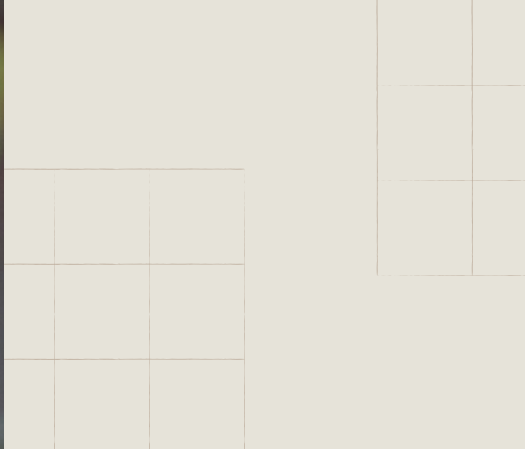
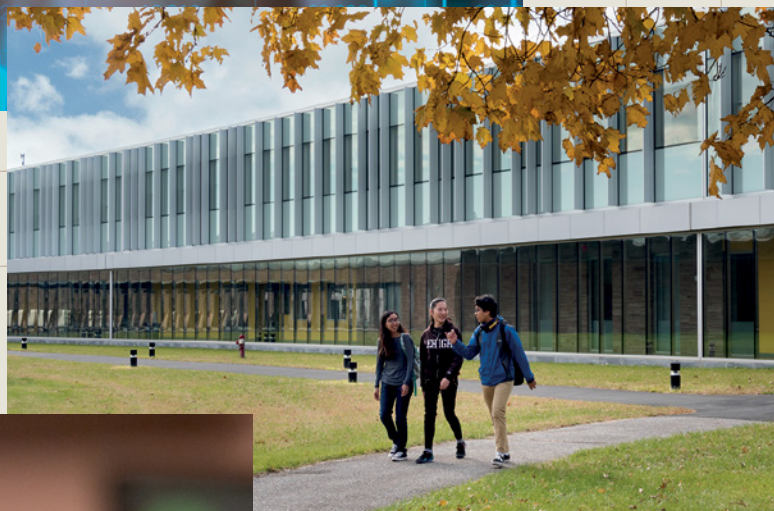
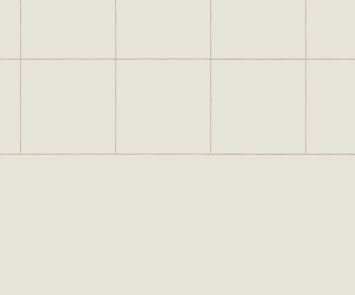




MS & CERTIFICATE

DATA SCIENCE



P.C. Rossin College of Engineering & Applied Science

LEHIGH UNIVERSITY



WHERE DATA SCIENCE MEETS INDUSTRY

Data science is a broad, interdisciplinary field spanning the math, coding, and computation needed for collecting data, processing and validating it, and putting it to a practical use—whether that’s a graphic visualization of the spread of a virus, for example, or using machine learning to predict a prospective borrower’s likelihood to default on a mortgage.

Data scientists are foundational to how AI systems learn and make informed decisions—and to the ethical considerations that come with using data responsibly.

Lehigh’s MS in Data Science combines a rigorous, project-based curriculum with real-world experience through an industry-sponsored Capstone, hands-on faculty research, and interview preparation with Fortune 500 companies such as AWS and Cisco. Graduates launch impactful careers across technology, healthcare, finance, energy, consulting, and research sectors, with recent employers including Meta, Oracle, PPL, Harvard Business School, and J.P. Morgan.

WHY DATA SCIENCE?

YOUR BACKGROUND

Engineering

Science

Mathematics

Economics

Technology

YOUR PASSIONS

"I like using data to make
better decisions"

"Data and artificial intelligence will
change every industry"

"I like solving complex problems"

"I want AI to help society"

"Data should be used
responsibly and ethically"



DATA SCIENCE



Skills and Career Pathways ...

