



**Master of Science in
Business Analytics
Program Handbook
2026-2027**

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Analytics Faculty Directory:

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GENERAL GRADUATE POLICIES

University Attendance Policy

Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

Academic Honor Policy

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to "...be honest and truthful and...[to] strive for personal and institutional integrity at Florida State University." (Florida State University Academic Honor Policy, found at <http://fda.fsu.edu/academic-resources/academic-integrity-and-grievances/academic-honor-policy>)

Americans with Disabilities Act

Florida State University (FSU) values diversity and inclusion; we are committed to a climate of mutual respect and full participation. Our goal is to create learning environments that are usable, equitable, inclusive, and welcoming. FSU is committed to providing reasonable accommodations for all persons with disabilities in a manner that is consistent with academic standards of the course while empowering the student to meet integral requirements of the course.

To receive academic accommodations, a student:

(1) must register with and provide documentation to the Office of Accessibility Services (OAS); (2) must provide a letter from OAS to the instructor indicating the need for accommodation and what type; and, (3) should communicate with the instructor, as needed, to discuss recommended accommodations. A request for a meeting may be initiated by the student or the instructor.

Please note that instructors are not allowed to provide classroom accommodations to a student until appropriate verification from the Office of Accessibility Services has been provided.

This handbook is available in alternative format upon request through OAS.

For more information about services available to FSU students with disabilities, contact the:
Office of Accessibility Services
874 Traditions Way
108 Student Services Building
Florida State University
Tallahassee, FL 32306-4167
(850) 644-9566 (voice); (850) 644-8504 (TDD); oas@fsu.edu; <https://dsst.fsu.edu/oas>.

Academic Success

Your academic success is a top priority for Florida State University. University resources to help you succeed include tutoring centers, computer labs, counseling and health services, and services for designated groups, such as veterans and students with disabilities. The following information is not exhaustive, so please check with your advisor or the Department of Student Support and Transitions to learn more.

Transfer Credit

Transfer of courses not counted toward a previous degree from another AACSB accredited graduate school is limited to six semester hours. Courses used for transfer credit must be equivalent to another course within the graduate program and approved by the faculty program director. All transfer credit must: 1) be recommended by the major department; 2) be evaluated as graduate work by the evaluation section of the Office of Admissions of Florida State University; and 3) have been completed with grades of 3.000 ("B") or better.

Grades earned at another institution cannot be used to improve a grade point average or eliminate a quality point deficiency at Florida State University.

The University does not accept experiential learning, or award credit for experiential learning. Transfer credit based on experiential learning from another institution will not be accepted.

Grade Appeals System

The purpose of the grade appeals system is to afford an opportunity for a student to appeal a final course grade under certain circumstances. Faculty judgment of students' academic performance is inherent in the grading process and hence should not be overturned except when the student can show that the grade awarded represents a gross violation of the instructor's own specified evaluation (grading) statement and therefore was awarded in an arbitrary, capricious, or discriminatory manner.

The evaluation (grading) statement utilized during the grade appeals process is the one contained in the instructor's syllabus at the beginning of the semester. This system does not

apply to preliminary or comprehensive exams or to thesis or dissertation defenses; these issues are reviewed by the Student Academic Relations Committee via the Dean of the Faculties.

The entire policy is found in the Academic Regulations and Procedures section of the Florida State University General Bulletin (<http://registrar.fsu.edu/bulletin/undergrad/apdefault.htm>) and on the Office of Faculty Development and Advancement's website: (<https://fda.fsu.edu/academic-resources/academic-integrity-and-grievances/grade-appeals-system>).

Incomplete Grade Policy

Incomplete ("I") grades should be recorded only in exceptional cases when a student, who has completed a substantial portion of the course and who is otherwise passing, is unable to complete a well-defined portion of a course for reasons beyond the student's control. Students in these circumstances must petition the instructor and should be prepared to present documentation that substantiates their case. Incompletes should not be granted in order to allow students to do extra coursework in an effort to increase their grades.

Even under these circumstances, the authority for determining whether to grant an incomplete rests solely with the instructor. A Graduate Teaching Assistant must have approval from a supervising faculty member to grant an incomplete.

