

Teaching and Learning Statistics and Data Science (Certificate)

The Graduate Certificate in Teaching and Learning Statistics & Data Science (TLSDS) is an online program that focuses on developing knowledge of core statistical and data science concepts and methods along with best practices for their instruction. The program is meant to serve practicing high school and college teachers in any discipline that uses data as well as graduate students interested in faculty or teaching careers but can be useful for anyone that presents with data. Those that complete the program should be able to apply common statistical and data science analyses to data using a programming language, understand common misunderstandings in how people interpret data and models, and use data effectively when teaching and presenting.

By the end of the certificate program our graduates will be able to

- develop lesson plans that utilize relevant technology and modern pedagogical approaches in statistics and data science courses
- apply common statistical and data science methods and interpret the results from designed experiments and observational studies

More Information

Departmental Website (<https://statistics.sciences.ncsu.edu/graduate/online-programs/teaching-and-learning-statistics-data-science-certificate/>)

Admissions

Requirements for admission include:

1. Completion of a bachelor's degree (any field) with a GPA of 3.0 or greater on a 4.0 scale;
2. Transcripts of all undergraduate and graduate course work (unofficial copies accepted);
3. A personal statement of goals related to enrolling in the certificate program.

After submitting your Graduate Application (<https://applygrad.ncsu.edu/apply/>) for the Teaching and Learning Statistics & Data Science certificate, you may check the status (<https://applygrad.ncsu.edu/apply/>) of your application at any time.

Applicant Information

- **Delivery Method:** On-Campus, Online, Hybrid
- **Entrance Exam:** None
- **Interview Required:** None

Application Deadlines

- **Fall:** July 15
- **Spring:** November 30
- **Summer:** April 15

Plan Requirements

Code	Title	Hours
Required Courses		
Choose two from the first group		6
ST 511	Statistical Methods For Researchers I	
or ST 513	Statistics for Management and Social Sciences I	
or ST 517	Applied Statistical Methods I	
ST 512	Statistical Methods For Researchers II	
or ST 514	Statistics For Management and Social Sciences II	
or ST 518	Applied Statistical Methods II	
ST 558	Data Science for Statisticians	
Choose two from the second group		6
EMS 510	Interactions In the Mathematics Classroom	
ST/EMS 519	Teaching and Learning of Statistical Thinking	
ST 557	Using Technology to Teach and Learn with Data	
Total Hours		12