Our Business Data Analytics (BDA) program was created in response to the critical need in today's workplace for employees who are capable of drawing meaningful insight from vast quantities of data. It is the only undergraduate program of its type in the state.

Data analytics is a growing field that uses data to gather intelligence in business, marketing, finance, accounting, human resources, insurance, homeland security, criminal justice, education, government, healthcare and manufacturing. Data mining turns raw data into information. This information creates knowledge used by leaders and managers to establish and achieve organizational goals and sustain a competitive advantage. For example, it assists businesses in spotting customer trends, creating customer loyalty, enhancing supplier relationship, reducing financial risk and uncovering new sales opportunities.

Organizations today face tough competitive challenges. Some challenges can be met with the competitive advantage of better knowledge. Your future employer may assign you to help create that knowledge by using sound research methods to discover information hidden within vast databases. For example, you may be asked to help a team discover customer buying patterns that signal new niche markets. Or discover a pattern of credit card use that points to fraud. Or you may help discover patterns of cell growth helpful in diagnosing cancer. Or you may assist a team searching for patterns of terrorist activities. Or you may help discover changing patterns of habitat growth impacting endangered species. Do you see yourself in a team working with research tools to explore vast amounts of data and information to uncover important patterns? If so, Business Data Analytics will prepare you to work in a team setting to help fulfill information needs of your employer through application of data mining methods.

- You will learn from statisticians and information systems experts who will teach you through practical, hands-on projects using worldwide known software.
- You will find the statistics faculty willing and readily available to help you outside of the classroom.
- You will learn by working with faculty on real-world projects at our research consulting center.
- Our classrooms and research consulting center provide opportunities for collaborative state-of-the-art learning.

Employers like to hire Ferris graduates because of their practical skills, receptive attitudes and abilities to do the job from day one. The BDA job market is exploding in a range of fields including business, education, manufacturing, healthcare, criminal justice, government, science and others. Some BDA career options: data scientist, business data analyst, market research analyst, data analyst/data architect, business and systems analyst, analytic software sales representative, business systems consultant, research analyst or data analyst consultant.

Communication Competency Course Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	MCC Equiv.	MCC Course Title	MCC Cr. Hrs.
COMM 121	Fundamentals of Public Speaking	3	COMM 210	Speech	3
ENGL 150	English 1	3	ENGL 100	Freshman English 1	3
ENGL 250	English 2	3	ENGL 101	Freshman English 2	3
ENGL 325	Advanced Business Writing	3	No Equivalent	No Equivalent	No Equivalent

Quantitative Literacy Course Requirements

FSU Course	FSU Course Title	FSU Cr. Hrs.	MCC Equiv.	MCC Course Title	MCC Cr. Hrs.
MATH 114 or	Quantitative Reasoning for Professionals 2 or	4 or	No Equivalent or	No Equivalent or	No Equivalent or
MATH 115	Intermediate Algebra	3	MATH 104	Intermediate Algebra	4

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

FSU Course	FSU Course Title	FSU Cr. Hrs.	MCC Equiv.	MCC Course Title	MCC Cr. Hrs.
Varies	Natural Sciences Elective	6	Varies	Varies	6 - 7

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

FSU Course	FSU Course Title	FSU Cr. Hrs.	MCC Equiv.	MCC Course Title	MCC Cr. Hrs.
Varies	FSU General Education - Culture Electives	6	Varies	Varies	6
PHIL 216	Introduction to Ethics	3	No Equivalent	No Equivalent	No Equivalent

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

FSU Course	FSU Course Title	FSU Cr. Hrs.	MCC Equiv.	MCC Course Title	MCC Cr. Hrs.
Varies	FSU General Education – Self & Society Competency	3	Varies	Varies	3
ECON 201	Principles of Microeconomics	3	ECON 216	Principles of Microeconomics	3
ECON 202	Principles of Macroeconomics	3	ECON 215	Principles of Macroeconomics	3

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

FSU Course	FSU Course Title	FSU Cr. Hrs.	MCC Equiv.	MCC Course Title	MCC Cr. Hrs.
Varies	FSU General Education Elective	3	Varies	Varies	Varies

Ferris State University General Education Program Students 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 Data Analytics degree students must complete 42 General Education credits to meet College of Business and University Requirements.

