

EXPLORE

Data Sciences

(Computational Option)



PennState
College of Engineering

The data sciences degree is part of an intercollege initiative among the College of Engineering, College of Information Sciences and Technology, and Eberly College of Science to meet the need of professionals who can make sense of big data.

The program provides students with the technical fundamentals of data sciences and helps them develop the knowledge and skills needed to manage and analyze large-scale, unstructured data.

As a result, data sciences graduates will possess the core skills and problem-solving approaches to compete for leading-edge analytics positions across many different industry sectors and address an expanding range of problems in industry, government, and academia.

The mission of our undergraduate program is to prepare our students for a wide range of careers as computational data scientists and related positions in the field of computing.

Our curriculum covers fundamental programming techniques and skills, broad knowledge of data science foundations, mathematical foundations of computing, and advanced topics in computing with large data sets.

This curriculum provides students with the skills needed to design, develop, evaluate, and analyze software solutions to computational problems involving large data and prepares them to be leaders throughout their careers.

For more information about the School of Electrical Engineering and Computer Science at Penn State, visit eecs.psu.edu.



Math, Statistics

Students who excel in these tend to do well in data sciences.

Our areas of specialization build on these skills.

Engineering Co-Op and Internship Program

Integrate classroom learning with real-world experience.

Graduate Program

Broaden educational credentials and improve your marketability in the global workplace.



Study Abroad Programs

Gain a worldwide perspective as you

develop foreign language skills, cultural understanding, and professional experience.

HackPSU

Penn State's student-run hackathon and the largest technology event at Penn State welcomes hundreds of students from across the world for 24 hours of innovation, creation, and fun. From seasoned coding veterans to first-time hackers in any major or field, students of all skill levels participate in technologically engaging challenges and professional networking.

DTSCE

Hear from students and alumni by watching the Exposure to Major video series: bit.ly/PennStateEngineering



What is a data scientist?

Data scientists employ innovation and creative thinking to design and build software that analyzes large amounts of data. They find new applications for using data and develop new ways in which problems can be solved. From social networking to location-aware devices, health care to automotive, data scientists change the way we look at and live in the world today. Our students learn how to apply these principles to diverse areas of applications, changing the way we live.

Examples of career opportunities: Statistician; business intelligence reporting professional; data analyst; data mining or big data engineer; program/project manager

eecs.psu.edu

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Kyle Bradley

“The computational data sciences major was great for me as someone interested in the intersection of computation and statistics. Through the coursework, I was able to gain experience working on real world problems, which I was able to transition into internships and research opportunities. The interdisciplinary nature of the major at Penn State stands out as you get to interact with faculty from various colleges with a wide variety of backgrounds.”