

Ferris Program: Applied Mathematics

Degree Type: Bachelor of Science

Ferris College: College of Arts, Sciences, and Education

Transfer School: Jackson College

Consortium Eligible: No

Total Credits Required: 120-121

Catalog Year: 2024-2025

GENERAL EDUCATION REQUIREMENTS – 36 Credits Required

Students are encouraged to work with an advisor to select appropriate general education courses. Diversity Competency - 2 Courses Required. If not met by courses taken for Culture, Self and Society, or MTA, a student must meet the following: 1 course with the Global Diversity attribute and 1 course with the U.S. Diversity attribute.

Visit the Ferris State [general education page](#) for more information.

Communication Competency

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
COMM 105 or COMM 121	Interpersonal Communication or Fundamentals of Public Speaking	3	COM 240 or COM 231 or COM 234
ENGL 150	English 1	3	ENG 131
ENGL 250	English 2	3	ENG 132 or ENG 201
ENGL 311 or ENGL 321 or ENGL 323 or ENGL 325	Advanced Technical Writing or Advanced Composition or Advanced Proposal Writing or Advanced Business Writing	3	No Equivalent

Quantitative Literacy Competency

Requirements for Quantitative Literary Competency can be met with the following:

- Official Pre-2016 Math SAT Score of 560 or Higher
- Official Post-2016 Math SAT Score of 580 or Higher
- Official Math ACT Score of 24 or Higher

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
MATH 220	Analytical Geometry and Calculus 1	3	MAT 151

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Natural Sciences Competency

Two courses are required with a minimum of 6 credits: must have at least one lab course. The courses depend on chosen minor, please see your advisor prior to registering for courses.

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
Varies	Natural Sciences Electives (Consult Advisor)	6	Varies

Culture Competency

Three courses are required with a minimum of 9 credits: must be from two different disciplines and have at least one at FSU 200 level or higher course. The courses depend on chosen minor, please see your advisor prior to registering for courses.

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
Varies	Culture Electives (Consult Advisor)	9	Varies

Self and Society Competency

Three courses are required with a minimum of 9 credits: must be from two different disciplines and have at least one at FSU 200 level or higher course, and at least one Self and Society Foundation course. The courses depend on chosen minor, please see your advisor prior to registering for courses.

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
Varies	Self and Society Electives (Consult Advisor)	9	Varies

COLLEGE REQUIREMENTS – 84 Credits Required

Major Courses

50 Credits Required. These courses are used to calculate the major 2.75 GPA requirement.

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
CPSC 130	Programming and Problem Solving	4	No Equivalent
CPSC 200	Object Oriented Programming	4	CPS 177
MATH 220	Analytical Geometry and Calculus 1	4	MAT 151
MATH 230	Analytical Geometry and Calculus 2	4	MAT 154
MATH 251	Statistics for the Life Sciences	3	MAT 133

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Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
MATH 320	Analytical Geometry and Calculus 3	4	No Equivalent
MATH 322	Linear Algebra	3	No Equivalent
MATH 324	Fundamental Concepts in Mathematics	3	No Equivalent
MATH 330	Differential Equations	3	MAT 254
MATH 340	Numerical Analysis	3	No Equivalent
MATH 420	Introduction to Abstract Algebra	3	No Equivalent
MATH 438	Teaching and Learning High School Math	3	No Equivalent

Choose 15 Credits:

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
CPSC 300	Data Structures and Algorithms	4	No Equivalent
CPSC 320	Computer Simulation	3	No Equivalent
MATH 328	Discrete Structures	3	No Equivalent
CPSC 330	Parallel Programming	4	No Equivalent
CPSC 340	Computer Organization	4	No Equivalent
MATH 360	Operations Research	3	No Equivalent
MATH 414	Mathematical Statistics 1	4	No Equivalent
MATH 416	Mathematical Statistics 2	4	No Equivalent
MATH 420	Introduction to Abstract Algebra	3	No Equivalent
MATH 430	Advanced Calculus	3	No Equivalent
MATH 440	Mathematics Modeling	3	No Equivalent

Electives

34 Credits Required. In order to graduate with a bachelor's degree, a student must have a minimum of 120 credits. The electives required for each student may vary depending on courses taken. Based on how a student meets the programmatic requirements, they may need more or less than 34 credits of elective courses to meet the required 120 credit minimum. These courses are not used to calculate the major 2.50 GPA requirement.

Ferris Course	Ferris Course Title	Ferris Credit Hours	Transfer Course
Varies	Electives	34	Varies

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PROGRAM CONTACT INFORMATION

College of Arts, Sciences, and Education
School of Education
(231) 591-5361
SOE@Ferris.edu

Ferris Statewide - Flint Hub
(810) 762-0461
FerrisFlint@ferris.edu

ADMISSION REQUIREMENTS

New Student Admission Requirements

- 2.50 High School GPA (on a 4.00 scale)
- Minimum Composite ACT Score of 17/SAT 900

Transfer Student Admission Requirements

- 2.00 College GPA (on a 4.00 scale)
- Students transferring with completed majors or minors in Education must meet GPA requirements as established by each program at Ferris to be presented to the Michigan Department of Education for certification.

MORE INFORMATION

To fulfill the residency requirement for a bachelor's degree a student must earn a minimum of 30 credits from Ferris State University.

Steps to Apply

- Complete your [free application](#).
- Submit official transcripts
 - Submit official transcripts from every school attended to Transfer@Ferris.edu
 - Or mail to:
Ferris State University Admissions Office
1201 S. State St., CSS 201
Big Rapids, MI 49307
- Submit test scores (if required)
 - ACT Scores; go to the [ACT website](#) - Ferris State University School Code: 1994
 - SAT, CLEP and AP Scores; go to the [College Board website](#) - Ferris State University School Code: 1222

Advising Notes

It is recommended that potential applicants meet with an advisor to review the degree, course schedule, transfer policies and have any questions answered prior to completing an application. Ferris accepts transfer courses in which the student earned a letter grade of "C" or better. Additional policies such as the Ferris Sunset and Residency Requirement should be discussed with a Ferris advisor. 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 coursework may reduce the chance of completing a course that will not apply toward the selected degree. Students must work with their Ferris advisor to declare a Minor or Concentration and for the selection of Directed Electives.

Once admitted, students are required to complete an orientation and should continue to meet with an advisor as they work toward graduation.

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To schedule an appointment or for additional transfer resources and policies see our [Transfer Resource page](#).

*Indicates an approved Ferris course substitution

Reverse Transfer Agreement

Ferris has reverse transfer agreements with several Michigan Community Colleges. Under such agreement, Ferris will provide your official University transcript to a partner school you have attended, so that they may grant you an associate or bachelor's degree upon completion of sufficient and appropriate credit hours from both institutions. In turn, the degree-granting institution will provide Ferris with an updated transcript reflecting the newly earned credential.

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.

Transfer Equivalencies Tools

The transfer equivalencies link is located in the Transfer Resources section at transfer.ferris.edu.

Disclaimer

Transfer guides are not intended to be a contract with Ferris. The information in this guide is subject to change and is aligned with the catalog year listed above. Students should contact their community college and/or Ferris to keep informed of changes. Students' final responsibility for verifying all transfer information lies with the student. Please refer to the [Ferris catalog](#) for the most current curriculum.

Partners may contact the Office of Transfer and Secondary School Partnerships with questions or updates at TransferGuidesArticulations@Ferris.edu.