

## 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 the [SARI](#) Requirement. The courses are not listed in sequential order. **The capstone course, DAAN 888, is only available during fall semesters.**

If you have any questions throughout your studies, please email [EngHelp@psu.edu](mailto: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> )		
DAAN 545	Data Mining ( <i>formerly SWENG 545</i> ) (INSC 521 is <u>NOT</u> a required prerequisite.)		
DAAN 825	Large-Scale Database and Warehouse (INSC 521 is <u>NOT</u> a required prerequisite.)		
DAAN 881	Data-Driven Decision Making ( <b>Required Prerequisite: STAT 500</b> )		
IE 575	Foundations of Predictive Analytics ( <b>Required Prerequisite: STAT 500</b> )		
INSC 521	Database Design Concepts		
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 ( <b>Required Prerequisites: <u>ALL Required Courses</u>, including STAT 500, DAAN 545, IE 575, INSC 521, DAAN 825 and DAAN 881</b> )		
Scholarship and Research Integrity (SARI) Requirement			
<a href="#">SARI</a> Module - Required Online Activity		<b>Semester Completed</b>	
<b>Note: The SARI Module is only offered in Spring &amp; Fall semesters.</b>			

**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 advisor with any questions or for advice on course selection. Course Descriptions are available at this [link](#).

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### Program Electives

<b>9-Credit Electives (Choose 3 courses from the following list)</b>	
<b>A-I 570</b>	Deep Learning <i>(formerly DAAN 570) (Required Prerequisite: STAT 500)</i>
<b>DAAN 822</b>	Data Collection and Cleaning <b>(Required Prerequisite: STAT 500)</b> <i>(INSC 521 is <u>NOT</u> a required prerequisite.)</i>
<b>DAAN 846</b>	Network and Predictive Analytics for Socio-Technical Systems
<b>DAAN 862</b>	Analytics Programming in Python <b>(Required Prerequisite: STAT 500)</b>
<b>DAAN 871</b>	Data Visualization
<b>DAAN 897</b>	Enterprise Analytics Strategies
<b>DAAN 897</b>	Foundations of Marketing Analytics <b>(Required Prerequisite: STAT 500)</b>
<b>ENGMT 520</b>	Systems Optimization <i>(formerly SYSEN 530)</i> <i>(SYSEN 520 is <u>not</u> a required prerequisite)</i>
<b>INSC 497</b>	Business Intelligence
<b>STS 589</b>	Ethics and Values in Science and Technology
<b>SWENG 541</b>	Advanced Database Design Concepts <b>(Required Prerequisite: INSC 521 or approval by Division)</b>
<b>SYSEN 536</b>	Decision and Risk Analysis in Engineering
<b>SYSEN 805</b>	Technical Project Management <i>(formerly SYSEN 505)</i>

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