

COMPUTER SCIENCE APPLIED, BACHELOR OF SCIENCE DEGREE

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

Code	Title	Credit Hours
General Studies		
<i>Foundational Requirements (LOPERs 1-4)</i>		14
Including:		
LOPER 4: Mathematics, Statistics and Quantitative Reasoning		
MATH 115	Calculus I with Analytic Geometry ¹	
<i>Broad Knowledge Requirements (LOPERs 5-8)</i>		12
<i>Dispositional Requirements (LOPERs 9-10) ²</i>		6
<i>Wellness (LOPER 11) Optional</i>		0
BS Science-related course requirements		
Select one of the following:		
Program-Specific Requirements		3
CYBR 101	Computer Science I: Python for Analytics ³	
Major Option		
Complete all required courses		36
Minor or 2nd Major		
Complete all required courses ⁴		24
Unrestricted electives		
Needed to reach 120 credit hour minimum		25
Total Credit Hours		120

Major Option

Code	Title	Credit Hours
Computer Science Core Requirements		
CYBR 105	Cyber Systems Freshmen: Professional Practice	2
CYBR 150	Computer Science II: Object Oriented Programming	3
CYBR 151	Cyber Programming Environment: Linux	1
CYBR 158	Introduction to Information Security	3
CYBR 180	Discrete Structures	3
CYBR 190	Data Analytics Mathematical Modeling	3
CYBR 235	Fundamentals of Networking & Systems	3
CYBR 325	Database Systems	3
CYBR 330	Algorithms and Data Structures	3
CYBR 381	Systems Analysis and Design I	3
CYBR 495	Cyber Systems Capstone	3
Computer Science Electives		
Select 6 credit hours of the following:		6
CYBR 348	Systems Administration I	
CYBR 401	Operating Systems	
CYBR 404	Software Engineering	

CYBR 405	Human Computer Interactive Application Development	
CYBR 406	Enterprise Application Development	
Total Credit Hours		36

1

Students without sufficient preparation will also need to take the following courses, increasing the total credit hours needed:

- MATH 102
- MATH 103

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

Students without sufficient preparation should take CYBR 100

4

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.