

The Computer Information Systems Bachelor of Science degree offered through the College of Business at Ferris prepares students to be team leaders in the development and maintenance of Business Information Systems. Starting positions include application programmer/analyst, business analyst, systems analyst, networking administrators, consultants, software developers, computer support specialist, systems administrators, project leaders and web developers.

To assure relevance and enduring value, our Computer Information Systems (CIS) program has been designed to align with the national standard (IS2002) established by computing professionals. In addition, we have drawn upon our tight linkages with industry to assure that our labs and our required internships provide the level of hands-on experience that ensures our students are sought after by employers who recognize Ferris as a source of skilled, knowledgeable IS/IT graduates that can hit the ground running and grow from there.

Computers and Information Systems have become essential to all aspects of business and life. Professionals are needed to relate the problem-solving abilities of a computer system to an individual business department, corporation, or multi-national enterprise.

This program has close relationships with the IT industry through a program advisory board, and requires internships as a practical hands-on experience. The hands-on approach in the bachelor degree gives graduates a real-world look at their professional field.

#### Communication Competency Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	ACC Equiv.	ACC Course Title	ACC Cr. Hrs.
COMM 121	Fundamentals of Public Speaking	3	SPE 123	Public Communication	3
ENGL 150	English 1	3	ENG 111 or ENG 121	English English	3
ENGL 250	English 2	3	ENG 112 or ENG 122	English English	3
ENGL 311 or ENGL 325	Advanced Technical Writing or Advanced Business Writing	3	No Equivalent	No Equivalent	No Equivalent

#### Quantitative Literacy Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	ACC Equiv.	ACC Course Title	ACC Cr. Hrs.
MATH 114 or MATH 115	Quantitative Reasoning for Professionals or Intermediate Algebra	4 or 3	No Equivalent or MTH 113	No Equivalent or Intermediate Algebra	No Equivalent or 4

#### Natural Sciences Competency Requirements – Two courses are required with a minimum of 6 credits; must have at least one lab course

FSU Course	FSU Course Title	FSU Cr. Hrs.	ACC Equiv.	ACC Course Title	ACC Cr. Hrs.
Varies	FSU General Education – Natural Sciences electives	6 - 7	Varies	Varies	6 - 7

#### Culture Competency Requirements - Three courses are required with a minimum of 9 credits: must be from two different disciplines, have at least one 200 level or higher course, and have no more than 5 credits from Cultural Competency Activities.

FSU Course	FSU Course Title	FSU Cr. Hrs.	ACC Equiv.	ACC Course Title	ACC Cr. Hrs.
Varies	FSU General Education – Culture electives	9	Varies	Varies	9

#### Self and Society Competency Requirements - Three courses are required with a minimum of 9 credits: must be from two different disciplines and have at least one 200 level or higher course.

FSU Course	FSU Course Title	FSU Cr. Hrs.	ACC Equiv.	ACC Course Title	ACC Cr. Hrs.
ECON 201	Principles of Economics 2	3	ECN 231	Microeconomics	3
ECON 202	Principles of Economics 1	3	ECN 232	Macroeconomics	3
Varies	FSU General Education – Self and Society Elective – Non-Economics	3	Varies	Varies	3

#### Additional General Education Requirements - These courses are additional General Education courses to meet the requirements for this specific program.

FSU Course	FSU Course Title	FSU Cr. Hrs.	ACC Equiv.	ACC Course Title	ACC Cr. Hrs.
ISYS 330	Systems Analysis and Design 1	3	No Equivalent	No Equivalent	No Equivalent
Varies	Varies	0 – 1	Varies	Varies	0 - 1

Refer to FSU's General Education Requirements at [Ferris State University General Education Program](#).

**Computer Information Systems** degree students must complete **43** General Education credits to meet College of Business and University Requirements and 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
- 1 course with the U.S. Diversity attribute

**Business Core Requirements - 30 Credits Required**

FSU Course	FSU Course Title	FSU Cr. Hrs.	ACC Equiv.	ACC Course Title	ACC Cr. Hrs.
ACCT 201	Principles of Accounting 1	3	BUS 123	Principles of Accounting 1	4
ACCT 202	Principles of Accounting 2	3	BUS 124	Principles of Accounting 2	4
BLAW 321	Contracts & Sales	3	BUS 222	Business Law	3
BUSN 499	Interdisciplinary Integrating Exp.	3	No Equivalent	No Equivalent	No Equivalent
FINC 322	Financial Management 1	3	No Equivalent	No Equivalent	No Equivalent
ISYS 321	Business Information Systems	3	No Equivalent	No Equivalent	No Equivalent
MGMT 301	Applied Management	3	BUS 127	Principles of Management	3
MGMT 370	Quality/Operations Management	3	No Equivalent	No Equivalent	No Equivalent
MKTG 321	Principles of Marketing	3	BUS 241	Principles of Marketing	3
STQM 260	Introduction to Statistics	3	MTH 223	Statistical Methods	4

