Graduate Certificate in Foundations of Data Science

The Foundations of Data Science Graduate Certificate prepares students for working as a Data Scientist or Analyst responsible for creating solutions and strategies for complex problems, applying algorithmic methods to discover patterns in data, creating comprehensive analytical solutions for business problems, analyzing large amounts of data, creating analytics solutions for business problems, and use of data to predict future trends and events. Students master the following skill set essential to this industry role:

- Machine learning
- Deep learning
- Statistical analysis and computing
- Processing large amounts of data

The Graduate Certificate in Foundations of Data Science will be awarded upon successful completion of the 9-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.**

9-Credit Required Curriculum			
Course #	**Course Title**	**Semester Completed**	**Grade**
STAT 500	Applied Statistics		
DAAN 545	Data Mining (Formerly SWENG 545)		
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 9 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.