In order to assign an incomplete, an instructor is required to indicate on the grade roster the time frame for resolution of the grade and the default grade (default grade of incomplete is not allowable) to be assigned if the student does not complete the remaining academic work. Some departments also require that an incomplete be documented with an "Incomplete Grade Agreement." It is the student's responsibility to complete the remaining academic work within the agreed-upon time frame.

Under University policy, an incomplete grade automatically reverts to the predetermined default grade at the end of the semester that has been specified by the faculty member as the time frame for resolution, unless one of two conditions is met:

1. Upon completion of the agreed-upon work, the instructor submits a grade-change (online) that replaces the "I" with the final grade for the course.
2. The instructor submits a separate "Incomplete Extension of Time" form to the Evaluation and Posting Section of Admissions and Records before the end of the semester in which the "I" is set to expire.

In cases where no default grade or instructor-determined expiration semester exists, incomplete grades will expire to an IE at the end of the next term of enrollment unless the

instructor submits a grade change prior to the official grade-posting deadline. No grade changes will be made to default grades or unresolved "I" grades after the degree has been granted.

Recency of Work

The work for the master's degree must be completed within seven years from the first semester a student enrolls in an FSU graduate course that may be counted toward the graduate degree. If the master's degree is not completed within seven years from the first semester a student enrolls in an FSU graduate course that may be counted toward the graduate degree, and the program and/or Department Chair does not choose to approve an Extension of Time (EOT), then the student may no longer be enrolled in that program or at Florida State University.

Minimum Course Grades for Graduate Credit

Credit for graduate courses will only be given for courses that are passed with a grade of C- or higher. Courses in which grades of D or F are earned will not count for graduate credit in business programs. In addition, please note that all courses required to fulfill program requirements must be taken for a grade and cannot be taken on a Satisfactory/Unsatisfactory basis unless the required course is only offered on a Satisfactory/Unsatisfactory grading basis (such as Internship). Good academic standing for graduate students is a 3.000 GPA. To meet graduation requirements, you must successfully complete all required courses with passing grades (C- or better) and have a 3.000 GPA or higher at the time of graduation.

GRADUATE ACADEMIC RETENTION

GPA Dismissal

A graduate student whose cumulative GPA in the program falls below 3.000 at the end of a term will be considered not in good standing by the University and will be placed on academic probation. If a 3.000 cumulative GPA is not attained by the end of the next term of enrollment, the student will be placed on academic dismissal.

While your university GPA is calculated based on all graduate work at the university, the Wertheim College calculates your average GPA separately for each program in which you are enrolled. Academic status in your business degree program is based upon your program GPA, not your university overall graduate GPA.

Students on dismissal will not be permitted to register for graduate study. However, at the time of dismissal, the program director may petition the academic dean for consideration of special circumstances that will constitute justification for an exception to this regulation. Students who are subsequently reinstated for graduate enrollment are considered to be on "Dismissal Probation" and may have one term to increase their GPA to 3.000 or above. Under no circumstances will a student be allowed more than one additional term of probation after reinstatement.

Review Process for GPA Dismissal

The review procedure will be initiated by the Director of Graduate Advising at the end of each semester. The action taken will be based on the extent of the deficiency:

1. Dean's Hold – Once a student has been dismissed due to GPA deficiency, they will no longer be permitted to register for classes. In the event that the student is approved by the faculty director and Associate Dean for a one-time reinstatement, a Dean's Hold will be placed upon their registration after the advisor has assisted them in enrolling for one last term (called the "dismissal probation term".)
2. Dismissal Reinstatement Agreement – Students who have been approved for a one-time reinstatement must sign the Dismissal Reinstatement Agreement that will be provided to them by their advisor. The form contains the courses the student will take in the subsequent term, as well as the grades that must be earned to remediate the GPA and be returned to good academic standing. Students whose GPA is still below 3.000 after the dismissal probation term are permanently dismissed from the university.

