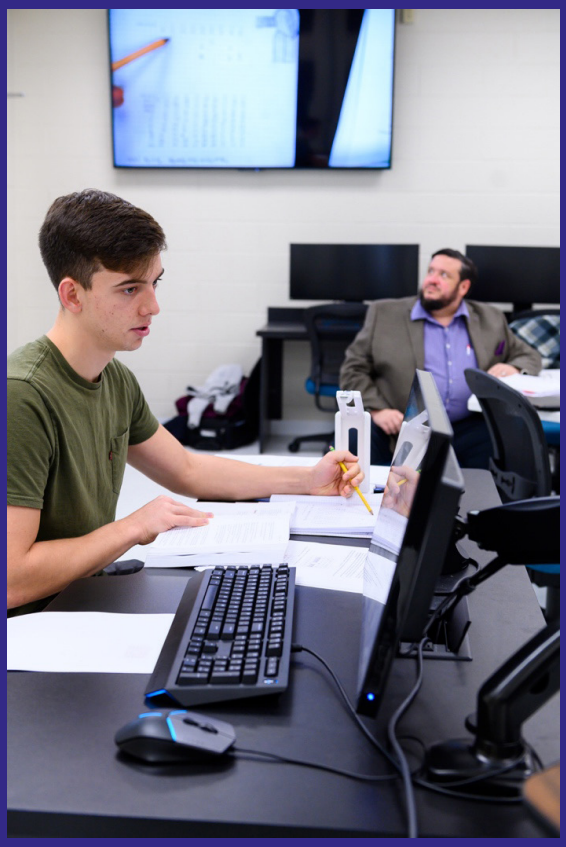
DATA SCIENCE

HIGH POINT UNIVERSITY
The Premier Life Skills University
Webb School of Engineering

What is a **data scientist?**

A data scientist uses computing skills for collecting, shaping, storing, managing, and analyzing data to allow for data-driven decision making. Data scientists are in huge demand as they benefit both companies and consumers. Almost every interaction with technology includes data–your online purchases, social media feed, streaming recommendations, and even the facial recognition required to sign in to your phone.



Why should I **major in data science** at HPU?

- Data science experts are needed in virtually every job sector, from government security to dating apps.
- The high demand for data science skills continues to grow and data scientists are in short supply. The HPU undergraduate data science program prepares students to embrace this opportunity.
- The HPU data science curriculum incorporates the latest trends in data skills and is guided by the new ABET data science accreditation criteria.

Relevant **curriculum**

The goal of the Computer Science department is to prepare students to combine domain expertise, programming skills, machine learning techniques, and knowledge of mathematics and statistics to extract meaningful insights from data. The professors strive to guide the students in the discovery and learning of new ideas and techniques, rather than just presenting carefully structured theories. Coursework includes:

- Computer programming in R, Python and C++
- Database systems
- Data visualization
- Data structures
- Algorithms
- Machine learning
- Data management
- Software engineering
- Calculus
- Linear algebra
- Statistical analysis
- Domain area courses
- Capstone experience

www.highpoint.edu/datascience

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What can I do with **this major?**

- Data scientist
- Data engineer
- Machine learning scientist
- Business intelligence developer
- Applications architect
- Enterprise architect

Mid-career median pay for data science majors: **$111,000**

Job growth:

There has been a 650% increase in data science jobs since 2012. Employment of data scientists is projected to grow 31% from 2019 to 2029.

– U.S. Bureau of Labor Statistics

Potential **Domain Areas**

Data science majors complete coursework in a data-rich domain area of their choosing then apply computational algorithms and machine learning techniques to data from that discipline in their capstone experience. Potential domain areas include:

- Physics and astronomy
- Biology and neuroscience
- Chemistry and biochemistry
- Exercise science
- Economics
- Healthcare management
- Finance and accounting

Meet **Kelsey**

Hometown: Howell, NJ

Current Job Title: Market Data Analyst at Bloomberg LP

Awards: 2020 Outstanding Computer Science graduate, 2020 Top Mathematics Graduate

Leadership: HPU Minds Woz Project, Data Analytics Team

Undergraduate Research: Machine Learning Classifiers in Honeynets, Graph Theory Approach to Gerrymandering

How I benefited from attending HPU: "I benefited tremendously by attending HPU due to the many clubs and opportunities available through the university. I was able to do research in 2 different areas, work on a 2.5 year project where I gained project management and peer relationship experience, engage in leadership through different organizations, and learn a ton of awesome stuff in the classroom that I now get to utilize in my job post-graduation. High Point, the clubs, and my professors set me up for success when it came to starting my career in the real world and I could not be more grateful for my time spent there."

For more information about HPU's Data Science Program, contact:

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