

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+, OSCP) 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 state-of-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.

REAL AMBITION
REAL SUCCESS

NKU  **NORTHERN
KENTUCKY
UNIVERSITY**



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