Program Termination

Program terminations (dismissal for a reason other than GPA) are processed at the academic program/departmental level and may occur for a number of different reasons, including but not limited to:

- Inability to conduct research in a fashion appropriate with the accepted norms of a discipline,
- Inability to function within a team environment to the degree that it negatively affects the learning, practice and/or research of fellow graduate students,
- Demonstration of behavior that is not acceptable with the general community in which the student would be practicing should he or she graduate (typically clinical or school settings),
- Failure meeting one or more major milestone requirements.

Review Process for Program Termination

Step 1: A graduate student is identified by his/her academic program/department as not making sufficient progress towards the degree, failing to complete the degree within the specified time-period, or whose academic performance is substandard, regardless of GPA.

Step 2: The graduate student meets with his/her major professor and/or program director to develop a remediation plan for the incomplete degree requirement or scholarly/behavioral objectives.

- The department will provide a written remediation plan or written academic “warning” to the student.
- The remediation plan/academic warning will be developed by the department/program for the individual student and documented accordingly.
- The academic dean, or appropriate designee, will also be notified of the situation, the deficiencies, and the remediation steps presented to the student.

Step 3: A written letter must be sent to the graduate student being dismissed which specifies the following information:

- The termination reasons,
- Benchmarks missed,
- The fact that an academic hold will be placed on registration on registration and effective date/semester,
- Dismissal from the program constitutes dismissal from the University,
- Any limitations on future enrollment in courses offered by the department/college, should the student reapply to the university in a different program,
- Alternatives a student could request, e.g., graduating with a master’s instead of Ph.D. (assuming coursework and degree requirements are met),
- Timeline to complete specific coursework, if any,

- Notification of the right to appeal and information about how to do so, and
- A deadline for any appeal submittal.

Faculty Academic Judgment

Successful completion of coursework constituting the student's program of studies, comprehensive exam, master's project, or thesis does not guarantee continuance in a master's degree program or award of the master's degree. Faculty judgment of the academic performance of the student is inherent in the educational process in determining whether the student should continue to be enrolled or be awarded the master's degree, or whether admission into a higher-level degree program is warranted.

M.S. in BUSINESS ANALYTICS (MS-BA) PROGRAM OVERVIEW

Learn to manage and leverage big data.

Why should you consider an MS-BA degree?

- **HIGH INDUSTRY DEMAND:** Surging growth in digital information means businesses are seeking graduates who can transform this raw data into trusted analysis used to develop new financial strategies.
- **SOARING JOB GROWTH:** Fortune reports that by 2030, the number of positions demanding skills in business analytics is expected to increase by 25%, significantly outpacing the nation's average job growth. If these projections by the U.S. Bureau of Labor Statistics hold true, more than three new business analyst jobs will be created for every one post added to handle other business tasks.
- **STEM DESIGNATED:** Because our MS-BA qualifies as a Science, Technology, Engineering or Mathematics (STEM) degree, as defined by the U.S. Department of Education, students know they are gaining the priority technical and analytical skills employers seek to remain globally competitive. The STEM designation also allows eligible graduates on student visas to extend their work stay in the United States up to two years longer.

Admission into the MS-BA program occurs once a year, every summer semester. The program is designed so that a typical full-time student can complete the degree in 3 semesters.

The one-year Master of Science in Business Analytics degree program requires students to complete 33 credit hours, which is a combination of 9 core courses (27 credit hours), 1 elective course (3 credit hours), and 1 credit hour of professional development each semester (Summer, Fall, and Spring). Our program is robust and provides students with a rigorous foundation of machine learning, programming and optimization. Students entering the program should be committed to further improving their mathematical/statistical and programming training. This training will prepare students to be leaders in the analytics field or to apply to related Ph.D. programs. The courses in the program will make use of a variety of mathematical, statistical and programming tools. These tools include: (i) calculus and linear algebra, (ii) statistical methods (including regression and its extensions), and (iii) computer programming software (R, Python, C++, Java, etc.)

