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 Course Requirements

<table>
<thead>
<tr>
<th>FSU Course</th>
<th>FSU Course Title</th>
<th>FSU Cr. Hrs.</th>
<th>SMC Equiv.</th>
<th>SMC Course Title</th>
<th>SMC Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 121</td>
<td>Fundamentals of Public Speaking</td>
<td>3</td>
<td>SPEE 102</td>
<td>Fundamentals of Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 150</td>
<td>English 1</td>
<td>3</td>
<td>ENGL 103</td>
<td>Freshman English II</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 250</td>
<td>English 2</td>
<td>3</td>
<td>ENGL 104</td>
<td>Freshman English III</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 311 or ENGL 325</td>
<td>Advanced Technical Writing or Advanced Business Writing</td>
<td>3</td>
<td>No Equivalent</td>
<td>No Equivalent</td>
<td>No Equivalent</td>
</tr>
</tbody>
</table>

### Quantitative Literacy Course Requirements

<table>
<thead>
<tr>
<th>FSU Course</th>
<th>FSU Course Title</th>
<th>FSU Cr. Hrs.</th>
<th>SMC Equiv.</th>
<th>SMC Course Title</th>
<th>SMC Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 114 or MATH 115</td>
<td>Quantitative Reasoning for Professionals or Intermediate Algebra</td>
<td>4 or 3</td>
<td>No Equivalent or No Equivalent or MATH 102 or MATH 127</td>
<td>No Equivalent or Mathematical Literacy or College Algebra</td>
<td></td>
</tr>
</tbody>
</table>

### Natural Sciences Competency Course Requirements – 1 course with lab

<table>
<thead>
<tr>
<th>FSU Course</th>
<th>FSU Course Title</th>
<th>FSU Cr. Hrs.</th>
<th>SMC Equiv.</th>
<th>SMC Course Title</th>
<th>SMC Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Varies</td>
<td>FSU General Education – Natural Sciences Electives</td>
<td>6</td>
<td>Varies</td>
<td>Varies</td>
<td>6</td>
</tr>
</tbody>
</table>

### Self and Society Competency Course Requirements – 1 Non-Economics Elective

<table>
<thead>
<tr>
<th>FSU Course</th>
<th>FSU Course Title</th>
<th>FSU Cr. Hrs.</th>
<th>SMC Equiv.</th>
<th>SMC Course Title</th>
<th>SMC Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 221</td>
<td>Principles of Economics 1</td>
<td>3</td>
<td>ECON 201</td>
<td>Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 222</td>
<td>Principles of Economics 2</td>
<td>3</td>
<td>ECON 202</td>
<td>Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Varies</td>
<td>FSU General Education – Self and Society Elective</td>
<td>3</td>
<td>Varies</td>
<td>Varies</td>
<td>3</td>
</tr>
</tbody>
</table>

### Culture Competency Course Requirements - Minimum 9 credits from two different disciplines with one 200+ level

<table>
<thead>
<tr>
<th>FSU Course</th>
<th>FSU Course Title</th>
<th>FSU Cr. Hrs.</th>
<th>SMC Equiv.</th>
<th>SMC Course Title</th>
<th>SMC Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Varies</td>
<td>FSU General Education – Culture Electives</td>
<td>9</td>
<td>Varies</td>
<td>Varies</td>
<td>9</td>
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</tbody>
</table>

Refer to FSU’s General Education Requirements at [Ferris State University General Education program](https://www.ferris.edu/).
### Business Core Requirements

