

Actuarial Science deals with design, financing and operation of insurance plans. Financial security for people and companies is the main goal of an actuary. Typical problems could include setting the premium for automobile insurance, insuring an athlete against injury or determining the payout for a sweepstakes contest.

Communication Competency Requirements

| FSU Course | FSU Course Title | FSU Cr. Hrs. | OCC Equiv. | OCC Course Title | OCC Cr. Hrs. |
|---|---|--------------|----------------------------|--|---------------|
| COMM 105 or COMM 121 | Interpersonal Communication or Fundamentals of Public Speaking | 3 | COM 1290 or COM 1600 | Interpersonal Communication or Fundamentals of Speech | 3 |
| ENGL 150 | English 1 | 3 | ENG 1510 | Composition 1 | 3 |
| ENGL 250 | English 2 | 3 | ENG 1520 | Composition 2 | 3 |
| 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 | No Equivalent | No Equivalent |

Natural Sciences Competency Requirements – minimum 6 credits; 1 course with lab

| FSU Course | FSU Course Title | FSU Cr. Hrs. | OCC Equiv. | OCC Course Title | OCC Cr. Hrs. |
|------------|---------------------------|--------------|------------|------------------|--------------|
| Varies | Natural Sciences Elective | 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. | OCC Equiv. | OCC Course Title | OCC Cr. Hrs. |
|------------|--|--------------|------------|------------------|--------------|
| Varies | FSU General Education – Self and Society Competency | 3 | Varies | Varies | 3 |
| ECON 201 | Principles of Microeconomics | 3 | ECO 2620 | Economics 2 | 3 |
| ECON 202 | Principles of Macroeconomics | 3 | ECO 2610 | Economics 1 | 3 |

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

[Ferris State University General Education Program](#)

education courses

Students are encouraged to work with an advisor to select appropriate general

Diversity Competency – 2 Courses Required

If not met by courses taken for Culture, Self and Society, or Michigan Transfer Agreement (MTA), a student must have one course with the Global Diversity attribute and one course with the U.S. Diversity attribute. Some courses include both Global Diversity and U.S. Diversity attributes. Courses with both attributes satisfies the entire Diversity competency.

Core Requirements- 32 Credits Required

| FSU Course | FSU Course Title | FSU Cr. Hrs. | OCC Equiv. | OCC Course Title | OCC 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 | MAT 1730 | Calculus 1 | 4 |
| MATH 230 | Analytical Geometry& Calculus 2 | 4 | MAT 1740 | Calculus 2 | 4 |
| MATH 251 | Statistics for the Life Sciences | 3 | MAT 1580 | Statistics | 4 |
| MATH 320 | Analytical Geometry& Calculus 3 | 4 | MAT 2740 | Calculus 3 | 4 |
| MATH 322 | Linear Algebra | 3 | MAT 2880 | Linear Algebra 4 | 4 |
| MATH 330 | Differential Equations | 3 | MAT 2810 | Differential Equations | 4 |
| MATH 340 | Numerical Analysis | 3 | No Equivalent | No Equivalent | No Equivalent |

Major Requirements – 21 Credits Required

| FSU Course | FSU Course Title | FSU Cr. Hrs. | OCC Equiv. | OCC Course Title | OCC Cr. Hrs. |
|------------|--|--------------|---------------|------------------|---------------|
| MATH 414 | Mathematical Statistics 1 | 4 | No Equivalent | No Equivalent | No Equivalent |
| MATH 416 | Mathematical Statistics 2 | 4 | No Equivalent | No Equivalent | No Equivalent |
| MATH 417 | Problem Solving Strategies in Probability Theory | 3 | No Equivalent | No Equivalent | No Equivalent |
| MATH 450 | Theory of Interest | 4 | No Equivalent | No Equivalent | No Equivalent |
| MATH 451 | Problem Solving Strategies in Interest Theory | 3 | No Equivalent | No Equivalent | No Equivalent |
| Elective | Directed Elective | 3 | No Equivalent | No Equivalent | No Equivalent |

Electives – 31 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 31 credits of elective courses to meet the required 120 credit minimum. These courses are not used to calculate the major 2.50 GPA requirement.

| FSU Course | FSU Course Title | FSU Cr. Hrs. | OCC Equiv. | OCC Course Title | OCC Cr. Hrs. |
|------------|------------------|--------------|---------------|------------------|---------------|
| Varies | Varies | Varies | 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 | [Math Department Email](#)

[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

Transfer Students

- Overall GPA of 2.0 (on a 4.0 scale)
- At least 12 credits, 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.

Graduation Requirements

In addition to meeting all the programmatic requirements, students must:

1. Meet University General Education requirements.
2. Earn a minimum of 120 credits.
3. Maintain a 2.00 or higher cumulative FSU GPA.
4. Earn 30 credits from FSU (Residency).
5. Earn 40 credits of 300 level or higher courses.
6. Maintain a 2.50 GPA for all MATH and CPSC course work.

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.