MAJOR COURSE REQUIREMENTS FOR M.S. BUSINESS ANALYTICS

Prerequisites

All applicants must have a bachelor's degree from a regionally accredited institution. Prerequisite coursework should provide a solid background in mathematics, statistics and computing. This would include: (1) at least one college-level course in calculus, (2) at least one college-level course in probability and statistics, and (3) at least one college-level course in computer programming using a high-level language such as Python, R, C++, etc. Previous coursework in business is not required, but all applicants are expected to have a general knowledge of economics, finance, accounting, statistics, calculus and management principles.

Major Requirements

The MS-BA degree program will require students to complete 33 credit hours, which is a combination of 9 core courses (27 credit hours), 1 elective course (3 credit hours), and 1 credit hour of professional development each semester (Summer, Fall, and Spring).

Core courses will include:

- ISM 5136 Data Analytics and Mining for Business
- ISM 5419 Fundamentals of Data Visualization
- ISM 5560 Data Management in Business Analytics
- ISM 5565 Foundational Concepts for Business Analytics
- ISM 5566 Forecasting, Revenue Management & Pricing
- ISM 5644 Programming for Analytics
- QMB 5616 Statistical Methods for Business Analytics
- QMB 5805 Mathematical Programming for Business Analytics
- ISM 5569 Business Analytics Capstone
- GEB 5087 Professional Development
- GEB 5088 Professional Development
- GEB 5089 Professional Development

Elective course options will include applications of analytical tools in specific business disciplines, such as marketing, human resources, operations, finance or real estate, including:

- ISM 5567 Supply Chain Analytics
- ISM 5525 Algorithms for Business Analytics
- ISM 5580 Healthcare Analytics
- FIT 5335 Fintech Innovations & Crypto
- GEB 5944 Graduate Internship

Program Schedule

Summer

QMB 5616 Statistical Methods for Business Analytics
ISM 5644 Programming for Analytics
GEB 5087 Professional Development (1 credit hour)

Fall

QMB 5805 Mathematical Programming for Business Analytics
ISM 5560 Data Management in Business Analytics
ISM 5565 Foundational Concepts for Business Analytics
ISM 5136 Data Analytics and Mining for Business
GEB 5088 Professional Development (1 credit hour)

Spring

ISM 5419 Fundamentals of Data Visualization
ISM 5566 Forecasting, Revenue Management & Pricing
ISM 5569 Business Analytics Capstone
GEB 5089 Professional Development (1 credit hour)

Plus one (1) of the following electives:

ISM 5567 Supply Chain Analytics
ISM 5525 Algorithms for Business Analytics
ISM 5580 Healthcare Analytics
GEB 5944 Graduate Internship

**Note: Program requirements are subject to change. Elective availability may vary from year to year.*

COURSE DESCRIPTIONS

GEB 5944 Graduate Internship

This internship offers a working and learning experience in the business industry. S/U grade only. 3 credit hours

ISM 5136 Data Analytics and Mining for Business

This course provides an in-depth examination of data analytics and machine learning models used to support complex data-driven decision-making. Students will explore the underlying algorithms, technical mechanics, and computational implementation of such models to extract actionable knowledge and business value from large-scale corporate data sets. 3 credit hours

ISM 5419 Fundamentals of Data Visualization

This course covers the tools and techniques needed to properly express the results of descriptive, predictive, and prescriptive analytical procedures. Students focus on identifying and applying the best methods and tools for a particular analytical question and dataset to produce a successful visualization. 3 credit hours

ISM 5525 Algorithms for Business Analytics

This course focuses on algorithms for business analytics. In this course, students will develop skills in forecasting, algorithms for smooth optimization, and algorithms for discrete optimization. 3 credit hours

ISM 5560 Data Management in Business Analytics

This course discusses various data related issues in business analytics and introduce the best practices, underlying principles, and emerging technologies in data management. The course specifically covers: foundational data management concepts; best practices in managing big data; and unstructured data management. 3 credit hours

ISM 5565 Foundational Concepts for Business Analytics

This course introduces the core concepts, methods, and applications of business analytics, equipping students with the skills to transform data into actionable insights. 3 credit hours