<table>
<thead>
<tr>
<th>FSU Course</th>
<th>FSU Course Title</th>
<th>FSU Cr. Hrs.</th>
<th>SMC Equiv.</th>
<th>SMC Course Title</th>
<th>SMC Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 201</td>
<td>Principles of Accounting 1</td>
<td>3</td>
<td>ACCO 201</td>
<td>Principles of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 202</td>
<td>Principles of Accounting 2</td>
<td>3</td>
<td>ACCO 202</td>
<td>Principles of Accounting II</td>
<td>4</td>
</tr>
<tr>
<td>BLAW 321</td>
<td>Contracts &amp; Sales</td>
<td>3</td>
<td>BUSI 207</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 499</td>
<td>Interdisciplinary Integrating Exp.</td>
<td>3</td>
<td>No Equivalent</td>
<td>No Equivalent</td>
<td>No Equivalent</td>
</tr>
<tr>
<td>FINC 322</td>
<td>Financial Management 1</td>
<td>3</td>
<td>No Equivalent</td>
<td>No Equivalent</td>
<td>No Equivalent</td>
</tr>
<tr>
<td>ISYS 321</td>
<td>Business Information Systems</td>
<td>3</td>
<td>No Equivalent</td>
<td>No Equivalent</td>
<td>No Equivalent</td>
</tr>
<tr>
<td>MGMT 301</td>
<td>Applied Management</td>
<td>3</td>
<td>BUSI 201</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 370</td>
<td>Quality/Operations Management</td>
<td>3</td>
<td>No Equivalent</td>
<td>No Equivalent</td>
<td>No Equivalent</td>
</tr>
<tr>
<td>MKTG 321</td>
<td>Principles of Marketing</td>
<td>3</td>
<td>BUSI 220</td>
<td>Marketing</td>
<td>3</td>
</tr>
<tr>
<td>STQM 260</td>
<td>Introduction to Statistics</td>
<td>3</td>
<td>MATH 150</td>
<td>Statistics</td>
<td>4</td>
</tr>
</tbody>
</table>

### Major Requirements

<table>
<thead>
<tr>
<th>FSU Course</th>
<th>FSU Course Title</th>
<th>FSU Cr. Hrs.</th>
<th>SMC Equiv.</th>
<th>SMC Course Title</th>
<th>SMC Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISYS 110</td>
<td>Fundamentals of Programming Design and Logic</td>
<td>3</td>
<td>ISYS 115</td>
<td>Programming Logic and Design</td>
<td>3</td>
</tr>
<tr>
<td>ISYS 216</td>
<td>Introduction Java Programming</td>
<td>3</td>
<td>ISYS 227 or ISYS 225</td>
<td>Java Programming I or C++ Programming</td>
<td>3</td>
</tr>
<tr>
<td>ISYS 221</td>
<td>Mobile Application Development</td>
<td>3</td>
<td>ISYS 276</td>
<td>Mobile Applications</td>
<td>3</td>
</tr>
<tr>
<td>ISYS 272</td>
<td>Fundamentals of Database Systems</td>
<td>3</td>
<td>ISYS 234</td>
<td>Database II</td>
<td>3</td>
</tr>
<tr>
<td>ISYS 288</td>
<td>Web Application Development</td>
<td>3</td>
<td>ISYS 251</td>
<td>Web Development II</td>
<td>3</td>
</tr>
<tr>
<td>ISYS 316</td>
<td>Advanced Java Programming</td>
<td>3</td>
<td>No Equivalent</td>
<td>No Equivalent</td>
<td>No Equivalent</td>
</tr>
<tr>
<td>ISYS 327</td>
<td>Operating Systems and Network Essentials</td>
<td>3</td>
<td>No Equivalent</td>
<td>No Equivalent</td>
<td>No Equivalent</td>
</tr>
<tr>
<td>ISYS 372</td>
<td>Advanced Database Systems</td>
<td>3</td>
<td>No Equivalent</td>
<td>No Equivalent</td>
<td>No Equivalent</td>
</tr>
<tr>
<td>ISYS 431</td>
<td>Systems Analysis and Design 2</td>
<td>3</td>
<td>No Equivalent</td>
<td>No Equivalent</td>
<td>No Equivalent</td>
</tr>
<tr>
<td>ISYS 482</td>
<td>Enterprise Integration and Business Process Design</td>
<td>3</td>
<td>No Equivalent</td>
<td>No Equivalent</td>
<td>No Equivalent</td>
</tr>
<tr>
<td>ISYS 489</td>
<td>Senior Capstone</td>
<td>3</td>
<td>No Equivalent</td>
<td>No Equivalent</td>
<td>No Equivalent</td>
</tr>
<tr>
<td>ISYS 491</td>
<td>*Internship (Junior Status)</td>
<td>3</td>
<td>No Equivalent</td>
<td>No Equivalent</td>
<td>No Equivalent</td>
</tr>
<tr>
<td>PROJ 320</td>
<td>Project Management</td>
<td>3</td>
<td>No Equivalent</td>
<td>No Equivalent</td>
<td>No Equivalent</td>
</tr>
</tbody>
</table>

