

M.S. in Business Analytics and Data Science¹ (MSBAnDS) for Full Time² Students From Fall 2019

The Master of Science in Business Analytics and Data Science (MSBAnDS) degree offers hands-on application of analytics and data science in a multi-platform environment that includes exposure to **SAS**® tools as well as other tools and programming languages such as Python, R, SQL, Tableau, Google Tensor Flow, etc. Additionally, the program places a strong emphasis on soft skills and business acumen development. The table below shows the approved core and elective OSU courses in for the full time program. Full time students must obtain **at least 37 credit hours (22 core and 15 elective hours)** to graduate. Beyond these OSU courses, full time students are **required** to attend several boot camps and special trainings for free (check with program director/advisor).

Required OSU Courses (Core)	Credit Hours
Fall – Year 1	
BAN 5733: Descriptive Business Analytics	3
MSIS 5503: Statistics for Data Science	3
MSIS 5600: Programming for Data Science & Analytics	3
BAN 5560: Research and Communications Seminar I	1
Spring – Year 1	
BAN 5743: Predictive Business Analytics	3
MSIS 5633: Business Intelligence Tools & Techniques	3
BAN 5560: Research and Communications Seminar II	1
Summer – Year 1	
BAN 5400: Practicum (internship)	2
Fall – Year 2	
BAN 5753: Advanced Business Analytics	3
Total Number of Required Hours	22

Electives (15 hours)

Students may specialize in any **option** (below) or, mix-and-match any approved courses to satisfy 15 hours of elective requirements.

Marketing Analytics Option	Credit Hours
Core Courses (6 hours)	
MKTG 5253 Advanced SAS Programming	3
BAN 5763 Adv. Marketing Research Analytics	3
Electives (6 hours)	
MKTG 5133 Marketing Management	3
BAN 5551 Optimization in Marketing Analytics	1
BAN 5561 Customer LTV models in marketing Analytics	1
BAN 5511 Web Analytics and Digital Marketing	
BAN 5521 GIS Applications in Marketing Analytics	
ACCT 5183 MBA Financial Reporting	
Other courses as approved by program director	

Advanced Data Science Option	Credit Hours
Core Courses (6 hours)	
MSIS 5223 Advanced R/Python	3
MSIS 5663 Data Warehousing	3
Electives (6 hours)	
MSIS 5303 Prescriptive Analytics	3
MSIS 5683 Big Data Analytics Technologies	3
MSIS 5713 Scripting	3
MSIS 5900 Advanced Topics	3
Other courses as approved by program director	

Health Analytics Option	Credit Hours
Core Courses (6 hours)	
HCA 5013 Survey of Health Care Admin	3
MSIS 5673 Descriptive Analytics and Visualization	3
Electives (6 hours)	
MSIS 5303 Prescriptive Analytics	3
MSIS 5663 Data Warehousing	3
MSIS 5683 Big Data Analytics Technologies	3
Other courses as approved by program director	

Cybersecurity Analytics Option	Credit Hours
Core Courses (6 hours)	
MSIS 5213 Information Assurance Management	3
MSIS 5773 Upper Layers of Telecom Systems	3
Electives (6 hours)	
MSIS 5243 Information Technology Forensics	3
MSIS 5713 Scripting Essentials	3
MSIS 5663 Data Warehousing	3
Other courses as approved by program director	

Other Approved General Electives	Credit Hours
MKTG 5243: Base SAS programming for Database Marketing	3
FIN 5013: Business Finance	3
EEE 5863: CIE Scholar Practicum	3
ECON 5113: Managerial Economics	3
STAT 4043 :Applied Regression (must enroll for graduate credit)	3
MSIS 5303: Prescriptive Analytics	3
MSIS 5643: Advanced Database Management Systems	3

¹Name change from MSBAN to MSBANdS is pending to internal approval.

²**Part-time (online learning)** students must obtain at least 33 credit hours. They are **not** required to complete BAN5560 (I and II) and BAN 5400. Online students (working professionals) are *strongly advised* to start with only 1 course in their first semester (BAN 5733) to understand time commitment needed to successfully complete analytics graduate courses. They can take more than 1 course per semester after their first semester. Before enrolling in any course, work with your academic advisor (call 405 744 5192) to set up a plan of study.