INFORMATION TECHNOLOGY, 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>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

General Studies

Foundational Requirements (LOPERs 1-4) 12
Including:
LOPER 4: Mathematics, Statistics and Quantitative Reasoning
MATH 102 College Algebra 1

Broad Knowledge Requirements (LOPERs 5-8) 12

Dispositional Requirements (LOPERs 9-10) 6

Wellness (LOPER 11) Optional 0

BS Science-related course requirements

STAT 241 Elementary Statistics 1 3
Select one of the following: 3-5
MATH 115 Calculus I with Analytic Geometry 1
MATH 123 Applied Calculus I 1

Program-Specific Requirements 3-4

CYBR 103 Computer Science I: Java for Software Development
or CYBR 101 Computer Science I: Python for Analytics
or CYBR 102 Computer Science I: C for Security

Major Option

Complete all required courses 36

Minor or 2nd Major

Complete all required courses 3 24

Unrestricted electives

Needed to reach 120 credit hour minimum 21-18

Total Credit Hours 120

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.

Major Option

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Information Technology Core Requirements

CYBR 150 Computer Science II: Object Oriented Programming 3
CYBR 180 Discrete Structures 3
CYBR 223 Foundations of Information Technology and Systems 3
CYBR 335 Fundamentals of Networking & Systems 3
CYBR 381 Systems Analysis and Design I 3
CYBR 405 Human Computer Interactive Application Development 3
CYBR 425 Database Systems 3
CYBR 458 Computer Security 3

Information Technology Electives

Select 9 credit hours of the following: 9

System Administration & Networking Options:

CYBR 340 Information Networking Preceptorial
CYBR 345 Intricacies of Advanced Networks & Systems
CYBR 448 System Administration II
CYBR 460 Virtualization Essentials

Web Development Options:

CYBR 406 Enterprise Application Development
CYBR 418 E-Commerce Information Systems
JMC 300 Website Design
JMC 304 Interactive Media Design

Data Analytics Options:

CYBR 306 Introduction to Predictive Modeling
CYBR 350 Predictive Modeling II
CYBR 410 Big Data Visualization
CYBR 411 Big Data II

General IT Options:

CYBR 300-CYBR 499 4

Total Credit Hours 36

1 Students with sufficient preparation may enter the mathematics program at a higher level, reducing the total credit hours needed.

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 A minor or second major is required for a complete degree program. The number of required electives needed to reach 120 total credit hours overall will depend upon the specific program chosen.

4 Except CYBR 388.