

# Business Administration, MBA STEM

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**Program Director: Andrew G. Meyer, Ph.D.**

MBA website (<https://www.marquette.edu/business/graduate/mba.php>)

The objective of the master of business administration (M.B.A.) program with specializations in Business and Managerial Analytics or Data Science and Artificial Intelligence at Marquette University is to provide students with a broad professional education in preparation for responsible managerial positions. The program is built upon the foundations of analytics, leadership, ethics, and strategy.

Emphases of the program includes an understanding of business problems and the development of managerial skills. The M.B.A. program is accredited by the Association for the Advancement of Collegiate Schools of Business (AACSB–International) and reflects the high standards and expectations of that accreditation.

The M.B.A. with specialization options in business and managerial analytics and in data science and artificial intelligence is STEM-designated and delivered in a flexible format with classes offered as a combination of on-campus, blended and online classes. The business and managerial analytics specialization is available in the fully-online M.B.A., whereas the data science and artificial intelligence specialization is not available in the fully-online M.B.A.

The M.B.A. program is delivered in a flexible format with classes offered as a combination of face-to-face, on-campus, hybrid or blended or online classes.

The M.B.A. program can be completed with 31.5 or 42 credit hours depending on academic background. Students who are waived from all business essentials courses and MBA 6010 Quantitative Analysis are required to complete the minimum 31.5 credits.

All waivers are reviewed at the time of admission so that students know the number of credits and which courses are required before starting the program. There is no option to test out or to place out of the business essentials based on a test or work experience, courses are waived only on formal, for-credit academic work completed within the last 10 years with a B or above from an accredited institution.

## Application Requirements

Application requirements and the online application link are available through the GSM website (<https://www.marquette.edu/business/graduate/mba.php>).

**Note:** Students may apply for regular degree, non-degree or temporary non-degree status. Non-degree applicants and temporary non-degree applicants must submit all required application materials, except the GMAT/GRE scores. Non-degree and temporary non-degree status are not available to international students. International applicants must apply for regular degree admission status.

Students are encouraged to complete all application materials and apply for degree status. Non-degree status and temporary non-degree status are valid for a limited number of semester(s) as approved by the program director. Students with non-degree or temporary non-degree status are not eligible to continue taking GSM classes beyond the time frame of the approved term(s) without degree admission. Typically, non-degree admission is not recommended in the M.B.A. program.

**Specializations:** Business and Managerial Analytics, Data Science and Artificial Intelligence

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This M.B.A. program can be completed with 31.5 - 42 credit hours depending on academic background. Students who are waived from all business essentials courses and MBA 6010 Quantitative Analysis are required to complete the minimum 31.5 credits.

All waivers are reviewed at the time of admission so that students know exactly which courses and number of credits are required before starting the program. There is no option to test out or to place out of the business essentials based on a test or work experience. Courses are waived only on formal, for-credit academic work completed within the last 10 years with a B or above from an accredited institution.

## Program Requirements

1. Business Essentials (9 credits)
2. Analytics (4.5 credits)
3. Ethics and Organizations (3 credits)
4. Strategy (6 credits)

5. Leadership (4.5 credits)
6. Electives (15 credits)

The program does not require a thesis, essay or comprehensive examination. Instead, MBA 6997 Strategic Management Capstone serves as the final integrating experience in the program. MBA 6997 may be taken only after completing a combination of 18 credits from Analytics, Ethics and Organizations, Strategy, Leadership and electives.

Code	Title	Hours
<b>Business Essentials <sup>1</sup></b>		
MBA 6040	Business Essentials - Accounting	1.5
MBA 6050	Business Essentials - Economics	1.5
MBA 6060	Business Essentials - Finance	1.5
MBA 6070	Business Essentials - Information Systems	1.5
MBA 6080	Business Essentials - Marketing	1.5
MBA 6090	Business Essentials - Operations and Supply Chain Management	1.5
<b>Analytics</b>		
MBA 6010	Quantitative Analysis <sup>1</sup>	1.5
MBA 6100	Business Analytics	3
<b>Ethics and Organizations</b>		
MBA 6120	Concepts for Ethical Business Practice	1.5
MBA 6130	Corporate Social Responsibility	1.5
<b>Strategy</b>		
MBA 6110	Strategic Management Introduction	3
MBA 6200	Enterprise Risk Management	1.5
MBA 6997	Strategic Management Capstone	1.5
<b>Leadership</b>		
MBA 6140	Leading People and Change	1.5
MBA 6150	Leading Innovation and Creativity	1.5
MBA 6160	Leadership Coaching and Development	1.5
<b>Electives <sup>2, 3</sup></b>		<b>15</b>
<b>Total Credit Hours:</b>		<b>42</b>

<sup>1</sup> The Business Essentials and MBA 6010 Quantitative Analysis courses represent the foundation of business. A student can be exempted from Business Essentials and/or MBA 6010 Quantitative Analysis course requirements if the student has recently completed equivalent course work, with satisfactory grades, as part of a degree program accredited by the AACSB–International or other regionally accredited program specifically recognized by the Graduate School of Management. Undergraduate courses would qualify as equivalent course work, if completed within the last 10 years. Courses that are waived reduce the total number of credits required to complete the degree.

