<b>60</b>

**NOTES:**

1. Students completing "CHOICE 3" have fulfilled the requirements for these Core and MACRAO areas.
2. Students completing "REQUIREMENTS" and/or "LIMITED CHOICE REQUIREMENTS" have fulfilled the requirements for this Core area.
3. Certain Core courses may also be used to meet MACRAO requirements. See *Transfer Information/LCC Core-MACRAO Crosswalk* for suggested courses.

**SUGGESTED COURSE SEQUENCE**

Students should see course descriptions to find out when departments plan to offer courses. Students who are unable to follow the course sequence suggested below (for example, those who are part-time, have transferred in courses from another school, or have prerequisites to fulfill) should contact an academic advisor for help with adjustments.

I	II	III
MATH 151 or 161	CPSC 231	CPSC 260
	MATH 152 or 162	MATH 253
	PHYS 251	