

Bachelor of Science

Cybersecurity with a Major in Cyber Risk Management (BS)

Web Site: <https://www.odu.edu/cyber> (<https://www.odu.edu/cyber/>)

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The Cybersecurity degree with a major in cyber risk management focuses on the risk management and management aspects of cybersecurity. Students are required to complete core courses in the fields of cybersecurity and information systems and technology. Building upon this foundation, students are offered elective courses in compliance methodologies, cyber risk management, insurance and information systems management.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both written communication courses and in ENGL 110C before declaring major.

Mathematics: MATH 162M required.

Impact of Technology: met with CYSE 200T/IT 200T in the major

Human Behavior: CRJS 215S or DASC 205S/SOC 205S

Upper-Division General Education

Met in the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.

- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Cyber Risk Management Major

General Education

Complete lower-division requirements 38-44

Complete upper-division requirements (met in the major)

Prerequisite Courses

IT 201	Introduction to Information Systems	3
IT 315	Introduction to Networking and Security	3

Core Courses

IDS 300W	Interdisciplinary Theory and Concepts	3
CYSE/IT 200T	Cybersecurity, Technology, and Society	3
CYSE 201S	Cybersecurity and the Social Sciences	3
CYSE 250	Basic Cybersecurity Programming and Networking	3
CYSE 300	Introduction to Cybersecurity	3
CYSE 301	Cybersecurity Techniques and Operations	3
CYSE 368	Cybersecurity Internship	3
or CYSE 494	Entrepreneurship in Cybersecurity	
CYSE/CRJS/CPD 406	Cyber Law	3
CYSE 425W	Cybersecurity Strategy and Policy (C or better required)	3
or POLS 425W	Cybersecurity Strategy and Policy	
CS 462	Cybersecurity Fundamentals	3
IDS 493	IDS Electronic Portfolio Project	3

Principles Courses

Select three of the following: 9

CYSE 430	Introduction to Cybersecurity Risk Management	
CYSE 431	Advanced Techniques Cybersecurity Risk Management	
CYSE 432	Cyber Risk CSF/CMMC	
CYSE 433	Cyber Risk FedRAMP/Audit	

Select two of the following: 6

RMI 317	Principles of Risk Management and Insurance	
RMI 412	Property & Liability Insurance Company Operations	
IT 417	Management of Information Security	
IT 418	Enterprise Information Assurance	

Electives (minimum of 19 credit hours)

Students can take the electives from any discipline at ODU and/ 19

or complete prerequisites for Principles and Application courses, as needed, to complete the required 120 credit hours. However, no more than 29 credits from courses in the Strome College of Business may be applied to the degree requirements, including named elective courses and general electives (ACCT, BNAL, BUSN, ECON, ENTR, FIN, INBU, IT, MGMT, MKTG, MSCM, OPMT, PAS, PORT, REST, RMI).

Total Credit Hours

111-117

- * No more than 29 credits from courses in the Strome College of Business may be applied to the degree requirements, including named elective courses and general electives (ACCT, BNAL, ECON, FIN, IT, OPMT, MSCM, MGMT, ENTR, MKTG).
- + Other courses may be substituted with the approval of the program coordinator.

No more than two classes, or six credits, may be counted for both the major and a minor. Some minors may allow fewer credits to share.

Electives

Elective credit may be needed to meet the minimum of 120 hours required for the degree.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 162M	Precalculus I	3
Oral Communication		3
Information Literacy and Research		3
Human Behavior (CRJS 215S or DASC 205S/SOC 205S required)		3
Credit Hours		15
Spring		
CYSE 200T or IT 200T	Cybersecurity, Technology, and Society (meets Impact of Technology) or Cybersecurity, Technology, and Society	3
IT 201	Introduction to Information Systems	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)		3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)		3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)		3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research or Writing, Rhetoric, and Research: Special Topics	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)		3
Nature of Science I		4
CYSE 201S	Cybersecurity and the Social Sciences	3
CYSE 250	Basic Cybersecurity Programming and Networking	3
Credit Hours		16

Spring

Nature of Science II		4
CYSE 300	Introduction to Cybersecurity	3
Program prerequisites or electives		7
Credit Hours		14

Junior

Fall

CYSE 430 or CYSE 431 or CYSE 432 or CYSE 433	Introduction to Cybersecurity Risk Management or Advanced Techniques Cybersecurity Risk Management or Cyber Risk CSF/CMMC or Cyber Risk FedRAMP/Audit	3
IT 315	Introduction to Networking and Security	3
Program prerequisites or electives		9
Credit Hours		15

Spring

CYSE 425W or POLS 425W	Cybersecurity Strategy and Policy (C or better required) or Cybersecurity Strategy and Policy	3
CYSE 301	Cybersecurity Techniques and Operations	3
CYSE 430 or CYSE 431 or CYSE 432 or CYSE 433	Introduction to Cybersecurity Risk Management or Advanced Techniques Cybersecurity Risk Management or Cyber Risk CSF/CMMC or Cyber Risk FedRAMP/Audit	3
Program prerequisites or electives		6
Credit Hours		15

Senior

Fall

CYSE 368 or CYSE 494	Cybersecurity Internship or Entrepreneurship in Cybersecurity	3
CYSE 430 or CYSE 431 or CYSE 432 or CYSE 433	Introduction to Cybersecurity Risk Management or Advanced Techniques Cybersecurity Risk Management or Cyber Risk CSF/CMMC or Cyber Risk FedRAMP/Audit	3
RMI 317 or RMI 412 or IT 417 or IT 418	Principles of Risk Management and Insurance or Property & Liability Insurance Company Operations or Management of Information Security or Enterprise Information Assurance	3
IDS 300W	Interdisciplinary Theory and Concepts	3
Elective		3
Credit Hours		15

Spring

IDS 493	IDS Electronic Portfolio Project	3
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RMI 317 or RMI 412 or IT 417 or IT 418	Principles of Risk Management and Insurance or Property & Liability Insurance Company Operations or Management of Information Security or Enterprise Information Assurance	3
CYSE 406 or CRJS 406 or CPD 406	Cyber Law or Cyber Law or Cyber Law	3
CS 462	Cybersecurity Fundamentals	3
Elective		3
Credit Hours		15
Total Credit Hours		120

Language and Culture I & II may be met in high school and are not included in this four-year plan. Please see requirement details.