

**CALIFORNIA UNIVERSITY
OF PENNSYLVANIA**

Program: Professional Science Masters: Applied Mathematics

Start: Summer Start

Total Credits: 30

Semester 1	Credits
Elective	3
PSA 611 Optimization and Operations Research I	3
	6
Semester 2	
Elective	3
PSM 675 Project Management	3
PSM 645 Applied Cryptography	3
	9
Semester 3	
Elective	3
PSM 760 Leadership and Professional Development	3
PSA 671 Advanced Multivariate Statistics	3
	9
Semester 4	
PSM 799 PSM Capstone Course	6
	6
Total Credits	30

Elective Courses

PSA 711: Optimization and Operations Research II
PSA 715: Advanced Time Series and Stochastic Processes
PSA 723: Advanced Nonparametric Statistics
PSA 724: Advanced Numerical Analysis and Empirical Modeling
PSA 725: Data Mining and Simulation Modeling
PSM 721: Database Systems

Data Science Certificate students may substitute the following as electives:

MAT 601: Advanced Data Preparation and Cleaning
MAT 602: Advanced Data Visualization
MAT 603 Advanced Big Data

Updated August 23, 2021