ISM 5566 Forecasting, Revenue Management & Pricing

This course examines quantitative methods for understanding and predicting customer demand and using that information to optimally plan capacity and pricing decisions. Students will also study core forecasting tools and learn how these models support operational and strategic decision making. 3 credit hours

ISM 5567 Supply Chain Analytics

This course examines the role that Business Analytics can play in the context of an organization's Operations and Supply Chain functions. The goal of this course is to develop critical skills in the management of Supply Chains. 3 credit hours

ISM 5569 Business Analytics Capstone

This course is to provide students with an advanced level of analytical skills that will enable them to examine business problems by developing models, analyzing alternatives, and recommending solutions using techniques and tools they have learned in previous Business Analytics courses. 3 credit hours

ISM 5644 Programming for Analytics

This course introduces students to the fundamentals of computer programming for business analytics, with a special emphasis placed on utilizing industry-standard coding practices for data science and analytics-related tasks. 3 credit hours

QMB 5616 Statistical Methods for Business Analytics

This course teaches students to address problems in factor analysis, cluster analysis, regression, and classification. Students will utilize methods such as calculus and linear algebra. 3 credit hours

QMB 5085 Mathematical Programming for Business Analytics. This course focuses on the formulation and solution of mathematical programming problems in business analytics. Students will utilize methods such as linear programming, quadratic programming, and integer programming. 3 credit hours

ISM 5580 Healthcare Analytics

This course equips students with essential skills to analyze and interpret population health data by applying healthcare analytics techniques. The course emphasizes the use of synthetic patient data, complemented by publicly available datasets, to help students develop a comprehensive understanding of population health dynamics. Students will learn to apply descriptive, predictive, and prescriptive analytics. 3 credit hours

FIT 5335 Fintech Innovations & Crypto

This course provides a discussion of the actively evolving field of financial technology (FinTech), focusing on critical areas such as blockchain technology, cryptocurrency, artificial intelligence (AI), and the impact of government regulations on digital innovations. 3 credit hours

GEB 5087 Professional Development Foundation

This course develops student career readiness through a comprehensive and systematic approach to career planning and job readiness. In this course, students cultivate a personalized professional brand, master job search strategies, and network effectively. Emphasizing a competency-driven approach, the curriculum adapts to industry trends, ensuring readiness for a dynamic job market and successful career transitions. 1 credit hour

GEB 5089 Professional Development Transition

This course focuses on career readiness through a comprehensive framework and systematic approach, bridging academic knowledge with professional application. In this course, students cultivate job search strategies, and learn techniques to network effectively. The course curriculum adapts to industry trends, ensuring student readiness for a dynamic job market and successful career transitions. 1 credit hour

GEB 5089 Professional Development

This course focuses on career readiness through a comprehensive framework and systematic approach, bridging academic knowledge with professional application. In this course, students cultivate job search strategies and learn techniques to network effectively. The course curriculum adapts to industry trends, ensuring student readiness for a dynamic job market and successful career transitions. 1 credit hour

FINANCIAL AID AND FUNDING

The Wertheim College awards a number of assistantships, fellowships, and scholarships to applicants with strong academic credentials. No duties are associated with the fellowships and scholarships other than the requirement to remain an enrolled student (no fewer than six credit hours) in good standing in the MS-BA program. Assistantships are a combination of biweekly pay and semesterly in-state tuition waivers and require the student to work 10 hours per week as a graduate research or teaching assistant. Assignments are made as research assistants or teaching assistants according to the current needs of the Department of Business Analytics, Information Systems, and Supply Chain.

Financial awards for the Master of Business Analytics program are normally awarded during the spring term before students begin the one-year program. Applicants interested in assistantship should respond in the affirmative on the application question that asks if financial assistance is requested. All such applicants will be reviewed for assistantships and offers will be made before the beginning of the first term.

UFF-GAU

The FSU UFF-GAU Collective Bargaining Agreement and subsequent Memoranda of Agreement set forth the terms and conditions that affect the employment of students who are supported on graduate assistantships. These documents can be found on the FSU Human Resources website: <https://hr.fsu.edu/sections/employee-labor-relations/collective-bargaining>