ARTIFICIAL INTELLIGENCE **DATA ENGINEERING** **BUSINESS**
MARKETING ANALYTICS **INTELLIGENCE**
DATABASE ADMINISTRATION
STATISTICS **MACHINE LEARNING**
= DATA = **DEEP NETWORKS**
MINING **GENERATIVE AI** **= BIG =**
DATA ANALYTICS **DATA ARCHITECTURE** **DATA**
LARGE LANGUAGE MODELS **HEALTH ANALYTICS**

OUR PROGRAM

The Curriculum

- ▶ Integrated foundations in math, coding, and computing
- ▶ Focus on real-world impact
- ▶ AI skills
- ▶ Industry-based Capstone
- ▶ Ethics
- ▶ Electives from five colleges

The Experience

- ▶ On campus and/or online
- ▶ Part time or full time
- ▶ Multidisciplinary faculty
- ▶ Research opportunities
- ▶ Student clubs
- ▶ Mock interviews with industry partners

Master of Science in Data Science Courses

- ▶ Data Foundations (3 credits)
- ▶ Math Foundations (3 credits)
- ▶ Software Foundations (3 credits)
- ▶ Statistics and Machine Learning (3 credits)
- ▶ Statistics and Machine Learning (3 credits)
- ▶ Big Data or Accelerated Computing (3 credits)
- ▶ Ethics in Data Science (3 credits)
- ▶ Electives, Capstone, or Thesis (9 credits)

Certificate in Data Science Courses

- ▶ Foundations (3 credits)
- ▶ Foundations (3 credits)
- ▶ Statistics and Machine Learning (3 credits)
- ▶ Electives (3 credits)

HOW WILL YOU BENEFIT?

In as little as 10 months, you will graduate with a skill set that will allow you to work in a multitude of fields. Your master's degree or certificate will translate to career opportunities in healthcare, computer engineering, business and marketing, and beyond. You will be ideally positioned with a degree or certificate in a field that is projected to grow by more than 30 percent by 2030.

**REQUEST
INFORMATION**



WHAT SETS US APART

Lehigh's Data Science Graduate Program combines academic rigor with real-world experience through an industry-sponsored Capstone, faculty-led research opportunities, and interview preparation with companies such as AWS, SAS, and Cisco. Students benefit from the resources of an R1 research university and the close-knit feel of a small program, with direct faculty access, a personalized experience, a growing professional network, and clear pathways into industry or PhD study.



CAREERS IN DATA SCIENCE

The program paves the way for students to unleash the power of data science to advance in their current careers in education, healthcare, science, liberal arts, and business. Our alumni are employed in various industries in reputed companies such as AIG, J.P. Morgan, Meta, Oracle, PPL Corporation, Sophia Genetics, Standard Industries, and TD Bank. Graduates also use their highly sought-after skills to set a new career trajectory in roles such as:

- ▶ Data Scientist
- ▶ Data Analyst
- ▶ AI Engineer
- ▶ ML Engineer
- ▶ Business Analyst
- ▶ Data Engineer
- ▶ Data Architect
- ▶ Statistician
- ▶ Public Health Analyst

LEHIGH UNIVERSITY is located in the heart of the beautiful Lehigh Valley, the third largest metropolitan area in Pennsylvania. Home to top-notch entertainment, shopping, and restaurants, our region is also known for its seemingly endless array of opportunities for outdoor exploration and adventure.

Bethlehem is a vibrant city, rich in history and radiating small-town friendliness and feel. The arts are alive here, with exciting seasonal events, nationally recognized musical acts, comedy, art, and more. Known as the "City of Festivals," Bethlehem hosts 20-plus major festivals and over 150 mini-festivals each year.



Need more action? Plan a day or weekend trip to New York City, Philadelphia, the Pocono Mountains, or the New Jersey and Delaware beaches—all within reach by car or public transportation.



**REQUEST
INFORMATION**



engineering.lehigh.edu/datascience