

Cybersecurity Major

Major Requirements

Degree Type: B.S.
Minimum Credits Required: 120

University Degree Requirements

For complete details on these and other university degree requirements, refer to the Degree and Graduation Requirements (<https://catalog.ndsu.edu/academic-policies/undergraduate-policies/degree-and-graduation/>) section in the University Catalog.

1. Minimum of 120 semester credits (some programs may exceed this minimum).
2. Complete the University General Education requirements.
3. Minimum institutional GPA of 2.00 based on work taken at NDSU.
4. Minimum of 30 credits in resident at NDSU.
5. Minimum of 36 upper level credits (courses numbered 300 or higher).
6. Students with transfer credit must meet the NDSU 30 credits in residence (#4). Of these 30 credits in residence, a minimum of 15 credits must be in courses numbered 300 or above, and 15 credits must be in the student's declared major curricula.

University General Education Requirements

A list of university approved general education courses along with the administrative policies governing the requirement and the categories is available here (<https://catalog.ndsu.edu/academic-policies/undergraduate-policies/general-education/>).

Code	Title	Credits
Category C: Communication		12
Category R: Quantitative Reasoning		3
Category S: Science and Technology		10
Category A: Humanities and Fine Arts		6
Category B: Social and Behavioral Sciences		6
Category W: Wellness		2
Category D: Cultural Diversity		
Category G: Global Perspectives		
Category L: Digital Literacy		
Total Credits		39

Major Requirements

Code	Title	Credits
CSCI 105	Introduction to Cybersecurity	3
CSCI 159	Computer Science Problem Solving	3
CSCI 160	Computer Science I	4
CSCI 161	Computer Science II	4
CSCI 222	Discrete Mathematics	3
CSCI 277	Introduction to UNIX	3
CSCI 305	Principles of Cybersecurity	3
CSCI 366	Database Systems	3
CSCI 371	Web Scripting Languages	3
CSCI 374	Computer Organization and Architecture	3
CSCI 403	Defensive Cybersecurity	3
CSCI 404	Ethical Hacking	3
CSCI 408	Malware Detection, Analysis and Threat Mechanisms	3
CSCI 409	Cybersecurity Law and Policy	3
CSCI 410	Cybersecurity Forensics	3
CSCI 411	Secure Software Development	2
CSCI 445	Software Projects Capstone	3

CSCI 359	Networking	3
CSCI 474	Operating Systems Concepts	3
ENGL 321	Writing in the Technical Professions	3
or ENGL 324	Writing in the Sciences	
MATH 146	Applied Calculus I	4
or MATH 165	Calculus I	
STAT 367	Probability	3
or STAT 330	Introductory Statistics	
STAT 368	Statistics	3
or STAT 331	Regression Analysis	
Select 6 credits of Cyber Electives from the following:		6
CSCI 213	Modern Software Development	
CSCI 412	Mobile Software Engineering	
CSCI 462	Mobile and Wireless Networks	
CSCI 706	Data-Driven Security (with department permission)	
DREM 150	Dealing with Terrorism, Cybersecurity and Other Emerging Threats	
DREM 435	Issues in Homeland Security and Emergency Management	
MATH 473	Cryptology	

Total Credits**77**