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

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. Three letters of reference are also required.

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	Trigonometry & Analytic Geom 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

Course	Title	Credit Hours
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 Survey of Economics 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**

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
Concentration Course		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.

[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.