Graduate Certificate in Data Analytics and Engineering

The Data Analytics and Engineering Graduate Certificate prepares students for working as a Data Architect responsible for designing, building, and maintaining infrastructure for managing and analyzing large volumes of data. Students master the following skill set essential to this industry role:

- Programming
- Machine Learning
- Data Mining
- Data Modeling and Design
- Data Integration
- Data Warehousing

The Graduate Certificate in Data Analytics and Engineering will be awarded upon successful completion of the 12-credit curriculum below. The courses are not listed in sequential order. All course work should be completed within two years of starting the certificate program. Students should e-mail questions to **EngHelp@psu.edu.**

12-Credit Required Curriculum			
Course #	**Course Title**	**Semester Completed**	**Grade**
DAAN 545	Data Mining (Formerly SWENG 545)		
DAAN 825	Large-Scale Database and Warehouse		
DAAN 862	Analytics Programming in Python (Prereq: STAT 500)		
DAAN/IE 575	Foundations of Predictive Analytics (Prereq: STAT 500)		

Note: Students must maintain a minimum grade point average of 3.0 (B) throughout the program. Courses may be applied to master's programs if admitted as a degree-seeking student. If degree-seeking, you must formally apply for degree admission. Up to 15 credits earned may be transferred to a master's degree, subject to restrictions outlined in GCAC-309 Transfer Credit. Completing this certificate does not guarantee admission to a degree program. To be awarded the graduate certificate, students must successfully complete 12 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.

Questions & Advising - Students should contact EngHelp@psu.edu with any questions.

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