

Cybersecurity with MS in Data Science

Recommended Graduation Plan (Fall 2025)

This recommended graduation plan is designed to provide a blueprint for students to complete their degrees on time. These plans are the recommended sequences of courses. Students must meet with their Academic Advisor to develop a more individualized plan to complete their degree.

NOTE: This recommended Graduation Plan is applicable to students admitted into the major during the 2025-2026 academic year.

CRWT Placement
CRWT 101 to CRWT 102
CRWT 101S to CRWT 102S

Math Placement
MATH 021/022 to MATH 024 to MATH 110 to MATH 121

NOTE: CRWT and MATH courses are determined by [placement testing](#) and should be taken following the sequence above.

First Year					
Fall Semester	HRS	✓	Spring Semester	HRS	✓
CMPS 147-Computer Science I	4		CMPS 148-Computer Science II	4	
Gen Ed: MATH 110-Precalculus	4		MATH 121-Calculus I	4	
Gen Ed: INTD 101-First Year Seminar	4		CMPS 220-Assembly Language Programming	4	
Gen Ed: CRWT 102 - Critical Reading and Writing II	4		General Education Requirement	4	
			TAS Pathways Module 1: Career Assessment/ Advising		
Total:	16		Total:	16	

Second Year					
Fall Semester	HRS	✓	Spring Semester	HRS	✓
CMPS 231-Data Structures	4		CMPS 311-Operating Systems WI	4	
MATH 237-Discrete Structures or MATH 205 Mathematical Structures WI	4		INFO 224-Principles of Information Technology	4	
General Education Requirement	4		General Education Requirement	4	
DATA 225 Ethics of Technology OR INFO 315 COMPUTER LAW & ETHICS	4		General Education Requirement	4	
TAS Pathways Module 2: Resume/CV Writing			TAS Pathways Module 3: Interview Preparation		
Total:	16		Total:	16	

Third Year					
Fall Semester	HRS	✓	Spring Semester	HRS	✓
CMPS 305-Cyber Security	4		CMPS 370 - Cyber and Network Defense	4	
CMPS 327 - Network Programming OR INFO 335 - Networks and Distributed Processing	4		CMPS/INFO/ELECTIVE 1 of 4	4	
General Education Requirement	4		General Education Requirement	4	
Free Elective (minor, certificate, or second major requirement)	4		MATH 370-Applied Statistics	4	
Total:	16		Total:	16	

Fourth Year					
Fall Semester	HRS	✓	Spring Semester	HRS	✓
MATH 240 - Cryptography	4		CMPS/INFO/ELECTIVE 3 of 4	4	
CMPS 530: Python for Data Science Counts as CMPS/INFO/ELECTIVE 2 of 4	4		CMPS/INFO/ELECTIVE 4 of 4	4	
DATA 601: Intro to Data Science (MS)	4		CMPS 450: Senior Project W	4	
Free Elective (minor, certificate, or second major requirement) OR Gen Ed: Values & Ethics if DATA 225 not taken	4		DATA 620: Ethics for Data Science (MS)	4	
Total:	16		Total:	16	

Fifth Year					
Fall Semester	HRS	✓	Spring Semester	HRS	✓
MATH 570: Applied Statistics	3		CMPS 664: Advanced Database and Big Data	3	
MATH 680: Advanced Mathematical Modeling	3		Data Science Elective at 600/700 level	3	
Data Science Elective at 600/700 level	3		CMPS 750 - Thesis	2	
Interdisciplinary Elective	3				
CMPS 745 - Thesis Proposal	1				
	13			8	

Total Credits Required: 128 credits

GPA Required: 2.0

WI: Writing Intensive-3 required in the major

General Education courses can be done in any order with the exception of INTD 101, CRWT and MATH. Those three general education courses will need to be done first. First Year Seminar is taken in the first semester. Failure to complete CRWT and MATH will result in a hold when the student hits 64 credits. The following general education courses can be done in any order. For more info on these courses, please visit the [General Education program requirements website in the College Catalog](#):

- Social Science Inquiry (SOSC 110) [+W]
- Scientific Reasoning
- Historical Perspectives [+W]
- Studies in the Arts & Humanities (*CRWT 102 is a prerequisite to this course*) [+W]
- Global Awareness [+W]
- Distribution Category (Social Systems & Society **OR** Culture & Creativity **OR** Values and Ethics) (**Must be outside of TAS**)
- Distribution Category

+W: Students transferring in with 48 or more credits are waived from these general education requirements.