

## Graduate Certificate in Natural Language Processing

The Natural Language Processing (NLP) Graduate Certificate prepares students for working as an NLP Engineer who will analyze, identify, architect, design, and implement NLP based systems. Students master the following skill set essential to this industry role:

- Identifying NLP tasks
- Framing NLP problems (language translation, chatbots, speech recognition, language models, etc.)
- Designing NLP pipelines to collect and preprocess textual data
- Building and evaluating NLP models based on deep neural networks
- Implementing explainable and interpretable NLP models
- Evaluating ethical and fairness in NLP tasks

The Graduate Certificate in Natural Language Processing 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](mailto:EngHelp@psu.edu).

9-Credit Required Curriculum			
Course #	Course Title	Semester Completed	Grade
A-I/DAAN 570	Deep Learning (Pre-req STAT 500)		
A-I 574	Natural Language Processing (Pre-req STAT 500 and A-I/DAAN 570)		
A-I 804	Ethics of Artificial Intelligence		

**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](mailto: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>.