<sup>2</sup> Data science and artificial intelligence specialization will fulfill 12 of the 15 elective credits required. The remaining three credits should be pursued in business.

<sup>3</sup> Students pursuing the data science and artificial intelligence specialization who are waived from 6 credits of MBA 6010 Quantitative Analysis, MBA 6050 Business Essentials - Economics, MBA 6060 Business Essentials - Finance, MBA 6070 Business Essentials - Information Systems and MBA 6090 Business Essentials - Operations and Supply Chain Management with no other waivers will need to complete 3 credits of a STEM-aligned M.B.A. elective to fulfill elective requirements.

## Specializations

Students pursuing the business and managerial analytics and/or data science and artificial intelligence specialization will be matriculated into the BUAS-MBA program plan aligned with these specializations. If a student adds a second specialization, the student will remain in the plan aligned with the BUAS-MBA specializations. If a student no longer wishes to pursue the business and managerial analytics and/or data science and AI specialization, they will be moved to the BUAD-MBA or BUAE-MBA plan aligned with their updated elective pursuits.

A specialization does not alter, in any way, the degree awarded. Specializations are noted on the student's official university transcript but not on the diploma. To earn a specialization, a student, in addition to meeting all requirements for the M.B.A. degree, must take at least 12 credits of course work from among the prescribed courses approved for the chosen specialization. The student must earn a grade of B or above in each of the prescribed courses and all courses applied toward a specialization must be taken at Marquette University. Specializations cannot be completed after the M.B.A. degree is awarded.

If a student pursues more than one specialization, 3 credit hours may count toward up to two specializations, as long as the same course is relevant to both specialization requirements. A second specialization does add additional courses beyond what is minimally required for the degree.

## Business and managerial analytics

Code	Title	Hours
<b>Required Courses</b>		
COSC 6520	Data Analytics	3
ECON 6114	R Programming	1
ECON 6116	SQL	1
ECON 6118	Python Programming	1
<b>Electives (Choose 3 courses from the following)</b>		<b>9</b>
ADPR 5350	Social Media Analytics and Measurement	
COMM 6002	Communication Research in Action	
COMM 6815	Digital Communication Strategies in Metrics	
ECON 6560	Applied Econometrics	
ECON 6561	Applied Time-Series Econometrics and Forecasting	
FINA 6175	FinTech: Foundations and Applications	
or FINA 5075	FinTech Foundations and Applications	
MSF 6560	Financial Derivatives	
HEAL 6830	Quality Improvement Science in Health Care	
HEAL 6835	Health Care Informatics, Technology and Professional Issues	
MARK 6130	Customer Relationship Management	
MARK 6160	Marketing Research	
MARK 6165	Marketing Analytics	
<b>Total Credit Hours:</b>		<b>15</b>

## Data Science and Artificial Intelligence

Code	Title	Hours
<b>Required Courses <sup>1</sup></b>		
COSC 5600	Fundamentals of Artificial Intelligence <sup>2</sup>	3
COSC 5610	Data Mining and Machine Learning	3
or COSC 6520	Data Analytics	
COSC 6570	Data at Scale	3
COSC 6820	Data Ethics	3
<b>Total Credit Hours:</b>		<b>12</b>

<sup>1</sup> Students waived from four of MBA 6010, MBA 6050, MBA 6060, MBA 6070 and MBA 6090 with no other waivers, need to complete their final M.B.A. elective credits through STEM-aligned course work. Examples of STEM electives include: ECON 6114 R Programming, ECON 6116 SQL, ECON 6118 Python Programming, INSY 5156 Privacy and Security, FINA 6111 Investments, FINA 6081 Investment Banking, FINA 6200 Advanced Financial Management, MARK 6130 Customer Relationship Management, and MARK 6160 Marketing Research. Students should consult with their adviser when selecting the STEM-aligned elective.

