

North Central Michigan College (NCMC)
Articulation Agreement and Transfer Guide

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.	NCMC Equiv.	NCMC Course Title	NCMC Cr. Hrs.
COMM 121	Fundamentals of Public Speaking	3	COM 111	Speech	3
ENGL 150	English 1	3	ENG 111	English Composition 1	3
ENGL 250	English 2	3	ENG 112	English Composition 2	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.	NCMC Equiv.	NCMC Course Title	NCMC Cr. Hrs.
MATH 114 or MATH 115	Quantitative Reasoning for Professionals or Intermediate Algebra	4 or 3	MATH 128 or MATH 112 or MATH 120	Quantitative Reasoning or Beginning / Intermediate Algebra or Intermediate Algebra	4

Natural Sciences Competency Requirements – 1 course with lab

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

Self and Society Competency Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	NCMC Equiv.	NCMC Course Title	NCMC Cr. Hrs.
ECON 221	Principles of Economics 1	3	ECO 111	Macroeconomics	3
ECON 222	Principles of Economics 2	3	ECO 112	Microeconomics	3
Varies	FSU General Education – Self and Society Elective – Non-Economics	3	Varies	Varies	3

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

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

Additional General Education Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	NCMC Equiv.	NCMC Course Title	NCMC Cr. Hrs.
ISYS 330	Systems Analysis and Design 1	3	No Equivalent	No Equivalent	No Equivalent
Varies	General Education Elective (If a 3 Credit MATH Course is Taken, 1 Additional Credit is Required)	0 – 1	Varies	General Education Elective (If a 3 Credit MATH Course is Taken, 1 Additional Credit is Required)	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.

Business Core Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	NCMC Equiv.	NCMC Course Title	NCMC Cr. Hrs.
ACCT 201	Principles of Accounting 1	3	B 211	Principles of Accounting 1	4
ACCT 202	Principles of Accounting 2	3	B 212	Principles of Accounting 2	4
STQM 260	Introduction to Statistics	3	STAT 200	Statistics	3
MGMT 301	Applied Management	3	B 200	Principles of Management	3
BLAW 321	Contracts & Sales	3	B 291	Business Law 2	3
ISYS 321	Business Information Systems	3	No Equivalent	No Equivalent	No Equivalent
MKTG 321	Principles of Marketing	3	M 200	Introduction to Marketing	3
FINC 322	Financial Management 1	3	No Equivalent	No Equivalent	No Equivalent
MGMT 370	Quality/Operations Management	3	No Equivalent	No Equivalent	No Equivalent
BUSN 499	Interdisciplinary Integrating Exp.	3	No Equivalent	No Equivalent	No Equivalent

Major Requirements - A 2.5 GPA is required for these courses

FSU Course	FSU Course Title	FSU Cr. Hrs.	NCMC Equiv.	NCMC Course Title	NCMC Cr. Hrs.
ISYS 110	Fundamentals of Programming Design and Logic	3	CIS 104	Introduction to Programming Logic	3
ISYS 216	Introduction Java Programming	3	CIS 115 or CIS 225	C++ Programming 1 or Introduction to Java Programming	3
ISYS 221	Mobile Application Development	3	CIS 230	Mobile App Design	3
ISYS 272	Fundamentals of Database Systems	3	CIS 215	Database Design and Management	3
ISYS 288	Web Application Development	3	No Equivalent	No Equivalent	No Equivalent
ISYS 316	Advanced Java Programming	3	CIS 205	C++ Programming 2	3
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	No Equivalent	No Equivalent	No Equivalent

Directed Electives

FSU Course	FSU Course Title	FSU Cr. Hrs.	NCMC Equiv.	NCMC Course Title	NCMC Cr. Hrs.
Varies	Varies	12	Varies	Approved NCMC Directive Electives: CIS 106, CIS 111, CIS 120, CIS 127, CIS 140, CIS 141, CIS 150, CIS 280. (Note: This is only pre-approved Directive Electives, see your FSU faculty advisor to determine additional options.)	12

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).

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 Delivery Locations and Contact Information:**Main Campus, Big Rapids****College of Business**

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

Ferris Statewide, FSU – Traverse City

(231) 995-1734 | [Ferris Traverse City Email](#) | [Ferris Statewide Website](#)

[Transfer Partnerships Website](#)

*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.

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 2.00 cumulative GPA in the business core and the major.
7. Earn 40 percent of their total credits required for graduation in general education courses to meet the College of Business ACBSP accreditation requirements. The University requires all bachelor degrees be a minimum 120 credits. When meeting the 40 percent requirement, programs can use 6 credits from the business core in the calculation. To meet the ACBSP, 40 percent general education requirement, a 120 credit program would consist of 42 general education credits, 30 business core credits, and 48 credits in the major.

Transfer Student Orientation

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

Ferris State University Residency Requirements

- Earn a minimum of 120 total credits for a bachelor's degree
- Earn a minimum of 30 credits from Ferris State University for a bachelor's degree

Reverse Transfer Agreement

North Central Michigan 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 North Central Michigan 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 transfercenter@ferris.edu.

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 North Central Michigan 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, 2020 – February 1, 2023

This Agreement shall commence as of February 1, 2020 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

North Central Michigan College
1515 Howard Street
Petoskey, MI 49770
Phone: (888) 298-6605

February 1, 2020

David M. Nicol
Dean
College of Business

February 1, 2020

Peter Olson
Vice President
Academic Affairs and Student Success

February 1, 2020

Lawrence Bajor
Chair
Accountancy, Finance & Information Systems

February 1, 2020

Charles Hayes
Dean
Business Manufacturing and Technology