### Directed Electives

<table>
<thead>
<tr>
<th>FSU Course</th>
<th>FSU Course Title</th>
<th>FSU Cr. Hrs.</th>
<th>SMC Equiv.</th>
<th>SMC Course Title</th>
<th>SMC Cr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Varies</td>
<td>Varies</td>
<td>12</td>
<td>Varies</td>
<td>Approved SMC Directive Electives - (Choose 6 credits from the list below from SMC, plus SMC's ISYS 182 and ISYS 241) ISYS 181, ISYS 182, ISYS 201, ISYS 207, ISYS 215, ISYS 229, ISYS 241, ISYS 255, ISYS 260, ISYS 71,ISYS 272, ISYS 275, ISYS 281, ISYS 282, ISYS 283, ISYS 284, ISYS 285, ISYS 288, ISYS 289, ISYS 294 or ISYS 296 (Note: This is only pre-approved Directive Electives, see your FSU faculty advisor to determine additional options.)</td>
<td>12</td>
</tr>
</tbody>
</table>

### Total Credits Required for Degree

124

*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](mailto:collegeofbusiness@ferris.edu) | [College of Business Website](http://www.ferris.edu/business)
[Transfer Partnerships Website](http://www.ferris.edu/transfer)

Ferris State University and Southwestern Michigan College – Computer Information Systems – Articulation Agreement and Transfer Guide
Effective February 1, 2019 – February 1, 2022
Ferris State University is an equal opportunity institution. For information on the University’s Policy on Non-Discrimination, visit ferris.edu/non-discrimination.
Delivery Locations
This degree and the Ferris courses are offered at the following locations:
- Ferris State University, Main Campus, Big Rapids MI
- 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.

Online Learning
Select courses 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). The “Online Readiness Tutorial” is required for students who register for an online course or are completing an online degree. Students must demonstrate competency in Blackboard skills. This may be done by taking a tutorial and quiz, or, for students who have already taken and passed online courses, they can submit a waiver request. Students should check with the department that offers the class to determine its particular needs and/or the Ferris advisor regarding registration for online course work.

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.
Original Signed Articulation Agreement
The original, signed document is kept on file in the Office of Transfer and Secondary School Partnerships. To obtain a copy of the original, signed document, contact the Office of Transfer and Secondary School Partnerships at 231/591-5983 or email your request to.

This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed to be one and the same agreement. A signed copy of this Agreement delivered by facsimile, e-mail, or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Agreement.

Indemnification
To the extent permitted by law, Ferris State University and the Community College agree to indemnify and hold one another harmless from any and all claims initiated by student participants, their parents, survivors, or agents, arising from any negligent acts or omission on the part of either institution or any of their employees.

Articulation Agreement
Effective Dates: February 1, 2019 – February 1, 2022
This Agreement shall commence as of February 1, 2019 and shall be for an initial term of three years. Minor updates to the agreement may be made during this time. This agreement may be renewed at the end of three years. Either party may terminate this agreement by providing the other party with written notice of the intent to terminate the agreement. The agreement shall terminate not less than one hundred eighty (180) days from the date of the termination notice, unless otherwise agreed in writing by both parties.

Signatures

Ferris State University
1201 S. State Street
Big Rapids, MI 49307
Phone: (231) 591-2000

February 1, 2019
David M. Nicol
Dean
College of Business

Southwestern Michigan College
58900 Cherry Gove
Dowagiac, MI 49047
Phone: (269) 782-1000

February 1, 2019
David Fleming
Vice President of Instruction

February 1, 2019
Lawrence Bajor
Chair
Accountancy, Finance & Information Systems Department

February 1, 2019
Stacy Young
Dean
School of Business