

Northwestern Michigan College (NMC)
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.	NMC Equiv.	NMC Course Title	NMC Cr. Hrs.
COMM 121	Fundamentals of Public Speaking	3	COM 111	Public Speaking	4
ENGL 150	English 1	3	ENG 111	English Composition	4
ENGL 250	English 2	3	ENG 112	English Composition	4
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.	NMC Equiv.	NMC Course Title	NMC Cr. Hrs.
MATH 114 or MATH 115	Quantitative Reasoning for Professionals or Intermediate Algebra	4 or 3	No Equivalent or MTH 111	No Equivalent or Intermediate Algebra	4

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

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

Self and Society Competency Requirements

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

Culture Competency Requirements - Minimum 9 credits from two different disciplines with one course at 200 level or above (**see advisor**).

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

Additional General Education Course Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	NMC Equiv.	NMC Course Title	NMC Cr. Hrs.
ISYS 330	Systems Analysis and Design 1	3	CIT 280	Systems Analysis and Design	4
Varies	Varies	1	Varies	Varies	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.	NMC Equiv.	NMC Course Title	NMC Cr. Hrs.
ACCT 201	Principles of Accounting 1	3	ACC 121	Accounting Principles 1	4
ACCT 202	Principles of Accounting 2	3	ACC 123	Accounting Principles 2	4
BLAW 321	Contracts & Sales	3	BUS 261	Business Law 1	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	MGT 241	Principles of Management	3
MGMT 370	Quality/Operations Management	3	No Equivalent	No Equivalent	No Equivalent
MKTG 321	Principles of Marketing	3	MKT 201	Principles of Marketing	3
STQM 260	Introduction to Statistics	3	MTH 131	Probability/Stats	3

Major Requirements - A 2.5 GPA is required for these courses

FSU Course	FSU Course Title	FSU Cr. Hrs.	NMC Equiv.	NMC Course Title	NMC Cr. Hrs.
ISYS 110	Fundamentals of Programming Design and Logic	3	CIT 110	Programming Logic and Design	3
ISYS 216	Introduction Java Programming	3	CIT 195	Application Development	3
ISYS 221	Mobile Application Development	3	No Equivalent	No Equivalent	No Equivalent
ISYS 272	Fundamentals of Database Systems	3	CIT 178	Relational Databases	3
ISYS 288	Web Application Development	3	CIT 218	Web Application Development	3
ISYS 316	Advanced Java Programming	3	CIT 255	Net Object-Oriented Program	3
ISYS 327	Operating Systems and Network Essentials	3	No Equivalent	No Equivalent	No Equivalent
ISYS 372	Advanced Database Systems	3	CIT 228	Advanced Database Systems	3
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.	NMC Equiv.	NMC Course Title	NMC Cr. Hrs.
Varies	Varies	12	Varies	Approved NMC Directive Electives below: CIT 156, CIT 157, CIT 160, CIT 161, CIT 170, CIT 180, CIT 190, CIT 208, CIT 210, CIT 213, CIS 215, CIT 240, CIT 242, CIT 246, CIT 247, CIT 256, CIT 260, CIT 261, CIT 275, CIT 290, CIT 291, & CIT 292 (Note: This is only pre-approved Directive Electives, see your FSU faculty advisor to determine additional options.)	12

Total Credits Required for Degree	124
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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).

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, FSU – Traverse City

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

[Transfer Partnerships Website](#)

Delivery Locations

This degree and the Ferris courses are offered to students of Northwestern Michigan College at the following locations:

- Northwestern Michigan College, University Center, Traverse City MI
- Ferris State University, Big Rapids, MI
- Select courses delivered online and/or in a mixed delivery format (i.e. a mix of online and face-to-face instruction at either Northwestern Michigan College, the Ferris main campus, or at another off-campus location).

Ferris State University and Northwestern Michigan College – Computer Information Systems – Articulation Agreement and Transfer Guide

Effective September 15, 2019 - September 15, 2022; 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.

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.

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.

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

Northwestern 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 Northwestern 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 Northwestern 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: September 15, 2019 - September 15, 2022

This Agreement shall commence as of September 15, 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

Northwestern Michigan College
1701 East Front Street
Traverse City, MI 49686
Phone: (231) 995-1000

September 15, 2019

David M. Nicol
Dean
College of Business

September 15, 2019

Brian Heffner
Director
Business Division

September 15, 2019

Lawrence Bajor
Program Coordinator
Accountancy, Finance & Information Systems