MS in Business Analytics

Admission

To be admitted to the STEM-designated MSBA program, an applicant must:

1. Possess an undergraduate degree in business, engineering, science or related field.
2. Have a minimum cumulative GPA of 3.000 (out of 4.000) in their undergraduate degree and submit clear copies of your transcript(s).
3. Submit a personal statement that clearly states the applicant's reason for seeking admission to the program (500 words maximum).
4. Submit a professional resume.
5. Meet the minimum TOEFL and IELTS requirements set by the WSU Graduate School (only for students with English as a second language).

International applicants needing an F1 visa must also provide documentation for financial support.

Application Deadlines
- Fall Admission: March 1
- Spring Admission: September 1
- Summer Admission: no admission

Space in this program is limited. Applicants must complete all required application material by the priority deadline listed above for the semester in which they desire to enroll. Not completing and submitting the required materials by the semester deadline will prevent them from being considered for admission for that semester. Consideration of candidates will continue until the program is full.

If admitted to the program, international students must arrive early in the USA before the semester starts so they can clear their international holds and enroll in classes in a timely fashion. Classes start on time and fill up quickly, so late arrivals may not be able to enroll in the allowable number of classes as per their visa regulations.

Program Requirements

The program is designed to attract a wide range of domestic and international professionals. The curriculum focuses on developing contemporary competencies via innovative hands-on activities and industry practices. To serve the needs of professionals in the field, the MS in business analytics program offers two tracks— management and data science:

- **Management Track** focuses on developing capabilities and mastery in leading analytics initiatives.
- **Data Science Track** aims to impart mastery in use of innovative tools and techniques in data analytics.

The program is a 30-credit-hour program. Students are required to complete eight required courses (24 credit hours) and two elective courses (6 credit hours) from an approved list.

Prerequisite Course

All students admitted to the MSBA program must have a statistics foundation course from their previous studies or must take the following course in their first semester when they enroll:

- ECON 231 Introductory Business Statistics

Substitute for Required Courses

There are two required MSBA courses, see below, that may be substituted for elective courses under the following conditions:

- BSAN/ ECON 710 Python Programming for Business: This course can be substituted for an elective if students took an equivalent 3 credit hour course in their previous studies.
- BSAN 810 Business Acumen for Technical Professionals: This course will be substituted for an elective if students have an undergraduate degree in business or MBA from a U.S. accredited school.

Substitutions are granted by the program director in the first semester when students enroll and upon showing their official transcript during orientation. This substitution will also be reflected on the student's Plan of Study.

MS in Business Analytics (MSBA) – Management Track

Course	Title	Hours
Required Courses (24 credit hours)		
BSAN/ECON 710	Python Programming for Business	3
BSAN 810	Business Acumen for Technical Professionals	3
BSAN 775	Introduction to Business Analytics	3
BSAN 734	Introduction to Data Mining and Machine Learning	3
BSAN 875	Advanced Business Analytics	3
BSAN 885	Business Analytics Capstone	3
BSAN/MIS 750	Data Visualization	3
ECON 803	Quantitative Analysis of Business Conditions and Forecasting	3
or IME 880Y	Forecasting and Analytics	
Electives (6 credit hours)		
Select 6 credit hours from the following		6
BSAN/DS 760	ERP: Enterprise Resource Planning	
BSAN 735	Advanced Machine Learning and Deep Learning	
MIS 612	Fundamentals of Cloud Computing	
MIS 884	Database Planning & Management	
or MIS 600	Database Management Systems	
FIN 790A	Finance Analytics: Contemporary and Traditional Topics	
FIN 865	Advanced Investment Analysis and Portfolio Management	
DS 755	Project Management	
CS 746	Perspectives on Data Science	
IME 883	Supply Chain Analytics	
SMGT 800	Analytics and Decision Making In Sport	
MATH 746	Introduction to Data Analytics	
or MATH 646	Introduction to Mathematical Data Analysis	
MKT 803	Marketing Analysis	
or MGMT 803	Business Decision Making and Analysis	
HRM 803	Human Resource Analytics	

	Any course with program director consent	
Total Credit Hours		**30**

MS in Business Analytics (MSBA) – *Data Science Track*

Course	Title	Hours
Required Courses (24 credit hours)		
BSAN/ECON 710	Python Programming for Business	3
BSAN 810	Business Acumen for Technical Professionals	3
BSAN 775	Introduction to Business Analytics	3
BSAN 734	Introduction to Data Mining and Machine Learning	3
BSAN 735	Advanced Machine Learning and Deep Learning	3
BSAN 885	Business Analytics Capstone	3
MATH 646	Introduction to Mathematical Data Analysis	3
or MATH 746	Introduction to Data Analytics	
CS 746	Perspectives on Data Science	3
Electives (6 credit hours)		
Select 6 credit hours from the following		6
BSAN/DS 760	ERP: Enterprise Resource Planning	
BSAN/MIS 750	Data Visualization	
BSAN 875	Advanced Business Analytics	
MIS 884	Database Planning & Management	
or MIS 600	Database Management Systems	
MIS 612	Fundamentals of Cloud Computing	
FIN 790A	Finance Analytics: Contemporary and Traditional Topics	
FIN 865	Advanced Investment Analysis and Portfolio Management	
IME 780AN	Big Data Analytics in Engineering	
IME 780AP	Neural Networks and Machine Learning	
IME 775	Computer Integrated Manufacturing	
MKT 803	Marketing Analysis	
ECON 803	Quantitative Analysis of Business Conditions and Forecasting	
or IME 880Y	Forecasting and Analytics	
Any course with program director consent		
Total Credit Hours		**30**

Applied Learning

Students in the Master of Science in business analytics program are required to complete an applied learning or research experience to graduate from the program. This requirement can be met by completion of BSAN 885 Business Analytics Capstone.