

# MASTER OF SCIENCE IN THE FIELD OF BUSINESS ANALYTICS (STEM)

Initiated in 2013, the GW School of Business master of science in business analytics program trains students to master real-world analytics and consulting skills for effective data-driven decision-making. Since its inception, the program has worked with leading analytics organizations—including IBM and Deloitte—to develop and continue to enhance a rigorous and balanced curriculum that encompasses the technical, quantitative, and qualitative skills for effectively developing, deploying, and communicating business analytics solutions.

The curriculum is a distinctive blend of analytics methods (descriptive, predictive, and prescriptive); applications (elective courses in analytics applied to a specific functional area or industry); soft skills (consulting, communication, and team dynamics); and technology (SAS tools, R, Python, SQL, no-SQL and other current and trending technologies). The culmination of the course of study is a practicum project in which students work with a team of peers to apply their newly acquired expertise to real-world business challenges sponsored by our partner industry organizations.

The program closely collaborates with its advisory group of leading analytics organizations (such as IBM, Deloitte, SAS, Accenture, MITRE, and Attain) on the development and overall growth of the program, assisting students with their practicum projects, and providing career development and networking opportunities.

Visit the program website (<https://business.gwu.edu/academics/programs/masters/ms-in-business-analytics/>) for additional information.

## ADMISSIONS

Admission deadline:	Fall: Round 1 - November 15; Round 2 - January 15; Round 3 - March 15; Round 4 - May 1; After May 1 - Rolling
Application form:	Our application process for designated degree and certificate programs is through a secure, electronic submission process. The application and uploaded electronic documents will be submitted directly to the Office of Graduate Admissions via a secure, online process.
Current resumé:	Please list your entire work history including start and stop dates. You can upload the resume in the Employment History section of the online application form.

Statement of purpose:	A Statement of Purpose is required for your application. Be sure to check your academic program of interest for any specific requirements regarding the statement. If there are no specific program requirements, your statement of approximately 500 words should address your interests, academic and professional objectives, and proposed topic(s) of graduate study. Please review the academic program pages for any additional guidelines for the statement of purpose.
Prior academic records:	Applicants are required to upload and submit copies of transcripts from all undergraduate and graduate institutions attended, whether or not the program was completed or the credit appears as a transfer credit on another transcript.  We consider these uploaded transcripts to be “unofficial” as they are submitted by the applicant. Applicants who receive an offer of admission will be required at that time of enrollment to submit official final transcripts. An acceptable transcript is a copy of an official transcript produced by the institution.  If submitting transcripts from a foreign institution, please reference the International Student Requirements section for detailed information on requirements.
Letters of recommendation:	Two official letters of recommendation are required. The recommendations must be from an individual in a position to appraise the applicant’s potential for graduate study (i.e. Manager, Professor, Mentor or etc.). Some programs have specific requirements for recommendation providers.
Standardized test scores:	Some departments and programs require applicants to take standardized entrance examinations such as GRE (institution code: 5246) or GMAT (institution code: QK4-4F-40) scores. Please refer to your academic program for examination requirements and waiver information.
English proficiency:	All applicants are required to demonstrate a level of proficiency in the English language sufficient to meet the admission requirement of the School of Business. Please reference our International Student Requirements for more details.
Supplemental application data:	Some departments and programs require the completion of supplemental data or submission of materials such as certificates or writing samples. Review the application requirements of your program of interest to determine if supplemental questions and/or materials are required.

International applicants only: Applicants who have not completed a post-secondary degree from a U.S. institution are required to submit TOEFL, IELTS, PTE Academic, or the Duolingo English Test scores to be considered for admission. Scores may not be more than two years old. To ensure TOEFL scores are sent to GW, use institutional code 5246. An institutional code is not required to send IELTS or PTE scores to GW.

PLEASE NOTE that the minimum English language test scores required by this program are:

- IELTS: Score of 6.0 overall with no individual score below 5.0.

- TOEFL: Score of 80 on the Internet exam (iBT) or 550 on the paper exam

- Duolingo English Test: Score of 110 or higher. Scores should be sent to GW School of Business.

- PTE Academic: Score of 53 or higher on the PTE Academic Test.

Supporting documents not submitted online should be mailed to:

The GW School of Business  
Attn: Graduate Admissions  
2201 G Street, NW, Suite 550  
Washington, DC 20052

Contact for questions:

business@gwu.edu  
202-994-1212)

Hours: 9 am to 5 pm, Monday through Friday

Visit the School of Business website (<https://business.gwu.edu/graduate-applications/>) for additional admissions information.

## REQUIREMENTS

The following requirements must be fulfilled: 30 credits, including 21 credits in required courses and 9 credits in elective courses.

Code	Title	Credits
<b>Required</b>		
DNSC 6303	Programming for Analytics	0, 1.5
DNSC 6305	Data Management for Analytics	0,3
DNSC 6306	Decision and Risk Analytics	0,1.5
DNSC 6307	Optimization I	0, 1.5
DNSC 6308	Optimization II	0, 1.5
DNSC 6311	Stochastic Foundation: Probability Models	0, 1.5

DNSC 6312	Statistics for Analytics I	0, 1.5
DNSC 6313	Statistics for Analytics II	0, 1.5
DNSC 6314	Machine Learning I	0, 1.5
DNSC 6315	Machine Learning II	0, 1.5
DNSC 6317	Business Analytics Practicum	0, 3
DNSC 6330	Responsible Machine Learning	0, 1.5

### Electives

9 credits in elective courses selected from the following:

DNSC 6280	Supply Chain Analytics	0,3
DNSC 6290	Special Topics	0-3
DNSC 6319	Time Series Forecasting for Analytics	0, 3
DNSC 6320	Pricing and Revenue Management	0, 1.5
DNSC 6321	Social Network Analytics	0, 1.5
DNSC 6323	Visualization for Analytics	0, 1.5
DNSC 6325	Business Process Simulation	0, 1.5
DNSC 6327	Sports Analytics	0, 1.5
DNSC 6331	Customer Analytics	1.5
IBUS 6101	Big Data for International Business	3

## COMBINED PROGRAMS

### Combined programs

- Dual Master of Business Administration and Master of Science in the field of business analytics (<http://bulletin.gwu.edu/business/dual-mba-and-business-analytics-ms/>)
- Dual Master of Business Administration (STEM) and Master of Science in the field of business analytics (<http://bulletin.gwu.edu/business/dual-mba-stem-and-business-analytics-ms/>)