

MPS in Data Analytics Core, Required and Elective Courses

The MPS in Data Analytics will be awarded upon successful completion of the 30-credit curriculum below, and successful completion of the SARI Requirement. The courses are not listed in sequential order. All module course work is subject to change as new courses are developed or renumbered. **Note: The capstone course, DAAN 888, is only offered in the fall semesters.**

9-Credit Core Curriculum			
Course #	Course Titles	Semester	Grade
STAT 500	Applied Statistics (<i>Should be one of first courses taken</i>)		
SWENG 545	Data Mining (<i>INSC 521 is NOT a required prerequisite</i>)		
IE 575	Foundations of Predictive Analytics (<i>Prereq: STAT 500</i>)		
9-Credit Required Courses (BASE PROGRAM)			
Course #	Course Titles	Semester	Grade
INSC 521	Database Design Concepts		
DAAN 825	Large-Scale Database and Warehouse (<i>Prereq: INSC 521</i>)		
DAAN 881	Data-Driven Decision Making (<i>Prerequisite: STAT 500</i>)		
9-Credit Electives*			
Course #	Course Titles	Semester	Grade
3-Credit Capstone for BASE PROGRAM			
Course #	Course Titles	Semester	Grade
DAAN 888	Design and Implementation of Analytic Systems (Prerequisites: <u>ALL Core and Required Courses</u> including STAT 500, SWENG 545, IE 575, INSC 521, DAAN 825 and DAAN 881) <i>* Only offered in fall semesters *</i>		
SARI Requirement Scholarship and Research Integrity			
SARI – Scholarship and Research Integrity Program			Semester Completed

Course Descriptions/Prerequisites - Do not check course descriptions from the registration web page. Please check course descriptions at: <https://greatvalley.psu.edu/academics/masters-degrees/data-analytics/curriculum-and-schedule-master-of-professional-studies>.

All course work toward the Master of Professional Studies in Data Analytics must be completed within eight years of admission to the program. Students must maintain a minimum grade point average of 3.0 (B) throughout the program.

Master of Professional Studies in Data Analytics Elective Courses

9-Credit Electives (Choose 3 courses from the following list)	
DAAN 822	Data Collection and Cleaning (<i>Prerequisites: STAT 500 and IN SC 521</i>)
DAAN 846	Network and Predictive Analytics for Socio-Technical Systems
DAAN 862	Analytics Programming in Python (<i>Prerequisites: STAT 500</i>)
DAAN 871	Data Visualization
DAAN 570	Deep Learning (<i>Prerequisite: STAT 500</i>) (<i>formerly DAAN 897</i>)
DAAN 897	Enterprise Analytics Strategies
DAAN 897	Foundations of Marketing Analytics (<i>Prerequisite: STAT 500</i>)
INSC 497	Business Intelligence
STS 589	Ethics and Values in Science and Technology
SWENG 541	Advanced Database Design Concepts (<i>Prerequisite: INSC 521 or approval by Division</i>)
SYSEN 505	Technical Project Management
SYSEN 530	Systems Optimization (<i>SYSEN 520 is <u>not</u> a required prerequisite</i>)
SYSEN 536	Decision and Risk Analysis in Engineering