Graduate Certificate in Data Analytics
Core and Elective Courses

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.

12 Credit Core Curriculum	
Course #	**Course Titles**
STAT 500 **or** **BUSAD 501**	Applied Statistics or Statistical Analysis for Managerial Decision Making
DAAN 871	Data Visualization for Analytics
DAAN 897	Enterprise Analytics Strategies
IN SC 525 **or** **SWENG 545**	Applied Data Mining or Data Mining *(INSC 521 is NOT a required prerequisite)*
3-Credit Elective Curriculum *(Choose ONE of the courses below)*	
Course #	**Course Titles**
DAAN 822	Data Collection and Cleaning *(Prerequisite: INSC 521 and STAT 500)*
DAAN 825	Large-Scale Database and Warehouse *(Prerequisite: INSC 521)*
DAAN 862	Analytics Programming in Python
DAAN 881	Data-driven Decision Making *(Prerequisite: STAT 500)*
DAAN 897	Foundations of Marketing Analytics *(Prerequisite: STAT 500)*
DAAN 897	Deep Learning *(Prerequisite: STAT 500)*
IE 575	Foundations of Predictive Analytics *(Prerequisite: STAT 500)*
INSC 521	Database Design Concepts
INSC 846	Network and Predictive Analytics for Socio-Technical Systems
SYSEN 530	System Optimization *(SYSEN 520 is not required as a prerequisite)*
SYSEN 536	Decision and Risk Analysis

Advising Worksheet

12 Credit Core Curriculum			
Course #	**Course Titles**	**Semester**	**Grade**
STAT 500 **or** **BUSAD 501**	Applied Statistics or Statistical Analysis for Managerial Decision Making		
DAAN 871	Data Visualization for Analytics		
DAAN 897	Enterprise Analytics Strategies		
IN SC 525 **or** **SWENG 545**	Applied Data Mining or Data Mining *(INSC 521 is NOT a required prerequisite)*		
3-Credit Elective Curriculum			
Course #	**Course Titles**	**Semester**	**Grade**

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 degree-seeking, you must formally apply for degree admission; completing this certificate does not guarantee admission to the degree program.

After successfully completing the required course work, please submit the Graduate Certificate Completion Form: http://greatvalley.psu.edu/form/graduate-certificate-completion-form

Students should e-mail questions and requests for course approvals to EngHelp@psu.edu.   7/9/2019