

Computer Security and Privacy MS

Program Requirements

Foundation Courses or Additional Electives 12.0

Foundation Courses for Students without a CS or SE Background (0-12 credits)

CS 501	Introduction to Programming
CS 502	Data Structures and Algorithms
CS 503	Systems Basics
CS 504	Introduction to Software Design

Electives CS and SE Courses that can be taken in lieu of Foundation Courses (0-12 credits)

CS 510	Introduction to Artificial Intelligence
CS 643	Advanced Operating Systems
CS 647	Distributed Systems Software
CS 660	Data Analysis at Scale
SE 575	Software Design
SE 576	Software Reliability and Testing
SE 577	Software Architecture

Required CS Courses

CS 543	Operating Systems	3.0
CS 544	Computer Networks	3.0
CS 613	Machine Learning	3.0
CS 615	Deep Learning	3.0

Required Security & Privacy Courses

CS 523	Cryptography	3.0
CS 590	Privacy	3.0
CS 645	Network Security	3.0
CT 605	Cloud Security and Virtual Environments	3.0
CT 620	Security, Policy and Governance	3.0
INFO 710	Information Forensics	3.0
SE 578	Security Engineering	3.0

Total Credits 45.0

Sample Plan of Study

No Co-op option

First Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
CS 510	3.0 CS 543	3.0 CS 544	3.0 CS 523	3.0
SE 575	3.0 SE 576	3.0 SE 577	3.0 CT 605	3.0
	6	6	6	6

Second Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
CS 613	3.0 CS 590	3.0 CS 645	3.0 CS 615	3.0
CT 620	3.0 SE 578	3.0 INFO 710	3.0	
	6	6	6	3

Total Credits 45

Full-time, Graduate Co-op option

First Year

Fall	Credits Winter	Credits Spring	Credits Summer	Credits
CS 510	3.0 CS 523	3.0 CS 544	3.0 Co-op	
CT 620	3.0 CS 543	3.0 CS 613	3.0	
SE 575	3.0 SE 576	3.0 SE 577	3.0	
	9	9	9	0

Second Year

Fall	Credits Winter	Credits Spring	Credits
Co-op	CS 590	3.0 CS 645	3.0
	CS 615	3.0 CT 605	3.0
	SE 578	3.0 INFO 710	3.0
	0	9	9

Total Credits 45