Buisness Core Requirements - 30 Credits Required

FSU Course	FSU Course Title	FSU Cr. Hrs.	MCC Equiv.	MCC Course Title	MCC Cr. Hrs.
ACCT 201	Principles of Financial Accounting	3	ACCT 115	Principles of Accounting 1	4
ACCT 202	Principles of Managerial Accounting	3	ACCT 116	Principles of Accounting 2	4
STQM 260	Introduction to Statistics	3	MATH 190	Elementary Statistics	3
MGMT 301	Applied Managemet	3	MGMT 237	Concepts of Management	3
BLAW 321	Contracts & Sales	3	No Equivalent	No Equivalent	No Equivalent
MKTG 321	Principles of Marketing	3	MRKT 230	Marketing Research	3
ISYS 321	Buisness Information Systems	3	No Equivalent	No Equivalent	No Equivalent
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	Integrating Experience	3	No Equivalent	No Equivalent	No Equivalent

Major Requirements - 39 Credits Required

FSU Course	FSU Course Title	FSU Cr. Hrs.	MCC Equiv.	MCC Course Title	MCC Cr. Hrs.
STQM 270	Introduction to Data Mining	3	No Equivalent	No Equivalent	No Equivalent
STQM 285	Foundations for Buisness Analytics	3	No Equivalent	No Equivalent	No Equivalent
ISIN 300	Link & Visual Analysis	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 322	Inferential Statistics	3	No Equivalent	No Equivalent	No Equivalent
STQM 342	Data Mining Tools	3	No Equivalent	No Equivalent	No Equivalent
STQM 375	Programming for Analytics	3	No Equivalent	No Equivalent	No Equivalent
STQM 421	Applied Linear Statistical Models	3	No Equivalent	No Equivalent	No Equivalent
STQM 450	Intelligence & Data Warehousing	3	No Equivalent	No Equivalent	No Equivalent
STQM 465	Text & Web Mining	3	No Equivalent	No Equivalent	No Equivalent
STQM 498	Capstone Experience	3	No Equivalent	No Equivalent	No Equivalent
STQM 491 or Elective	Statistic Internship or Directed Elective (Advisor Approval)	3	No Equivalent	No Equivalent	No Equivalent

Directed Electives – 9 Credits Required (advisor approval)

Total Credits Required for Degree	**120 - 122**

Program Contact Information:
Main Campus, Big Rapids
College of Business
Marketing Department
(231) 591-2426 | Marketing Department Email | Business Data Analytics Webpage
Transfer Partnerships Website

Delivery Locations
This degree and the Ferris courses are offered at the following locations:
- Ferris State University, Main Campus, Big Rapids
- 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).

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General Admission Criteria
New Student SAT Scores
- 2.50 High School GPA (on a 4.00 scale)
- Two of the Three Criteria:
    1. ERW SAT score of 450 or higher.
    2. Math SAT score of 500 or higher. Placement in MATH 109 or 110 will be considered (Math SAT score of 480 or higher).
    3. Composite SAT of 900 or higher.

New Student ACT Scores
- 2.50 High School GPA (on a 4.00 scale)
- Two of the Three Criteria:
    1. English ACT score of 16 or higher.
    2. Math ACT score of 19 or higher.
    3. Reading ACT score of 19 or higher.

Transfer Students
- Combined college or university GPA of 2.35 (on a 4.00 scale) from all institutions attended. GPA 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 English ACT score of 16 or higher; or ERW SAT score of 450 or higher; or English Accuplacer score of 6 or higher.
- Transfer equivalency for FSU MATH 114 or 115 or placement during the first semester at FSU which would require a Math ACT score of 19 or higher; Math SAT of 500 or higher; or Math Accuplacer scores: Elementary Algebra score 75 or higher and College Level Math 0 to 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
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.

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