<sup>2</sup> Completion of COSC 5600 Fundamentals of Artificial Intelligence may require enrollment in a course section offered during business hours.

## MASTER'S DEGREE WITH A GRADUATE CERTIFICATE

If an M.B.A. student chooses to earn a Marquette graduate certificate, admission to both programs may be concurrent. The same courses may be used to satisfy the requirements of the master's program and certificate, as outlined in the University Bulletin for each program. Students are expected to be admitted into all programs they intend to complete, although course work completed prior to admission may be allowed to apply toward program requirements. Note that Marquette bulletin guidelines do not allow a student to complete a specialization and a certificate in the same area.

## Accelerated Bachelor's-Master's Degree Program

The accelerated degree program (ADP) allows students to earn both their master of business administration (M.B.A.) and an undergraduate degree from various Marquette University colleges within five years as long as they complete a minor in business or the following courses outlined below as part of their undergraduate studies.

Code	Title	Hours
<b>3 credits of Statistics from the following (transfer/test credits may also be accepted):</b>		
COMM 1700	Communication Statistics and Analysis	
MATH 1700	Modern Elementary Statistics	
MATH 1700H	Honors Modern Elementary Statistics	
MATH 4710	Mathematical Statistics	
MATH 4720	Statistical Methods	
MATH 4740	Biostatistical Methods and Models	
PSYC 2001H	Honors Psychological Measurements and Statistics	
BUAD 1560	Applied Statistics	
MEEN 3426	Engineering Statistics	
<b>Courses aligned with Business Essentials waivers include:</b>		
BUAD 2100	Accounting and Finance Fundamentals for Non-Business Majors (or ACCO 1030 and ACCO 1031)	
ACCO 1030	Principles of Financial Accounting (completed with ACCO 1031)	
ACCO 1031	Principles of Managerial Accounting (completed with ACCO 1030)	
ECON 1001	Introduction to Economics (or ECON 1103 and ECON 1104)	
ECON 1103	Principles of Microeconomics (completed with ECON 1104)	
ECON 1104	Principles of Macroeconomics (completed with ECON 1103)	
FINA 3001	Introduction to Financial Management	
INSY 3001	Introduction to Information Systems	
MARK 3001	Introduction to Marketing	
OSCM 3001	Operations and Supply Chain Management	

In addition to completing courses associated with Business Essentials course waivers, undergraduate students may begin their graduate work as early as their junior year and complete 3-9 credits of graduate-level course work. ~~These graduate courses count toward both the undergraduate and graduate degrees. A maximum of 6 credits of 5000-level course work transfers to the M.B.A.~~ Should a student be denied admission to the M.B.A. program, the courses are counted toward the undergraduate degree only. A minimum grade of B is required for courses taken as an undergraduate student for graduate credit to apply toward graduate program requirements. Upon completion of the first term as a full-time master's candidate, the student must petition the appropriate Graduate School of Management program director to transfer the courses taken as an undergraduate to the master's degree.

To be considered for admission to the accelerated degree program, applicants must formally apply to the Graduate School of Management during their junior or senior year at Marquette University, complete all application requirements, and indicate on the application that they are applying for the ADP.

For detailed information, contact the Graduate School of Management at (414) 288-7145 or visit the website at [businessmarquette.edu/academics/mba](https://businessmarquette.edu/academics/mba).

## University Policies

- Academic Censure - Graduate School of Management (<https://bulletin.marquette.edu/policies/academic-censure/management/>)
- Academic Integrity (<https://bulletin.marquette.edu/policies/academic-integrity/>)
- Academic Misconduct (<https://bulletin.marquette.edu/policies/academic-misconduct-policy/>)
- Academic Program Definitions (<https://bulletin.marquette.edu/policies/academic-programs-defined/>)
- Accelerated Degree Programs (<https://bulletin.marquette.edu/policies/accelerated-degree-programs/>)
- Attendance - Graduate School of Management (<https://bulletin.marquette.edu/policies/attendance/management/>)
- Awarding Diplomas and Certificates (<https://bulletin.marquette.edu/policies/awarding-diplomas-certificates/>)
- Background Checks, Drug Testing (<https://bulletin.marquette.edu/policies/background-checks-drug-testing/>)
- Class Rank (<https://bulletin.marquette.edu/policies/class-rank/>)
- Commencement (<https://bulletin.marquette.edu/policies/commencement/>)
- Course Levels (<https://bulletin.marquette.edu/policies/course-levels/>)
- Credit Hour (<https://bulletin.marquette.edu/policies/credit/>)
- Credit Load - Graduate School of Management (<https://bulletin.marquette.edu/policies/credit-load/management/>)
- Faculty Grading (<https://bulletin.marquette.edu/policies/faculty-grading/>)
- Family Education Rights and Privacy Act-FERPA (<https://bulletin.marquette.edu/policies/ferpa/>)
- Grade Appeals (<https://bulletin.marquette.edu/policies/grade-appeals/>)
- Grading System - Graduate School and Graduate School of Management (<https://bulletin.marquette.edu/policies/grading-system/graduate-management/>)
- Graduation - Graduate School of Management (<https://bulletin.marquette.edu/policies/graduation/management/>)

