



# CYBERSECURITY AT WESTERN KENTUCKY UNIVERSITY

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# MS CYBERSECURITY DATA ANALYTICS

- Fall 2021

  - Cybersecurity Data Analytics Certificate

  - Data Analytics Certificate

  - Cybersecurity as a concentration in the MBA Program

- Fall 2022

  - MS Cybersecurity Data Analytics

    - Concentrations

      - Local Government Administration

      - Healthcare Administration

      - Organizational Communication

      - Supply Chain Management

      - Interdisciplinary



# INTENDED AUDIENCES

- Designed for 2 primary audiences:

Entry-level managers who work in critical infrastructure positions (communications, chemical, commercial facilities, critical manufacturing, dams, defense industrial base, emergency services, energy, financial, food & agriculture, government facilities, healthcare & public health, information technology, nuclear reactors & materials & waste, transportations systems, and water)

Entry-level cybersecurity workforce through applying data analytics to information security issues



# PROGRAM FOCUS

- **Gordon Ford College of Business Program**

- Use of Data Analytics to detect and defend against cybersecurity attacks

- Create and analyze cybersecurity workplace policies

- Understand how to extract and transform data

- Use data visualization to communicate cybersecurity analysis



# MS HOMELAND SECURITY

- Fall 2017

Cybersecurity added as a concentration in Homeland Security Sciences



# INTENDED AUDIENCES

- Developed to satisfy the demand for cybersecurity professionals in and out of the state by providing a graduate-level, advanced study path for:
  - System security professionals
  - Site administrators
  - Practitioners with responsibility for securing computer network infrastructure and related technologies



# PROGRAM FOCUS

- **Ogden College of Science and Engineering Program**

- Only Homeland Security program in Kentucky focused on the science behind security

- Strong experiential learning component including laboratory and community engagement

- Graduates are prepared for the Certified Ethical Hacker certification exam

- Prepares students to understand and demonstrate

- Current security threats and recommendations for countermeasures

- Hacking and penetration techniques using appropriate tools

- Countermeasures to social engineering and other types of attacks

