**CYBER SECURITY OPERATIONS COMPREHENSIVE, BACHELOR OF SCIENCE**

Offered by Department of Cyber Systems (http://catalog.unk.edu/undergraduate/departments-programs/cyber-systems/)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
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**General Studies**

**Foundational Requirements (LOPERs 1-4)** 14

- **LOPER 2: Writing Skills**
  - ENG 101 Introduction of Academic Writing
- **LOPER 4: Mathematics, Statistics and Quantitative Reasoning**
  - MATH 115 Calculus I with Analytic Geometry

**Broad Knowledge Requirements (LOPERs 5-8)** 12

- **Dispositional Requirements (LOPERs 9-10)** 6
- **Wellness (LOPER 11) Optional** 0

**BS Science-related course requirements** 0

**Program-Specified Requirements** 6-7

- **ENG 102** Special Topics in Academic Writing and Research
- **CYBR 102** Computer Science I: C for Security

**Major Option**

- Complete all required courses 54
- **Unrestricted electives** Needed to reach 120 credit hour minimum 28-27

Total Credit Hours 120

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

**Major Option**

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<tbody>
<tr>
<td>CYBR 430</td>
<td>Defending &amp; Protecting Cyber Systems</td>
<td>3</td>
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<tr>
<td>CYBR 435</td>
<td>Reverse Engineering: Thinking like an Adversary</td>
<td>3</td>
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<tr>
<td>CYBR 444</td>
<td>Software Reverse Engineering</td>
<td>3</td>
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<tr>
<td>CYBR 460</td>
<td>Virtualization Essentials</td>
<td>3</td>
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<tr>
<td>CYBR 468</td>
<td>Advanced Security: Playing Both Sides</td>
<td>3</td>
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<td>CYBR 490</td>
<td>Information Networking Law and Public Policy</td>
<td>3</td>
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<tr>
<td>CYBR 495</td>
<td>Cyber Systems Capstone</td>
<td>3</td>
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**Electives**

Take 12 hours from:

- ITEC 220  Electricity/Electronics
- CJUS 321  Technology in Criminal Justice
- CYBR 340  Information Networking Preceptorial
- CYBR 404  Software Engineering
- CYBR 407  Introduction to Automata, Formal Languages, and Computability
- CYBR 425  Database Systems
- CYBR 448  System Administration II
- CYBR 475  Internship in Cyber Systems
- CYBR 484  Parallel Computing
- CYBR 300-CYBR 499  3,4

Total Credit Hours 54

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1 Students without sufficient preparation will also need to take the following courses, increasing the total credit hours needed:
   - MATH 102 (http://catalog.unk.edu/search/?P=MATH%20102)
   - MATH 103 (http://catalog.unk.edu/search/?P=MATH%20103)

2 Designated courses with the appropriate content may be approved to satisfy one of the Broad Knowledge requirements plus LOPER 9 or Broad Knowledge plus LOPER 10. Courses may be approved to satisfy LOPER 9 or LOPER 10 alone. (Courses satisfying LOPER 9 or LOPER 10 alone must be 3 credit hours.) Students applying this option will need to take additional hours in other categories to meet the required GS hours.

3 Except CYBR 388

4 As approved by the department