Cybersecurity - Residential

The Master of Science in Cybersecurity is designed to be completed in 4 semesters. It takes 8 courses to complete the program and students can take up to 3 courses per semester, but the Department strongly recommends taking no more than 2 courses per semester--especially during one's first term at Brown. We do not currently offer summer term courses in the program, so courses are completed during fall and spring. Course availability varies and there is no guarantee that students will be able to take every course they are interested in.

Students in the program are only pre-approved to take the courses from the standard curriculum during the specific semesters listed below. If you deviate from the standard curriculum without approval from your Director of Graduate Studies, the course you register for may not count towards your degree.

Computer Science Track

Computer Science Track:		
Required Courses:		
CSCI 2200	Cybersecurity Law and Policy	1
CSCI 2660	Computer Systems Security	1
CSCI 2999A	Cybersecurity Management Within Business, Government, and Non-Profit Organizations	1
Select Three Track courses:		**3**
CSCI 1310	Fundamentals of Computer Systems	
CSCI 1330	Computer Systems	
CSCI 1340	Introduction to Software Engineering	
CSCI 1510	Introduction to Cryptography and Computer Security (prerequisite: CSCI 1010 Theory of Computation, prerequisite/corequisite: CSCI 1660 Computer Systems Security)	
CSCI 1515	Applied Cryptography (prerequisite: CSCI 1310 Fundamentals of Computer Systems or CSCI 1330 Computer Systems)	
CSCI 1650	Software Security and Exploitation (prerequisites: CSCI 1330 Computer Systems, CSCI 1670 Operating Systems)	
CSCI 1670	Operating Systems (prerequisite: CSCI 1330 Computer Systems)	
CSCI 2670	Operating Systems (prerequisite: CSCI 1330 Computer Systems)	
CSCI 1680	Computer Networks (prerequisite: CSCI 1310 Fundamentals of Computer Systems or CSCI 1330 Computer Systems)	
CSCI 1690	Operating Systems Laboratory (prerequisite: CSCI 1330 Computer Systems)	
CSCI 1730	Design and Implementation of Programming Languages	
CSCI 1951L	Blockchains and Cryptocurrencies (prerequisite: CSCI 1330 Computer Systems)	
CSCI 2590	Advanced Topics in Cryptography (prerequisite: CSCI 1510 Introduction to Cryptography and Computer Security)	
CSCI 2951E	Topics in Computer Systems Security (prerequisite: CSCI 1660 Computer Systems Security)	
CSCI 2951U	Topics in Software Security (prerequisite: CSCS 1650 Software Security and Exploitation)	
Select Two Elective Courses:		**2**
CSCI 1010	Theory of Computation	
CSCI 1260	Compilers and Program Analysis	
CSCI 1270	Database Management Systems	
CSCI 1360	Human Factors in Cybersecurity	
CSCI 1570	Design and Analysis of Algorithms	
CSCI 1760	Multiprocessor Synchronization	
CSCI 1800	Cybersecurity and International Relations	
CSCI 1805	Computers, Freedom and Privacy	
CSCI 1870	Cybersecurity Ethics	
CSCI 1951R	Introduction to Robotics	
CSCI 2002	Privacy and Personal Data Protection	
CSCI 2980	Reading and Research	

This course can be used for a project relevant to policy challenges in cybersecurity. It can count as 1 or 2 courses: shorter projects will count as one course and are completed in one semester; longer projects will count as two courses and are completed in two semesters.

Policy Track

Policy Track:		
Required Courses:		
CSCI 1360	Human Factors in Cybersecurity	1
CSCI 1880	Introduction to Computer Security	1
CSCI 2200	Cybersecurity Law and Policy	1
CSCI 2999A	Cybersecurity Management Within Business, Government, and Non-Profit Organizations	1
Select Three Track courses:		**3**
CSCI 1040	The Basics of Cryptographic Systems	
CSCI 1800	Cybersecurity and International Relations	
CSCI 1805	Computers, Freedom and Privacy	
CSCI 1870	Cybersecurity Ethics	
IAPA 1811	Contemporary Digital Policy and Politics (Only Available for Synchronous Attendance) (Course With Limited Enrollment) or CSCI 1952X Contemporary Digital Policy and Politics (Asynchronous Version of IAPA 1811) (Course With Limited Enrollment))	
CSCI 2002	Privacy and Personal Data Protection	
CSCI 2952S	Topics in Cyber and Digital Policy (Course With Limited Enrollment)	
Select Two Elective Courses:		**2**
CSCI 1951L	Blockchains and Cryptocurrencies	
ENGN 2125	Engineering Management + Decision Making	
ENGN 2150	Technology Entrepreneurship and Commercialization I (This course has a limited number of seats for ScM in Cybersecurity students. The number of seats available varies by semester)	
ENGN 2180	Globalization Immersion Experience and Entrepreneurship Laboratory (This course has a limited number of seats for ScM in Cybersecurity students. The number of seats available varies by semester)	
CSCI 2951E	Topics in Computer Systems Security (if you have satisfied prerequisites)	
CSCI 2980	Reading and Research	

This course can be used for a project relevant to policy challenges in cybersecurity. It can count as 1 or 2 courses: shorter projects will count as one course and are completed in one semester; longer projects will count as two courses and are completed in two semesters.