

BACHELOR OF INFORMATION TECHNOLOGY (BIT) AND MASTER OF SCIENCE IN CYBER TECHNOLOGY (MSCT)

Program Requirements

Entrance requirements for the Bachelor of Information Technology and Master of Science in Cyber Technology combined degree are:

- 3.0 GPA
- Junior Standing
- Acceptance into Graduate School

Freshman – Junior Standing Requirements

Students will complete all the course requirements for undergraduate Bachelor of Information Technology (<https://catalog.clayton.edu/academic-catalog/information-mathematical-sciences/computer-science-information-technology/information-technology-bit/>).

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 only.

Course	Title	Credit Hours
First Year		
First Semester		
ENGL 1101	English Composition I	3
MATH 1101 or MATH 1111	Intro to Mathematical Modeling or College Algebra	3
CRIT 1101	Critical Thinking	3
POLS 1101	American Government	3
ITFN 1101	Foundations-Information Tech.	3
Credit Hours		15
Second Semester		
ENGL 1102	English Composition II	3
MATH 1221	Finite Mathematics	3
HIST 2111 or HIST 2112	Survey of US History to 1877 or US HIST Since Reconstruction	3
ITFN 1201	Foundations of Database Design	3
ITFN 1401	Foundations of Webmaster	3
Credit Hours		15
Second Year		
First Semester		
Literature, Philosophy, or Foreign Language		3

AFAM 2010 or ECON 1101 or ECON 2105 or ECON 2106 or PSYC 1101 or SOCI 1101 or WST 2010	Intro-African American Studies 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 1301	Computer Science I	3
MATH 1401	Elementary Statistics	3
ITFN 1502	Fnds. of Networking & Security	3
Credit Hours		15
Second Semester		
Fine Arts OR Intermediate Foreign Language		3
HIST 1111 or HIST 1112 or HIST 2750 or POLS 2401	Survey-PreModern World History or Survey of Modern World History or Critical Trends and Issues or Intro to Global Issues	3
CSCI 1302	Computer Science II	3
ITFN 2214	Web Application Development	3
ITFN 2512	Interm. Networking & Security	3
Credit Hours		15
Third Year		
First Semester		
Foreign Languages or Communication		2
Natural Sciences with Lab		4
ITFN 3003	Professional Dev. and Ethics	3
ITFN 3103	Human-Computer Interaction	3
ITFN 3112	System Analysis and Design	3
Credit Hours		15
Second Semester		
Natural Sciences		3
ITFN 3144	Informatics Project Management	3
ITFN 3316	SW Security, Testing, and QA	3
ITFN 3601	Operating Systems	3
Free Elective		3
Credit Hours		15
Total Credit Hours		90

Networking and Security Concentration

Course	Title	Credit Hours
Fourth Year		
First Semester		
ITFN 4154	Informatics Integration	3
ITFN 4433	Web Integration	3
ITNW 4501	Network Planning and Design	3
CSCI 5701	Introduction to Cybersecurity ^{1, 2}	3
Free Elective		3
Credit Hours		15
Second Semester		
ITFN 4014	Internship Cooperative	3
ITNW 4502	Secure Networks & Comm. Protoc	3
CSCI 5317	Operating Systems Admin& Secur ^{2, 3}	3
Free Elective		3
Free Elective		3
Credit Hours		15
Total Credit Hours		30

Database Administration Concentration

Course	Title	Credit Hours
Fourth Year		
First Semester		
ITFN 4154	Informatics Integration	3
ITFN 4433	Web Integration	3
ITDB 4201	Advanced Database Modeling	3
ITDB 4203	Database Admin & Architecture	3
CSCI 5701	Introduction to Cybersecurity ^{1, 2}	3
Credit Hours		15
Second Semester		
ITFN 4014	Internship Cooperative	3
ITDB 4202	Database Applications	3
CSCI 5317	Operating Systems Admin& Secur ^{2, 3}	3
Free Elective		3
Free Elective		3
Credit Hours		15
Total Credit Hours		30

Informatics Concentration

Course	Title	Credit Hours
Fourth Year		
First Semester		
ITFN 4154	Informatics Integration	3
ITFN 4433	Web Integration	3
Any 4000 IT Course		3
CSCI 5701	Introduction to Cybersecurity ^{1, 2}	3
Free Elective		3
Credit Hours		15
Second Semester		
ITFN 4014	Internship Cooperative	3
CSCI 5317	Operating Systems Admin& Secur ^{2, 3}	3
Upper Division IT Elective		3
Free Elective		3
Free Elective		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 5601	Software Security	3
CSCI 5306	Computer & Networks 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

¹ Students who take CSCI 5701 Introduction to Cybersecurity in their senior year should NOT take CSCI 4701 or ITMM 4423.

² Dual Credit-Course counts towards both degrees.

³ Students who take CSCI 5317 Operating Systems Admin& Secur should NOT take CSCI 4317 or ITFN 4601.