- Immunization and Tuberculosis Screening Requirements (<https://bulletin.marquette.edu/policies/immunization-and-tuberculosis-screening/>)
- Last Date of Attendance/Activity (<https://bulletin.marquette.edu/policies/last-dateof-attendance-activity/>)
- Military Call to Active Duty or Training (<https://bulletin.marquette.edu/policies/militarycall-active-duty-training/>)
- Registration - Graduate School of Management (<https://bulletin.marquette.edu/policies/registration/management/>)
- Repeated Courses - Graduate School of Management (<https://bulletin.marquette.edu/policies/repeated-courses/management/>)
- Student Consumer Complaints (<https://bulletin.marquette.edu/policies/student-complaints/>)
- Student Data Use and Privacy (<https://bulletin.marquette.edu/policies/student-data-use-privacy/>)
- Transcripts-Official (<https://bulletin.marquette.edu/policies/transcripts-official/>)
- Transfer Course Credit - Graduate School of Management (<https://bulletin.marquette.edu/policies/transfer-course-credit-policy/management/>)
- Withdrawal - Graduate School of Management (<https://bulletin.marquette.edu/policies/withdrawals/management/>)

## Graduate School of Management Policies

- Academic Programs Overview - Graduate School of Management (<https://bulletin.marquette.edu/business-administration/policies/academic-programs-overview/>)
- Academic Review (<https://bulletin.marquette.edu/business-administration/policies/academic-review/>)
- Advising (<https://bulletin.marquette.edu/business-administration/policies/advising/>)
- Appeals (<https://bulletin.marquette.edu/business-administration/policies/appeals/>)
- Assistantships and Fellowships (<https://bulletin.marquette.edu/business-administration/policies/assistantships-fellowships/>)
- Certificate Concurrent Enrollment (<https://bulletin.marquette.edu/business-administration/policies/certificate-concurrent-enrollment/>)
- College of Business Administration Policies (<https://bulletin.marquette.edu/business-administration/policies/>)
- Communication (<https://bulletin.marquette.edu/business-administration/policies/communication/>)
- Conduct (<https://bulletin.marquette.edu/business-administration/policies/conduct/>)
- Confidentiality of Proprietary Information (<https://bulletin.marquette.edu/business-administration/policies/confidentiality-proprietary-information/>)
- Continuous Enrollment (<https://bulletin.marquette.edu/business-administration/policies/continuous-enrollment/>)
- Courses and Prerequisites (<https://bulletin.marquette.edu/business-administration/policies/courses-prerequisites/>)
- Cross-listed Courses (<https://bulletin.marquette.edu/business-administration/policies/cross-listed-courses/>)
- Deadlines (<https://bulletin.marquette.edu/business-administration/policies/deadlines/>)
- Dual/Joint Programs of Study (<https://bulletin.marquette.edu/business-administration/policies/dual-joint-programs/>)
- Graduate Credit (<https://bulletin.marquette.edu/business-administration/policies/graduate-credit/>)
- Independent Study Courses (<https://bulletin.marquette.edu/business-administration/policies/independent-study-courses/>)
- Intellectual Property (<https://bulletin.marquette.edu/business-administration/policies/intellectual-property/>)
- Inter-University Visitation (<https://bulletin.marquette.edu/business-administration/policies/inter-university-visitation/>)
- Law Student Consent to Take a GSM Course (<https://bulletin.marquette.edu/business-administration/policies/law-student-consent-take-gsm-course/>)
- Prior Learning Assessment (<https://bulletin.marquette.edu/business-administration/policies/prior-learning-assessment/>)
- Temporary Withdrawal from a Graduate Program (<https://bulletin.marquette.edu/business-administration/policies/temporary-withdrawal/>)
- Time Limitations (<https://bulletin.marquette.edu/business-administration/policies/time-limitations/>)
- Undergraduate Students in Graduate Courses (<https://bulletin.marquette.edu/business-administration/policies/undergraduate-students-in-graduate-courses/>)