## CYBERSECURITY AT NORTHERN KENTUCKY UNIVERSITY

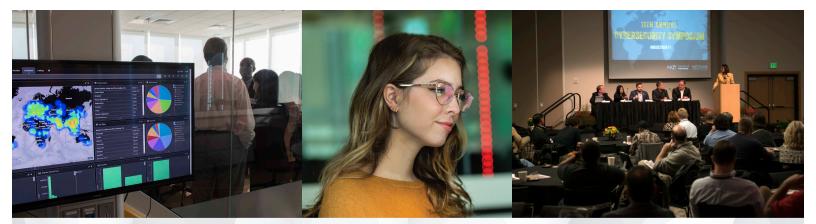


- **A Center of Excellence**: NKU has had the NSA NCAE-C designation since 2015 (see reverse).
- Multiple cybersecurity degrees and programs: BS and accelerated online MS in Cybersecurity; Cybersecurity tracks in IT and Business Information Systems majors; Computer Forensics and Information Security minors; Undergraduate certificate in cybersecurity.
- Large enrollment: NKU currently has 113 enrolled MS Cybersecurity students, 98 BS cybersecurity students, and 120 students in the cybersecurity track of the BS in IT degree.
- The programs **include security certificate content** (e.g. CCNA, Security+, OCSP) designed to meet workforce needs.
- Cybersecurity outreach is coordinated through the **NKU Center for Information Security**, housed in the College of Informatics.
- The donor-funded **JRG Cyber Threat Intelligence Lab** in NKU's Griffin Hall is a stateof-the-art learning space replicating key Security Operations Center functionality.
- Large cybersecurity faculty: Seven professors (PhD), 3 lecturers, plus faculty in other areas who teach security-allied subjects such as cryptography and privacy/disinformation.
- **K-12 teacher outreach**: NSA/NSF GenCyber grants to train HS teachers in cybersecurity, 2021-23. 25 teachers participating in 2023.
- K-12 student outreach: 2023 CINSAM Cyber Academy for HS students covers topics from threat modeling to ethics. Co-led by HS teachers from the 2021 GenCyber program.

- **ABET-accredited BS in Data Science** program (the first ABET-accredited DS program in the world) in the College of Informatics facilitates easy collaboration on cyber data analysis, AI, etc.
- 16 years hosting the NKY Cybersecurity Symposium for IT and legal professionals, co-organized with NKU Chase College of Law. Average annual attendance 400-500; numerous local and national corporate sponsorships.
- Active student cyber defense team and NKCyber Club, placing in the top 2 for most of past 12 years in the Collegiate Cyber Defense Competition in a nine-state region which includes KY and OH.
- **NKU's location enables collaboration** with companies in nearby states and with the Ohio Cyber Range at the University of Cincinnati.
- NKU is joining the **Public Infrastructure Security Cyber Education System** (PISCES) program, a 501(c)(3) with DHS support that uses upper-level cybersecurity students as (supervised) cyber analysts to assist small municipalities, e.g. small KY county governments, in cyber defense.
- Collaborations with INTERalliance, a partnership of major Cincinnati/NKY corporations with programs to attract and retain regional IT talent, managing corporate internship opportunities for HS students, a "Tech Olympics" and leadership experiences. Company partners include Procter & Gamble, Fifth Third Bank, Kroger, and Great American Insurance.







## **BACKGROUND ON NSA NCAE-C DESIGNATION:**

- The NSA's National Centers of Academic Excellence in Cybersecurity (NCAE-C) designation means that NKU has a program of study that meets a combination of curriculum, outreach, and practice standards in the field of cybersecurity.
- To become a NCAE-C, a university must map its program of study to 14 NCAE-C knowledge units and must meet the following institutional requirements:
  - 1. University accreditation
  - 2. Institutional commitment
  - 3. Evidence of a sound cybersecurity posture and plan
  - 4. Established center for cybersecurity
  - 5. Affirmation of the CAE core values and guiding principles
  - 6. Sustainability
  - 7. Professional development
  - 8. Cybersecurity academic integration
  - 9. Outreach
  - 10. Transfer of credit/articulation agreements