Data Analytics & Applications

Contact: Dorris Scott
Phone: 314-935-5498
Email: d.scott@wustl.edu
Website: https://caps.wustl.edu/items/mdaa/

Degree Requirements

The Master of Data Analytics & Applications program requires the successful completion of 30 units of graduate course work, including 21 units of required core courses and 9 units of electives. New students without evidence of math and programming proficiency will be required to take 6 units of bridge courses.*

Required Courses: 21 units

Code	Title	Units
CAPS-DATASTUDIES 5025	Enterprise Data Management	3
CAPS-DATASTUDIES 5030	Analytics Applications	3
CAPS-DATASTUDIES	Applied Data Science for Practitioners (new course coming soon!)	3
CAPS-DATASTUDIES 5035	Data Engineering Foundations	3
CAPS-DATASTUDIES 5013	Data Visualization and Storytelling	3
CAPS-DATASTUDIES 5300	Introduction to Relational Databases and SQL Programming	3
CAPS-DATASTUDIES 5040	Applied Machine Learning	3
Total Units		**21**

Elective Courses: 9 units

Choose from options such as the following:

Code	Title	Units
CAPS-DATASTUDIES	Applied Natural Language Processing (new course coming soon!)	3
CAPS-DATASTUDIES 5045	Applications of Deep Neural Networks	3
CAPS-DATASTUDIES	Applied Simulation Modeling (new course coming soon!)	3
CAPS-DATASTUDIES	Architectural Data Analytics and Applications (new course coming soon!)	3
CAPS-DATASTUDIES	Special Topics in Data Analytics and Applications (topic, # varies)	3
CAPS-DATASTUDIES	Applied Research Study	

This program is offered fully online. Students entering the U.S. on an F-1 or J-1 Visa must enroll in a program full time. F-1 students are only permitted to enroll in one online course per semester and J-1 students may only enroll in non-credit online courses that do not count toward their degree program. WashU Continuing & Professional Studies (CAPS) cannot guarantee face-to-face enrollment options each semester of full time enrollment, therefore cannot issue an I-20 or DS 2019 to F-1 and J-1 students for this program. If you are an F-1 or J-1 student and wish to enroll in a CAPS program while here on a Visa, please contact our recruitment team to discuss your options for face-to-face program enrollment. F-1 and J-1 students should not enroll in online courses or programs without first consulting the university's Office for International Students and Scholars (OISS).

* Proficiency in 1) introductory statistics and linear algebra and 2) basic programming is required for admittance into the program. There are two introductory bridge courses covering these subject areas. Students who have earned a 3.0 GPA or better in introductory statistics and linear algebra and a programming course can have the two bridge courses waived.

1. Foundations of Programming for Data Analytics & Applications (CAPS-DATASTUDIES 5001)
   a. Students with proficiency in Python may have the requirement to take Foundations of Programming for Data Analytics & Applications waived. Proficiency is established with a B or better in an introductory Python programming course or relevant work experience (as evaluated by the program director or delegated evaluator).
2. Foundations of Mathematics for Data Analytics & Applications (CAPS-DATASTUDIES 5002)
   a. Students with proficiency in introductory statistics and linear algebra may have the requirement to take Foundations of Mathematics for Data Analytics and Applications waived. Proficiency is demonstrated with a B or better in Introduction to Statistics and Linear Algebra courses.