

The Applied Mathematics concentration is designed for students who want a broad knowledge of mathematics and its many types of applications. Courses in statistics, operations research and computer science can be combined for a well-rounded applied mathematics foundation, which can lead to careers in business and industry.

**Communication Competency Requirements**

FSU Course	FSU Course Title	FSU Cr. Hrs.	SMC Equiv.	SMC Course Title	SMC Cr. Hrs.
COMM 121	Fundamentals of Public Speaking	3	SPEE 102	Fundamentals of Public Speaking	3
ENGL 150	English 1	3	ENGL 103	English 1	3
ENGL 250	English 2	3	ENGL 104	English 2	3
ENGL 311 or ENGL 321 or ENGL 323 or ENGL 325	Advanced Technical Writing or Advanced Composition or Proposal Writing or Advanced Business Writing	3	No Equivalent	No Equivalent	No Equivalent

**Natural Sciences Competency Requirements - 1 course with lab**

FSU Course	FSU Course Title	FSU Cr. Hrs.	SMC Equiv.	SMC Course Title	SMC Cr. Hrs.
Varies	Natural Sciences Electives	6	Varies	Varies	6

**Self and Society Competency Requirements – Minimum 9 credits from 2 different disciplines with 1 course at 200 level or higher**

FSU Course	FSU Course Title	FSU Cr. Hrs.	SMC Equiv.	SMC Course Title	SMC Cr. Hrs.
Varies	FSU General Education – Self and Society Competency Electives	9	Varies	Varies	9

**Culture Competency Requirements - Minimum 9 credits from 2 different disciplines with 1 course at 200 level or higher**

FSU Course	FSU Course Title	FSU Cr. Hrs.	SMC Equiv.	SMC Course Title	SMC Cr. Hrs.
Varies	FSU General Education - Culture Electives	9	Varies	Varies	9

[Ferris State University General Education Program](#) Students are encouraged to work with an advisor to select appropriate general education courses

**Applied Mathematics Concentration**

FSU Course	FSU Course Title	FSU Cr. Hrs.	SMC Equiv.	SMC Course Title	SMC Cr. Hrs.
MATH 324	Fundamental Concepts in Mathematics	3	No Equivalent	No Equivalent	No Equivalent
Varies	MATH or CPSC Elective	3-4	No Equivalent	No Equivalent	No Equivalent
Varies	MATH or CPSC Elective	3-4	No Equivalent	No Equivalent	No Equivalent
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Varies	MATH or CPSC Elective	3-4	No Equivalent	No Equivalent	No Equivalent
Varies	MATH or CPSC Elective	3-4	No Equivalent	No Equivalent	No Equivalent

**Major Requirements**

FSU Course	FSU Course Title	FSU Cr. Hrs.	SMC Equiv.	SMC Course Title	SMC Cr. Hrs.
CPSC 130	Programming and Problem Solving	4	No Equivalent	No Equivalent	No Equivalent
CPSC 200	Object Oriented Programming	4	No Equivalent	No Equivalent	No Equivalent
MATH 220	Analytical Geometry & Calculus 1	4	MATH 141	Analytical Geometry-Calculus 1	4
MATH 230	Analytical Geometry & Calculus 2	4	MATH 142	Analytical Geometry-Calculus 2	4
MATH 251	Statistics for the Life Sciences	3	No Equivalent	No Equivalent	No Equivalent
MATH 320	Analytical Geometry & Calculus 3	4	MATH 201	Analytical Geometry-Calculus 3	4
MATH 322	Linear Algebra	3	MATH 203	Linear Algebra	3
MATH 330	Differential Equations	3	MATH 204	Differential Equations	3
MATH 340	Numerical Analysis	3	No Equivalent	No Equivalent	No Equivalent

**Total Credits Required for Degree**
**120**

## Program Contact Information:

### Main Campus, Big Rapids

#### College of Arts & Sciences

(231) 591-3660 | (231) 591-2565 | [Mathematics Website](#)

[Transfer Partnerships Website](#)

### Delivery Locations

This degree and the Ferris courses are offered at the following locations:

- Ferris State University, Main Campus, Big Rapids
- Select courses may be delivered online and/or in a mixed delivery format (i.e. a mix of online and face-to-face instruction at the Ferris Main Campus or at an off-campus location).

### General Admission Criteria

#### New Students

- 2.5 high school GPA
- 17 ACT or 900-930 SAT
- Must demonstrate appropriate academic preparedness, maturity and seriousness of purpose

#### Transfer Students

- Must have at least 12 credits with a minimum 2.0 overall GPA including an English and Mathematics course

### Advising Notes

It is recommended that potential applicants meet with an advisor to review the degree, course schedule, and have any questions answered prior to completing an application. Students who are completing the MTA may have different general education course requirements for the particular degree selected. Meeting with a Ferris advisor prior to the selection of general education or elective course work may reduce the chance of completing a course that will not apply toward the selected degree. Once admitted, students must continue to meet with an advisor as they work toward graduation.

### Transfer Student Orientation

All new students to Ferris State University are required to complete an orientation.

### Reverse Transfer Agreement

The Community College and Ferris have entered into a partnership in order to work collaboratively and creatively to increase student completion of associate and bachelor degrees. The partners work together to provide a seamless transfer experience and increase student retention and completion at both the community college and Ferris.

### Michigan Transfer Agreement (MTA)

Ferris participates in the Michigan Transfer Agreement (MTA). This agreement will facilitate the transfer of general education requirements from one Michigan institution to another. Students may complete the MTA as part of a degree program or as a stand-alone package. The MTA consists of a minimum of 30 general education credit hours as identified by the college or university.

Students transferring to Ferris with the Michigan Transfer Agreement (MTA) and entering a degree program will have met a 30-hour block of lower-level general education courses. However, this does not exempt students from completing program specific prerequisites or higher-level general education course requirements. Students should contact their advisor regarding classes that meet the MTA.

Students must work with their Ferris advisor to declare a Minor or Concentration and for selection of Directed Electives.

### Disclaimer

This is a guide for students who plan to transfer to Ferris State University. This guide is not intended to be a contract with Ferris. The information on this guide is subject to change. Students should contact their community college or Ferris to keep informed of changes. Final responsibility for verifying all transfer information lies with the student. Please refer to effective and/or revised date on the bottom of this guide.