**Major Requirements – 51 Credits Required – A 2.5 GPA is required for these courses**

FSU Course	FSU Course Title	FSU Cr. Hrs.	ACC Equiv.	ACC Course Title	ACC Cr. Hrs.
ISYS 110	Fundamentals of Programming Design and Logic	3	CIS 206	Object Oriented Programming	3
ISYS 216	Introduction Java Programming	3	No Equivalent	No Equivalent	No Equivalent
ISYS 221	Mobile Application Development	3	No Equivalent	No Equivalent	No Equivalent
ISYS 272	Fundamentals of Database Systems	3	CIS 258	Introduction To Enterprise Database	3
ISYS 288	Web Application Development	3	No Equivalent	No Equivalent	No Equivalent
ISYS 316	Advanced Java Programming	3	No Equivalent	No Equivalent	No Equivalent
ISYS 327	Operating Systems and Network Essentials	3	No Equivalent	No Equivalent	No Equivalent
ISYS 372	Advanced Database Systems	3	No Equivalent	No Equivalent	No Equivalent
ISYS 431	Systems Analysis and Design 2	3	No Equivalent	No Equivalent	No Equivalent
ISYS 482	Enterprise Integration and Business Process Design	3	No Equivalent	No Equivalent	No Equivalent
ISYS 489	Senior Capstone	3	No Equivalent	No Equivalent	No Equivalent
ISYS 491	*Internship (Junior Status)	3	No Equivalent	No Equivalent	No Equivalent
PROJ 320	Project Management	3	BUS 262	Project Management	3

**Directed Electives**

FSU Course	FSU Course Title	FSU Cr. Hrs.	ACC Equiv.	ACC Course Title	ACC Cr. Hrs.
Varies	Varies	12	Varies	CIS 140, CIS 241, CIS 270, CIS 280, CNS 150, CNS 151, CNS 155, CNS 170, CNS 180, CNS 215, CNS 220, CNS 230, CNS 235, CNS 240	12

(Note: This is only pre-approved Directive Electives, see your FSU faculty advisor to determine additional options.)

<b>Total Credits Required for Degree</b>	<b>121</b>
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\*CIS Internship not required with 1+ year work experience in field. Credits will be substituted with directive elective (See FSU advisor).

**No more than 90 credit hours may be transferred from the community college to Ferris State University.**

**CIS / CIT credits that are not part of a completed degree, either transfer or Ferris, that are older than 10 years will not be counted toward the degree requirements for CIS/CIT program. Exceptions to this rule may be considered by petitioning the program coordinator.**

**Program Contact Information****Main Campus, Big Rapids****College of Business**

(800) 433-7747 | (231) 591-2420 | [College of Business Email](#)

**Ferris Statewide, Northern Region**

(989) 358-7212 | [Ferris Northern Region Email](#) | [Ferris Statewide Website](#)

[Transfer Partnerships Website](#)

**Ferris State University and Alpena Community College – Computer Information Systems –Transfer Guide**

Effective Fall 2019; updated ECON course numbers/sequence Fall 2020

Ferris State University is an equal opportunity institution. For information on the University's Policy on Non-Discrimination, visit [ferris.edu/non-discrimination](http://ferris.edu/non-discrimination).

## **Delivery Locations**

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

- Ferris State University, Big Rapids Campus, Big Rapids, MI
- Ferris State University, Northern Region
- 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 SAT Scores**

- 2.5 High School GPA (on a 4.0 scale)
- Two of the Three Criteria:
  1. SAT ERW score of 450 or higher.
  2. SAT Math score of 500 or higher. Placement in MATH 109/110 will be considered (SAT MATH score of 480 or higher).
  3. SAT Composite of 900 or higher.

### **New Students ACT Scores**

- 2.5 High School GPA (on a 4.0 scale)
- Two of the Three Criteria:
  1. ACT English score of 16 or higher.
  2. ACT Math score of 19 or higher.
  3. ACT Reading score of 19 or higher

### **Transfer Students**

- Combined college or university GPA of 2.5 (on a 4.0 scale) from all institutions attended. GPA is based on completion of 12 credit hours or more. Developmental courses will not be considered in computing the GPA requirement.
- Transfer equivalency for FSU ENGL 150 or placement during the first semester at FSU which would require an ACT English score of 16 or higher; or SAT ERW score of 450 or higher; or Accuplacer English score of 6 or higher.
- Transfer equivalency for FSU MATH 114/115 or placement during the first semester at FSU which would require an ACT Math score of 19 or higher; SAT Math score of 500 or higher; or Accuplacer Math scores: Elementary Algebra score 75 or higher and College Level Math 0-49.

## **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.