

BACHELOR OF SCIENCE (BS) IN COMPUTER SCIENCE AND MASTER OF SCIENCE IN CYBER TECHNOLOGY (MSCT)

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Program Requirements

Entrance requirements for the Bachelor of Science in Computer Science and Master of Science in Cyber Technology combined degrees are:

- 3.0 GPA
- Junior Standing
- Acceptance into Graduate School

Freshman – Junior Standing Requirements

Students will complete the course requirements for undergraduate BSCS (<https://catalog.clayton.edu/academic-catalog/information-mathematical-sciences/computer-science-information-technology/computer-science-bs/>).

Senior Standing Requirements

Students will complete up to 6 credit hours of approved graduate-level CSCI courses in the final 2 semesters along with their remaining undergraduate coursework.

The student must submit the following to Graduate Admissions during their senior year: application, application processing fee, and transcripts from all institutions attended.

Suggested Course Sequence

Please note: This is a suggested course sequence.

Course	Title	Credit Hours
First Year		
First Semester		
ENGL 1101	English Composition I	3
MATH 1112 or MATH 1113	College Trigonometry or Pre-Calculus	3
POLS 1101	American Government ^{Core Area E1}	3
HIST 2111 or HIST 2112	Survey of US History to 1877 ^{Core Area E3} or US HIST Since Reconstruction	3
CSCI 1301	Computer Science I	3
CSU 1000	First Year Seminar	1
Credit Hours		16
Second Semester		
ENGL 1102	English Composition II	3
CRIT 1101	Critical Thinking	3
CSCI 1100	Applied Computing	3
CSCI 1302	Computer Science II	3
MATH 2020	Introductory Discrete Math	3
Credit Hours		15
Second Year		
First Semester		
Foreign Languages or Communication ^{Area B2}		1

Literature, Philosophy, or Foreign Language ^{Core Area C1}		3
1st Natural Sciences with Lab ^{Area D1}		4
MATH 1501	Calculus I	4
CSCI 2302	Data Structures and Algorithms	3
Credit Hours		15
Second Semester		
Fine Arts OR Intermediate Foreign Language ^{Core Area C2}		3
HIST 1111 or HIST 1112 or HIST 2750 or POLS 2401	Survey-PreModern World History ^{Core Area E2} or Survey of Modern World History or Critical Trends and Issues or Intro to Global Issues	3
CSCI 2305	Computer Org. & Architecture	3
MATH 1401	Elementary Statistics	3
MATH 2502	Calculus II	4
Credit Hours		16
Third Year		
First Semester		
2nd Natural Sciences with Lab ^{Core Area D1}		4
MATH 2140	Introductory Linear Algebra	3
CSCI 3305	Operating Systems	3
CSCI 3306	Computer Networks & Security	3
CSCI 3310	Databases Design & Implement.	3
Credit Hours		16
Second Semester		
AFAM 2010 or ECON 1101 or ECON 2105 or ECON 2106 or PSYC 1101 or SOCI 1101 or WST 2010	Intro-African American Studies ^{Core Area E4} or Economics of Fin Literacy or Principles of Macroeconomics or Principles of Microeconomics or Intro to General Psychology or Introduction to Sociology or Intro to Women's Studies	3
CSCI 3300	Professional Dev and Ethics	3
CSCI 3320	Software Engineering Design	3
CSCI 3333	Programming Languages	3
Area F Course *		4
Credit Hours		16
Total Credit Hours		94

Cybersecurity Concentration and General Computer Science Concentration

Course	Title	Credit Hours
Fourth Year		
First Semester		
CSCI 4333	Theory of Computation	3
CSCI 4320	Software Engineering Practicum	3
CSCI 5701	Introduction to Cybersecurity ^{1, 2}	3
Major Concentration		3
ENGL 3900	Professional & Tech. Writing	3
Credit Hours		15
Second Semester		
CSCI 5317	Operating Systems Admin& Secur ^{2, 3}	3
Major Concentration		3
Major Concentration		3
Free Elective		3
Credit Hours		12
Total Credit Hours		27

Big Data Concentration

Course	Title	Credit Hours
Fourth Year		
First Semester		
CSCI 4333	Theory of Computation	3
CSCI 4320	Software Engineering Practicum	3
Major Concentration		3
Major Concentration		3
ENGL 3900	Professional & Tech. Writing	3
Credit Hours		15
Second Semester		
Major Concentration		3
Major Concentration		3
Major Concentration		3
CSCI 5701	Introduction to Cybersecurity ^{1,2}	3
CSCI 5317	Operating Systems Admin& Secur ^{3,4}	3
Credit Hours		15
Total Credit Hours		30

¹ Students who take CSCI 5701 Introduction to Cybersecurity in their senior year should not take CSCI 4701 or ITMM 4423 Security for E-Commerce.

² Dual Credit-Course counts toward both degrees.

³ Students who take CSCI 5317 Operating Systems Admin& Secur should not take CSCI 4317 OS Security, Prog, & Admin or ITFN 4601 OS Security, Prog, & Admin.

⁴ The 3 credit-hours count only toward master's degree.

Applied Project Track (Fifth Year)

Course	Title	Credit Hours
Fifth Year		
First Semester		
CSCI 5306	Computer & Networks Security	3
CSCI 5601	Software Security	3
Concentration Course		3
CSCI 6574	Research Techniques	3
Credit Hours		12
Second Semester		
CSCI 6599	Special Project	3
Concentration Course		3
Concentration Course		3
Concentration Course		3
Credit Hours		12
Total Credit Hours		24

Thesis Track (Fifth Year)

Course	Title	Credit Hours
Fifth Year		
First Semester		
CSCI 5306	Computer & Networks Security	3
CSCI 5601	Software Security	3
CSCI 6574	Research Techniques	3
Concentration Course		3
Credit Hours		12
Second Semester		
CSCI 6600	Thesis	3
Concentration Course		3
Concentration Course		3
Concentration Course		3
Credit Hours		12
Total Credit Hours		24

* MATH 2503 Calculus III OR 3rd Calculus III OR 3rd Natural Sciences with Lab.