FERRIS STATE UNIVERSITY

Northwestern Michigan College (NMC)
Articulation Agreement and Transfer Guide

The Information Security and Intelligence degree prepares you for a variety of career possibilities in fields that allow you to see your contribution in action. Computer Forensics, Fraud Investigation, Information Security, Intelligence, and Terrorism and Crime Analysis are a few of the possibilities. Opportunities exist in the government, security, intelligence, health care, insurance, finance, education and several other fields. The Information Security & Intelligence program is a National Security Agency and Department of Homeland Security National Center of Academic Excellence in Cyber Defense. Additionally, the program holds the National Center for Digital Forensic Academic Excellence designation from the Department of Defense Cyber Command Center (DC3) and the Air Force Office of Special Investigations. The ISI program is the first university program in the United States to receive Department of Defense Cyber Crime Center and Air Force Office of Special Investigations Center designation as a National Center of Digital Forensics Academic Excellence.

Communication Competency Course Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	NMC Equiv.	NMC Course Title	NMC Cr. Hrs.
COMM 105 or COMM 121	Interpersonal Communication or Fundamentals of Public Speaking	3	BUS 155 or COM 111	Interpersonal Communications or Public Speaking	3 or 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 321 or ENGL 325	Advanced Technical Writing or Advanced Composition or Advanced Business Writing	3	No Equivalent	No Equivalent	No Equivalent

Quantitative Literacy Course Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	NMC Equiv.	NMC Course Title	NMC Cr. Hrs.
MATH 115	Intermediate Algebra	3	MTH 111	Intermediate Algebra	4

Natural Sciences Competency Course Requirements – minimun 6 credits with 1 lab course

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

Self and Society Competency Course Requirements – minimun 9 credits from 2 different disciplines with 1 course at 200 level or higher

FSU Course	FSU Course Title	FSU Cr. Hrs.	NMC Equiv.	NMC Course Title	NMC Cr. Hrs.
Varies	FSU General Education – Self and Society electives	9	Varies	Varies	Varies

Culture Competency Course Requirements – minimun 9 credits from 2 different disciplines with 1 course at 200 level or higher

FSU Course	FSU Course Title	FSU Cr. Hrs.	NMC Equiv.	NMC Course Title	NMC Cr. Hrs.
Varies	FSU General Education – Culture electives (foreign language recommended)	9	Varies	Varies	Varies

Information Security and Intelligence degree students must complete a total of 40 general education credits to meet College of Business and University requirements.

Ferris State University General Education Courses Students are encouraged to work with an advisor to select appropriate general education courses

Business Core Requirements – 15 credits required

FSU Course	FSU Course Title	FSU Cr. Hrs.	NMC Equiv.	NMC Course Title	NMC Cr. Hrs.
ACCT 201	Principles of Financial Accounting	3	ACC 121	Principles of Accounting	4
STQM 260	Introduction to Statistics	3	MTH 131	Probability/Statistics	3
MGMT 301	Applied Management	3	MGT 241	Applied Management	3
MKTG 321	Principles of Marketing	3	MKT 201	Principles of Marketing	3
MGMT 350	Management Metrics and Decision Making	3	No Equivalent	No Equivalent	No Equivalent

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Major Requirements – 51 credits required

FSU Course	FSU Course Title	FSU Cr. Hrs.	NMC Equiv.	NMC Course Title	NMC Cr. Hrs.
ISIN 200	Secure Digital Technologies	3	No Equivalent	No Equivalent	No Equivalent
STQM 270	Introduction to Data Mining	3	No Equivalent	No Equivalent	No Equivalent
ISIN 300	Link & Visual Analysis	3	No Equivalent	No Equivalent	No Equivalent
ISIN 301	Data Intelligence Competitive Theory	3	No Equivalent	No Equivalent	No Equivalent
ISIN 306	Security Informatics	3	No Equivalent	No Equivalent	No Equivalent
ISIN 308	Principles of Info Security	3	No Equivalent	No Equivalent	No Equivalent
DFOR 310	Digital Forensics and Analysis	3	No Equivalent	No Equivalent	No Equivalent
ISIN 312	Applications of Information Security	3	No Equivalent	No Equivalent	No Equivalent
ISIN 317	Fraud Examination	3	No Equivalent	No Equivalent	No Equivalent
PROJ 320	Project Management Fundamentals	3	No Equivalent	No Equivalent	No Equivalent
ISIN 325	Database Security	3	No Equivalent	No Equivalent	No Equivalent
STQM 360	Risk Analysis and Strategy	3	No Equivalent	No Equivalent	No Equivalent
ISIN 380	Current Issues in Info Security & Intelligence	3	No Equivalent	No Equivalent	No Equivalent
ISIN 409	Network Forensics and Analysis	3	No Equivalent	No Equivalent	No Equivalent
ISIN 429	Legal and Ethical Issues in Information Security	3	No Equivalent	No Equivalent	No Equivalent
ISIN 491	ISI Internship	3	No Equivalent	No Equivalent	No Equivalent
ISIN 499	Capstone Experience	3	No Equivalent	No Equivalent	No Equivalent
Varies	Directed Electives (see advisor)	5	No Equivalent	No Equivalent	No Equivalent

Select One Concentration from list below, or a Custom Concentration may be developed with advisor approval.

