Bachelor of Science in Cybersecurity

(Prior to Fall 2025)

Cybersecurity Core
40 Hours

Course	Hr
CSE 1011 - Introduction to CSE	1
CSE 1284 - Intro. To Comp. Prog.	4
CSE 1384 - Intermed. Comp. Prog.	4
CSE 2213 - Methods & Tools in SW	3
CSE 2383 - Data Structures & Alg.	3
CSE 2813 - Discrete Structures	3
CSE 3183 - Systems Programming	3
CSE 3724 - Comp. Organization	4
CSE 3763 - Ethical & Legal Issues	3
CSE 4153 - Data Com. & Networks	3
CSE 4173 - Cryptography	3
CSE 4243 - Info. & Comp. Security	3
CSE 4733 - Operating Systems I	3

Cybersecurity Electives
15 Hours (Select 5 Courses)

Course	Hr
BIS 4113 - BIS Security	3
CSE 4253 - Secure SW Engineering	3
CSE 4273 - Intro. Comp. Forensics	3
CSE 4363 - Software Reverse Eng.	3
CSE 4383 - Network Security	3
CSE 4773 - Intro. Cyber Operations	3
CSE 4743 - Operating Systems II	3

Cybersecurity - Free Electives
6 Hours

Course	Hr
Free Elective Course	3
Free Elective Course	3

Departmental Required Hours :	73
Non-Departmental Required Hours:	24
MSU Core Required Hours:	31
Total Program Hours:	128

Cybersecurity - Tech Electives
18 Hours (3000+ level CSE, ECE, MA, or approved courses)

Course	Hr
3000+ Approved Tech Elective	3
3000+ Approved Tech Elective	3
3000+ Approved Tech Elective	3
3000+ Approved Tech Elective	3
3000+ Approved Tech Elective	3
3000+ Approved Tech Elective	3

Cybersecurity - Math Core
9 Hours

Course	Hr
MA 1713 - Calculus I	3
MA 1723 - Calculus II	3
MA 3113 - Linear Algebra	3

Cybersecurity - Math Elective
3 Hours (Select 1 Course)

Course	Hr
MA 2733 - Calculus III	3
MA 3053 - Foundations of Math	3
MA 4143 - Graph Theory	3
MA 4173 - Number Theory	3

Cybersecurity - Communication
3 Hours

Course	Hr
GE 3513 - Technical Writing	3

Cybersecurity - Statistics Elective
3 Hours (Select 1 Course)

Course	Hr
IE 4613 - Engineering Statistics	3
MA 4523 - Intro. To Probability	3
MA 4543 - Intro. Math Statistics	3
BQA 2113 - Business Statistics	3

MSU Core - English
6 Hours

Course	Hr
EN 1103 or 1104 - English Comp. I	3
EN 1113 or 1173 - English Comp. II	3

MSU Core - Lab Sciences*
4 Hours

Course	Hr
CH 1213 - Chemistry I	3
CH 1211 - Investigations in Chemistry	1

MSU Core - Science Elective**
6 Hours

Course	Hr
Approved Science - see footnote	3
Approved Science - see footnote	3

MSU Core - Humanities***
6 Hours

Course	Hr
MSU Core defined Humanities	3
MSU Core defined Humanities	3

MSU Core - Creative Discovery***
3 Hours

Course	Hr
MSU Core defined Creative Discovery	3

MSU Core - Social Science***
6 Hours

Course	Hr
MSU Core defined Social Science	3
MSU Core defined Social Science	3

*Lab Sciences: BIO 1134, BIO 1144, PH 2223, CH 1223 + 1221

**Science Electives: PH 2213 and all Lab Sciences listed above

***Additional Information on MSU Core course categories: MSU Catalog Reference