



UMBC
AN HONORS UNIVERSITY IN MARYLAND

**DATA SCIENCE
GRADUATE PROGRAM**

Master of Professional Studies and Graduate Certificate: Data Science

General Information

Student Name: _____
 Admission Date: _____ Projected Graduation Date: _____
NOTE: This form serves as unofficial guidance in planning your program. In coordination with the Program Director you may edit or modify your desired courses (where possible & appropriate) at any point while at UMBC.

Academic Plans and Record (Program requires 10 courses, 30 credits)

Course	Course Title	Semester Planned/Completed
Required courses for Data Science - (21 credits)		
DATA 601*	Introduction to Data Science**	
DATA 602*	Introduction to Data Analysis and Machine Learning**	
DATA 603*	Platforms for Big Data Processing	
DATA 604*	Data Management	
ENGM 652	Management, Leadership and Communication	
DATA 605	Ethical and Legal Issues in Data Science	
DATA 606	Capstone in Data Science	
Pathways Courses - Select 3 Courses (9 credits)		
Spatial Analytics (in collaboration with Department of Geography and Environmental Science)		
GES 773	GIS Modeling	
GES 773	Spatial Analysis	
GES 773	Visualization and Presentation	
Data Science (in collaboration with Department of Information Systems)		
IS 721	Semi-Structured Data Management	
IS 774	Systems and Information Integration	
IS 778	Data Warehousing and Data Mining	
Project Management (in collaboration with the College of Engineering and Information Technology)		
ENGM 650	Project Management	
ENGM 661	Leading Virtual/Global Teams	
ENGM 662	Advanced Project Management	
Management Science (in collaboration with the College of Engineering and Information Technology)		
ENGM 650 - 690	Choose one of the ENGM courses	
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All other course electives or substitutions must be approved by the GPD. For data course descriptions please visit: datascience.umbc.edu. For descriptions of other courses (e.g. CMSC, CMPE), please visit the website of the respective department. Some courses may have prerequisites; consult the specific department or instructor for further information. Up to six (6) relevant credits may be transferred into the MPS provided they were not applied toward another earned graduate degree. Contact the GPD for course transfer information and applicability. For class schedules please visit: datascience.umbc.edu

* Indicates courses needed for Data Science Certificate.
 ** Must be taken in st semester

Students may choose to complete a certificate by itself or they may complete a certificate and then later complete the master's degree. If a student is accepted into the M.P.S.: Data Science program, certificate courses count toward that degree.

Note: The Graduate School has a "continuous registration" policy which states you must register each fall and spring semester until you have completed your program of study. If you cannot register but wish to continue in your program you must submit a Leave of Absence (LOA) form to the program. Failure to enroll after two consecutive semesters of LOA, may result in your enrollment being discontinued. You may have to reapply to the Graduate School to continue in the program. (<https://gradschool.umbc.edu/students/policies/registration/>)