Data Mining Concentration – *This concentration is available at the main Big Rapids Campus only*

FSU Course	FSU Course Title	FSU Cr. Hrs.	NMC Equiv.	NMC Course Title	NMC Cr. Hrs.
STQM 342	Data Mining Tools	3	No Equivalent	No Equivalent	No Equivalent
STQM 380	Data Mining Processes	3	No Equivalent	No Equivalent	No Equivalent
STQM 322	Inferential Statistics	3	No Equivalent	No Equivalent	No Equivalent
ISIN 335	Pen Testing and Cloud Security	3	No Equivalent	No Equivalent	No Equivalent

Digital Forensics Concentration

FSU Course	FSU Course Title	FSU Cr. Hrs.	NMC Equiv.	NMC Course Title	NMC Cr. Hrs.
CITS 270	Network+	3	CIT 213	Networking Technologies	3
DFOR 315	Advanced Digital Forensics	3	No Equivalent	No Equivalent	No Equivalent
ISIN 335	Pen Testing and Cloud Security	3	No Equivalent	No Equivalent	No Equivalent
Varies	Directed Elective (See Ferris advisor)	3	Varies	Directed Elective (See Ferris advisor)	3

Foreign Language Concentration Transfer (12 credits)

Network Security Concentration

FSU Course	FSU Course Title	FSU Cr. Hrs.	NMC Equiv.	NMC Course Title	NMC Cr. Hrs.
CITS 280	Linux Administration	3	CIT 256	Linux Administration	3
CITS 270	Network+	3	CIT 213	Networking Technologies	3
Varies	Directed Electives	6	Varies	Directed Elective (See Ferris advisor)	3

Penetration Testing and Secure Software Concentration - *This concentration is available at the main Big Rapids Campus only*

FSU Course	FSU Course Title	FSU Cr. Hrs.	NMC Equiv.	NMC Course Title	NMC Cr. Hrs.
DFOR 315	Advanced Digital Forensics	3	No Equivalent	No Equivalent	No Equivalent
ISIN 335	Pen Testing and Cloud Security	3	No Equivalent	No Equivalent	No Equivalent
ISIN 430	Pen Testing and Mobile Security	3	No Equivalent	No Equivalent	No Equivalent
Varies	Directed Elective	3	No Equivalent	No Equivalent	No Equivalent

Total Credits Required for Degree	**123**

Program Contact Information:

Ferris Statewide, FSU – Traverse City
(231) 995-1734 or ferrisNorth@ferris.edu
www.ferris.edu/statewide
Main Campus, Big Rapids
College of Business
(800) 433-7747 | (231) 591-2420 | business@ferris.edu
www.ferris.edu/transfer

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Delivery Locations
This degree and the Ferris courses are offered to students of Northwestern Michigan College at the following locations:
- Northwestern Michigan College
- 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).

General Admission Criteria
New Students SAT Scores
- 3.0 High School GPA (on a 4.0 scale)
- SAT Math Score of 550 or higher

New Students ACT Scores
- 3.0 High School GPA (on a 4.0 scale)
- ACT Math Score of 22 or higher

Transfer Students
- Combined college or university GPA of 3.0 (on a 4.0 scale) from all institutions attended. GPA based on completion of 24 credit hours or more.
- Completion of the transfer equivalency for FSU's MATH 114/115 with a grade of "C" or higher (this does not include FSU's equivalent of MATH 117) or a ACT Math score of 22 or higher or SAT Math score of 550 or higher.
- 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.

Essay Requirement - In addition, all students applying for admission to the ISI program will have to submit a 750 to 1,000 word essay to the Admissions Office that addresses the following: Who they are and why they desire admission to the ISI program, description of a personal quality, talent, accomplishment, contribution, or experience, and a description of someone that influenced them and why.

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.

It is recommended that students have, or have access to, a laptop or desktop computer with Windows or OSX/MacOS, 8 GB Ram (16 GB recommended), 500 GB HDD or SSD, and CPU minimum i5 or equivalent.

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.

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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 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: Effective November 1, 2018 – November 1, 2021
This Agreement shall commence as of November 1, 2018 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) 955-1000

November 1, 2018
David Nicol
Dean
College of Business

November 1, 2018
Stephen Siciliano
Vice President for Educational Services

November 1, 2018
Greg Gogolin
Faculty Representative

November 1, 2018
Scott Goethals
Program Coordinator

November 1, 2018
Susan DeCamillis
Academic Chair

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