

CYBERSECURITY - BACHELOR OF SCIENCE

Students must complete all University degree requirements, which include: General Education requirements, Viewing a Wider World requirements, and elective credits to total at least 120 credits with 48 credits in courses numbered 300 or above. Developmental coursework will not count towards the degree requirements and/or elective credits, but may be needed in order to take the necessary English and Mathematics coursework.

Prefix	Title	Credits
General Education		
<i>Area I: Communications</i> ¹		
	English Composition - Level 1 ²	4
	English Composition - Level 2 ²	3
	Oral Communication	3
<i>Area II: Mathematics</i> ³		
Choose one from the following:		3-4
MATH 1430G	Applications of Calculus I	
MATH 1511G	Calculus and Analytic Geometry I	
<i>Area III/IV: Laboratory Sciences and Social/Behavioral Sciences</i>		
C S 171G	Modern Computing in Practice	11
<i>Area III: Laboratory Sciences Course (4 credits)</i> ²		
<i>Area IV: Social & Behavioral Sciences (3 credits)</i> ²		
<i>Area V: Humanities</i> ²		
<i>Area VI: Creative and Fine Arts</i> ²		
<i>General Education Elective</i>		
MATH 1521G	Calculus and Analytic Geometry II	4
	or MATH 1521H	Calculus and Analytic Geometry II Honors
Viewing a Wider World ⁴		
Departmental/College Requirements		
BCIS 482	Management of Information Security	3
C S 111	Computational Thinking for Solving Problems	4
C S 272	Introduction to Data Structures	4
C S 273	Machine Programming and Organization	4
	or E E 212	Introduction to Computer Organization
C S 278	Discrete Mathematics for Computer Science	4
C S 371	Software Development	4
C S 380	Introduction to Cryptography	3
C S 448	Senior Project	4
C S 474	Operating Systems I	3
C S 478	Computer Security	3
C S 479	Special Topics (Mobile Computing and Wireless)	3
	or E E 490	Selected Topics
C S 479	Special Topics (Software Reverse Engineering)	3
C S 480	Linux System Administration	3
C S 482	Database Management Systems I	3
C S 484	Computer Networks I	3
CJUS 412	Introduction to Security Technology and Loss Prevention	3
E E 458	Hardware Security and Trust	3
E T 339	Introduction to Digital Forensics and Incident Response	3
Choose one sequence from the following:		6-8

C S 172 & C S 271	Computer Science I and Object Oriented Programming	
C S 152 & C S 271	Java Programming and Object Oriented Programming	
Choose one from the following:		3
E E 200	Linear Algebra, Probability and Statistics Applications	
STAT 3110	Statistics for Engineers and Scientists	
STAT 4210	Probability: Theory and Applications	
Second Language Requirement: (not required)		
Electives, to bring the total credits to 120 ⁵		8-11
Select upper division electives to bring total upper division to 48		
C S 496	Cloud and Edge Computing (Recommended)	
Total Credits		120

- ¹ Students with Area I transfer credits may sometimes complete this requirement with 9 credits
- ² See the General Education (<https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/>) section of the catalog for a full list of courses
- ³ Either MATH 1511G Calculus and Analytic Geometry I or MATH 1430G Applications of Calculus I are required for the degree but students may need to take any prerequisites needed to enter MATH 1511G or MATH 1521G first.
- ⁴ See the Viewing a Wider World (<https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/#viewingawiderworldtext>) section of the catalog for a full list of courses.
- ⁵ Elective credit may vary based on prerequisites, dual credit, AP credit, double majors, and/or minor coursework. The amount indicated in the requirements list is the amount needed to bring the total to 120 credits and may appear in variable form based on the degree. However students may end up needing to complete more or less on a case-by-case basis and students should discuss elective requirements with their advisor.