



## Graduate Certificate in Data Analytics Required and Elective Courses

The Data Analytics Graduate Certificate program is designed to prepare students to apply data analytics techniques to large data sets to support data-driven decisions across application domains. The Graduate Certificate in Data Analytics will be awarded upon successful completion of the 15-credit curriculum below. The courses are not listed in sequential order. All course work should be completed within three years of starting the certificate program. Please verify that course prerequisites are met.

If you have any questions throughout your studies, please email [EngHelp@psu.edu](mailto:EngHelp@psu.edu).

12-Credit Required Curriculum			
Course #	Course Titles	Semester	Grade
STAT 500	Applied Statistics		
DAAN 545	Data Mining (formerly SWENG 545) (INSC 521 is <b>NOT</b> a required prerequisite.)		
DAAN 871	Data Visualization for Analytics		
IE 575	Foundations of Predictive Analytics (Required Prerequisite: STAT 500)		
3-Credit Elective Curriculum (See Below)			
Course #	Course Title	Semester	Grade

### Program Electives

Elective Courses (Choose 1 course from the following list)	
Course #	Course Titles
A-I 570	Deep Learning (formerly DAAN 570) (Required Prerequisite: STAT 500)
DAAN 862	Analytics Programming in Python (Required Prerequisite: STAT 500)
DAAN 881	Data-Driven Decision Making (Required Prerequisite: STAT 500)
INSC 521	Database Design Concepts
DAAN 846/INSC 846	Network and Predictive Analytics for Socio-Technical Systems

**NOTE:** Students must maintain a minimum grade point average of 3.0 (B) throughout the program. Courses may be applied to the Master of Professional Studies in Data Analytics, if admitted as a degree-seeking student. If degree-seeking, you must formally apply for degree admission: completing this certificate does not guarantee admission to the [degree program](#).

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

**NOTE:** To be awarded the graduate certificate, students must successfully complete 15 credits of course work. Students must complete each course with a grade of C or better, and an overall grade-point average of 3.0 in the certificate courses. After successfully completing the required course work, please submit a Graduate Certificate Completion Form at <http://greatvalley.psu.edu/form/graduate-certificate-completion-form>.