# **Business and Managerial Analytics, Certificate**

#### Program Director: Scott Rex

Business and Managerial Analytics website (https://www.marquette.edu/business/graduate/analytics-certificate.php)

## **Degree Offered**

Certificate

## **Program description**

The graduate certificate in business and managerial analytics is designed to develop the knowledge and skills to enable employees to leverage an organization's data and to utilize it in business decision making and risk reduction. The Marquette University Graduate School of Management (GSM) focuses on a deep understanding of the practice and use of analytics in the business environment: how to understand, frame and solve real world business problems across business disciplines. The GSM certificate gives students the tools and knowledge to make informed business decisions. This certificate prepares students to assemble the appropriate information and analytics tools needed to address a specific business problem, identify appropriate data sources and acquire required data, prepare and organize the data for analysis, and interpret appropriate analytical methods to address a business problem using descriptive, predictive and/or prescriptive analytics.

# **Prerequisites for Admission**

Applicants must hold a baccalaureate degree, or its academic equivalent, from an accredited college or university. The undergraduate background must be appropriate to the chosen course of study. Applicants should have a minimum cumulative grade point average of 2.750 (on a scale of 4.000) in their undergraduate course work.

Applicants need to have completed a college-level statistics course with content the equivalent of the GSM statistics foundations course (MBA 6010 Quantitative Analysis). An applicant without college level statistics may seek temporary enrollment in the GSM to complete MBA 6010 before pursuing admission to the certificate program. The marketing, finance and economics electives within the certificate curriculum require foundational knowledge outlined below. Students interested in the marketing, finance and/or economics electives without the associated prerequisite course work may complete foundational courses as part of enrollment in the certificate program with the understanding that foundational courses do not fulfill certificate requirements.

- Marketing: completion of a college-level introduction to marketing course with a B or above.
- Finance: completion of a college-level introduction to finance course with a B or above.
- · Economics: completion of intermediate-level macroeconomic and microeconomic courses.

No programming experience is required.

# **Application Requirements**

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

## **Business and Managerial Analytics Certificate**

This business and managerial analytics certificate is a 14- to 15-credit program. Within the application process, students may be considered for a 12credit program through the prior completion of up to 3 credits within the required course list below or a course approved by the certificate's director of graduate studies.

Required courses:

Code	Title	Hours
Platform Courses		6
MBA 6100	Business Analytics	
COSC 6520	Data Analytics	
Skills Courses <sup>1</sup>		2-3
ECON 6114	R Programming	
ECON 6116	SQL	
ECON 6118	Python Programming	
Electives		6
MARK 6130	Customer Relationship Management	
MARK 6160	Marketing Research	
ECON 6116 ECON 6118 Electives MARK 6130	SQL Python Programming Customer Relationship Management	

MARK 6165	Marketing Analytics
ECON 6560	Applied Econometrics
ECON 6561	Applied Time-Series Econometrics and Forecasting
MSF 6560	Financial Derivatives
MSF 6575	FinTech Foundations and Applications
or FINA 6175	FinTech: Foundations and Applications
or FINA 5075	FinTech Foundations and Applications
HEAL 6830	Quality Improvement Science in Health Care
HEAL 6835	Health Care Informatics, Technology and Professional Issues
ADPR 5350	Social Media Analytics and Measurement
COMM 6002	Communication Research in Action
COMM 6815	Digital Communication Strategies in Metrics

14-15

#### **Total Credit Hours:**

1

In consultation with the director of the BMAN certificate program prior to the start of the program.

#### **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/)
- Conferral of Degrees and Certificates (https://bulletin.marquette.edu/policies/conferral-degrees-certificates/)
- · 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/graduatemanagement/)
- 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 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/academicprograms-overview/)
- Academic Review (https://bulletin.marquette.edu/business-administration/policies/academic-review/)
- Accelerated Degree Program (ADP) (https://bulletin.marquette.edu/business-administration/policies/accelerated-degree-program/)

- · Advising (https://bulletin.marquette.edu/business-administration/policies/advising/)
- Appeals (https://bulletin.marquette.edu/business-administration/policies/appeals/)
- Assistanships and Fellowships (https://bulletin.marquette.edu/business-administration/policies/assistanships-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/)
- 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/)
- Undergradaute Students in Graduate Courses (https://bulletin.marquette.edu/business-administration/policies/undergraduate-students-in-graduatecourses/)