

Master of Professional Studies in Data Analytics (MPS in DAAN) Required and Elective Courses

The Master of Professional Studies in Data Analytics degree will be awarded upon successful completion of the 30-credit program, and completion of [SARI](#).^{*} The courses are not listed in sequential order. All module course work is subject to change as new courses are developed or renumbered. **The capstone course, DAAN 888, will only be available during fall semesters.**

If you have any questions throughout your studies, please email EngHelp@psu.edu.

18-Credit Required 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 <u>NOT</u> a required prerequisite)</i>		
IE 575	Foundations of Predictive Analytics <i>(Prereq: STAT 500)</i>		
INSC 521	Database Design Concepts		
DAAN 825	Large-Scale Database and Warehouse <i>(Prereq: INSC 521)</i>		
DAAN 881	Data-Driven Decision Making <i>(Prereq: STAT 500)</i>		
9-Credit Elective Curriculum			
Course #	Course Titles	Semester	Grade
3-Credit Required Capstone (to be taken near end of the program)			
<i>The Capstone Course is only offered in Fall Semesters</i>			
DAAN 888	Design & Implementation of Analytic Systems <i>(Prerequisites: <u>ALL Required Courses</u>, including STAT 500, SWENG 545, IE 575, INSC 521, DAAN 825 and DAAN 881)</i>		
Scholarship and Research Integrity (SARI) Requirement			
SARI	Scholarship and Research Integrity Program		

***NOTE:** Students must maintain a minimum grade point average of 3.0 (B) throughout the program. A 3.0 cumulative GPA is required to graduate. All course work toward the Master of Professional Studies in Data Analytics degree must be completed within eight years of admission to the program.

Questions & Advising - Students should contact their assigned faculty advisors with any questions or for advice on course selection.

Master of Professional Studies in Data Analytics (MPS in DAAN)
Course Descriptions/Prerequisites - Do not check course descriptions from the registration web page. Please check this advising sheet or the course descriptions at this [link](#).

Program Electives

9-Credit Electives (Choose 3 courses from the following list)	
Course #	Elective Courses
DAAN 822	Data Collection and Cleaning (<i>Prerequisite: STAT 500</i>) (<i>INSC 521 is <u>NOT</u> a required prerequisite</i>)
DAAN 846	Network and Predictive Analytics for Socio-Technical Systems
DAAN 862	Analytics Programming in Python (<i>Prerequisite: STAT 500</i>)
DAAN 871	Data Visualization
A-I 570 / DAAN 570	Deep Learning (<i>Prerequisite: STAT 500</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