Offered by Department of Computer Science and Information Technology

Cyber Security Operations Major

Cyber Security Operations Comprehensive
Bachelor of Science

- **General Studies Program** Hours = 49
  including General Studies coursework required by major
  - **Foundational Core** (Written, Math, Oral, Democracy) = 14 including:
    - MATH 115*, Calculus I with Analytic Geometry - 5 hours
  *Students without sufficient preparation will also need to take the following courses, increasing the total hours needed:
    - MATH 102GS*, College Algebra - 3 hours
    - MATH 103GS*, Plane Trigonometry - 3 hours
  - Portal = 3
  - Distribution = 29
    - Aesthetics minimum = 3
    - Humanities minimum = 6
    - Social Sciences minimum = 6
    - Natural Sciences minimum = 7
    - Analytical and Quantitative Thought minimum = 7
      - CSIT 130GS, Introduction to Computer Science - 4 hours
      - ITEC 150GS, Telecommunications Literacy - 3 hours
  - Wellness minimum = 0
  - Capstone = 3

- **BS Science-related course requirements** = 0
- **Major Option** = 59
- **Minimum total hours required coursework** = 108
- **Unrestricted electives in 120 hour program** = 12
- **Minimum total hours required for BS Cyber Security Comprehensive** = 120

All UNK degrees require a minimum of 120 hours. Forty (40) of the hours required for all UNK degrees must be upper division hours, which are courses numbered 300 or above taken at a 4-year college or university.

A grade of "C" or above is required for all courses in this Option. In this option, prerequisites are fulfilled when the prerequisite courses have been passed with a "C" or above.

**A. Cyber Security Major** Comprehensive Core Requirements (47 hours required)
- Take all of the following:
  - CSIT 150, Object Oriented Programming - 3 hours
  - CSIT 180, Discrete Structures - 3 hours
  - CSIT 301, Computer Organization - 3 hours
  - CSIT 330, Algorithms and Data Structures - 3 hours
  - CSIT 401, Operating Systems - 3 hours
  - CSIT 402, Introduction to Automata, Formal Languages, and Computability - 3 hours
  - CSIT 444, Reverse Engineering – 3 hours
  - CSIT 458, Computer Security - 3 hours
  - ITEC 330, Information Networking Preceptorial - 4 hours
  - ITEC 335, Network Architecture and Telecommunications I - 3 hours
  - ITEC 345, Network Architecture and Telecommunications II - 4 hours
  - ITEC 390, Information Networking Law and Public Policy -3 hours
  - ITEC 430, Internetworking Design - 3 hours
  - ITEC 435, Global Internetworking - 3 hours
  - ITEC 485, Information Networking Seminar -3 hours
Electives

- Take 12 hours from:
  - CSIT 404, Software Engineering - 3 hours
  - CSIT 428, Data Comm & Distributed Processing – 3 hours
  - CSIT 448, System Administration - 3 hours
  - ITEC 220, Electricity/ Electronics – 3 hours
  - ITEC 320, Applied Electronics – 3 hours
  - CJUS 321, Technology in Criminal Justice – 3 hours
  - CSIT 300-499 as approved by the department (except CSIT 388GS)
  - ITEC 300-499 as approved by the department (except ITEC 388GS)