



*Neumann University's new  
Data Analytics Lab*

# New Neumann University Programs to Combat Hacking

BY DANIEL FRIEL, CAMPUS REPORTER

TARGET, EBAY, Equifax, Sony, Yahoo, Marriott. These are just a few of the giant corporations that have been hacked in the past several years.

Technological trends -- such as bring your own device (BYOD), the internet of things (IoT) and the increase in cloud-based computing -- have increased the need for protection against cyber threats, but the lack of cybersecurity professionals who understand and can mitigate these threats is an ongoing privacy concern. According to Forbes magazine, the global cybersecurity market is expected to reach 170 billion dollars by 2020.

To help address this critical marketplace need, Neumann University is launching two new degree programs in fall 2019: Cybersecurity, and Data Science and Analytics.

The centerpiece of these two new majors is the Data Analytics Lab. Located on the third floor of the Rocco Abessinio Building, the lab features glass classroom walls, a stock market ticker, mounted TVs with stock information, three 75" instructional monitors, rise-display monitors at each desk, and a server lab for hacking simulations.

The server lab has three servers that can operate on or off the university network. During their capstone class, Cybersecurity majors will be assigned roles in simulations where they will have to protect the servers from hackers while classmates try to hack into the technology and obtain data.

"We want to teach our students to use their powers for good, as we state in our mission and core values," said Eric Wellington, dean of the Business and Information Management Division at Neumann. The goal is for students to learn counter-hacking. "We will teach them the way hackers come in and then how to protect against them."

Neumann University's degree in Cybersecurity will give students a background in network security, operating systems, cryptography, incident response, secure programming, vulnerability analysis, social engineering, governance and risk assessment -- all skills designed to prepare a student for a career in this growing field. They will also get hands-on experience working with the latest hardware, software, and firewall and infrastructure technologies.

Career opportunities in this field include security analyst, security architect, network security analyst, security systems administrator, IT security consultant, and many others.

Data Science and Analytics is not only one of the fastest growing fields in the United States but also one of the highest paying jobs in the tech sector. Neumann's major in Data Science and Analytics gives students a strong background in statistics, computer science and mathematics along with the critical thinking skills necessary to analyze voluminous and complex data sets. Students will learn computer programming and how to manage database systems and perform data analysis.

Graduates of the program will be able to extract meaning and hidden patterns from large complex data taken from diverse sources and demonstrate proficiency with important data analytic and data visualization technology, including spreadsheet tools. In addition, graduates will be able to articulate and apply specialized data models in a business context as well as design and develop databases, data warehouses, and working computer systems using industry-standard tools.

For more information about the Cybersecurity and Data Science and Analytics majors, visit [www.neumann.edu](http://www.neumann.edu). ■