COMPUTER SCIENCE, BS

Course Sequencing

Systems Programming

First Year

Fall

		Hours
UNIV 1101	University Seminar I	1
ENGL 1301	Writing and Rhetoric I	3
COSC 1435	Introduction to Problem Solving with Computers I	4
COSC 3100	Skills for Computing Professionals I	1
MATH 2413	Calculus I	4
Social and Behavioral Sciences Core Requirement		3
	Hours	**16**

Spring

UNIV 1102	University Seminar II	1
ENGL 1302 or COMM 1311	Writing and Rhetoric II or Foundation of Communication	3
COSC 1436	Introduction to Problem Solving with Computers II	4
COSC 3301	Cyber Security	3
MATH 2305	Discrete Mathematics I	3
	Hours	**14**

Second Year

Fall

COSC 2334	Computer Architecture	3
COSC 2437	Data Structures	4
MATH 2414	Calculus II	4
POLS 2305	U.S. Government and Politics	3
Creative Arts Core Requirement		3
	Hours	**17**

Spring

ENGL 3310	Technical and Professional Writing for Computer Science	3
COSC 3324	Object-oriented Programming	3
COSC 3353	Survey of Programming Languages	3
POLS 2306	State and Local Government	3
Approved Upper-Division COSC Course		3
	Hours	**15**

Third Year

Fall

MATH 3342 or MATH 3345	Applied Probability and Statistics or Statistical Modeling and Data Analysis	3
COSC 3336	Introduction to Database Systems	3
COSC 3370	Software Engineering	3
COSC 3385	Numerical Methods	3
Science Sequence		4
	Hours	**16**

Spring

COSC 3346	Operating Systems	3
COSC 3373	Software Project Management	3

Approved Upper-Division COSC Course		3
American History Core Requirement		3
Science Sequence		4
	Hours	**16**

Fourth Year

Fall

COSC 4100	Skills for Computing Professionals II	1
COSC 4342	Computer Networks	3
COSC 4343	Algorithms	3
COSC 4353 or COSC 4360 or COSC 4370	Compiler Construction or Theory of Programming Languages or Models of Computation	3
Approved Upper-Division COSC Course		3
American History Core Requirement		3
	Hours	**16**

Spring

COSC 4354	Senior Capstone Project	3
COSC 4348	Systems Programming	3
Approved Upper-Division COSC Course		3
Language, Philosophy & Culture Core Requirement		3
	Hours	**12**
	Total Hours	**122**

Cyber Security and Infrastructure

First Year

Fall

		Hours
UNIV 1101	University Seminar I	1
ENGL 1301	Writing and Rhetoric I	3
COSC 1435	Introduction to Problem Solving with Computers I	4
COSC 3100	Skills for Computing Professionals I	1
MATH 2413	Calculus I	4
Social and Behavioral Sciences Core Requirement		3
	Hours	**16**

Spring

UNIV 1102	University Seminar II	1
ENGL 1302 or COMM 1311	Writing and Rhetoric II or Foundation of Communication	3
COSC 1436	Introduction to Problem Solving with Computers II	4
COSC 2348	Introduction to Scripting	3
MATH 2305	Discrete Mathematics I	3
	Hours	**14**

Second Year

Fall

COSC 2334	Computer Architecture	3
COSC 2437	Data Structures	4
COSC 2465	Linux Systems	4
POLS 2305	U.S. Government and Politics	3
Creative Arts Core Requirement		3
	Hours	**17**

Spring

COSC 2466	Network Systems	4

Course	Title	Hours
COSC 3336	Introduction to Database Systems	3
POLS 2306	State and Local Government	3
American History Core Requirement		3
Component Area Option Core Requirement		3
	Hours	**16**

Third Year

Fall

Course	Title	Hours
COSC 3351	Internet Programming	3
ENGL 3310	Technical and Professional Writing for Computer Science	3
COSC 4365	Windows Security	3
MATH 3342 or MATH 3345	Applied Probability and Statistics or Statistical Modeling and Data Analysis	3
COSC 3346	Operating Systems	3
	Hours	**15**

Spring

Course	Title	Hours
COSC 3370	Software Engineering	3
COSC 3372	Network Security	3
COSC 4310	Digital Forensics	3
Component Area Option Core Requirement		3
Approved Upper-Division COSC Course		3
	Hours	**15**

Fourth Year

Fall

Course	Title	Hours
COSC 4367	Firewall and Intrusion Detection Systems	3
COSC 3474	Cyber Defense I	4
COSC 4100	Skills for Computing Professionals II	1
American History Core Requirement		3
Life & Physical Science Core Requirement		3
	Hours	**14**

Spring

Course	Title	Hours
COSC 4354	Senior Capstone Project	3
COSC 4368	Penetration Testing	3
Approved Upper-Division COSC Course		3
Life & Physical Science Core Requirement		3
Language, Philosophy & Culture Core Requirement		3
	Hours	**15**
	Total Hours	**122**

Computer Game Programming

First Year

Fall

Course	Title	Hours
UNIV 1101	University Seminar I	1
ENGL 1301	Writing and Rhetoric I	3
COSC 1435	Introduction to Problem Solving with Computers I	4
COSC 3100	Skills for Computing Professionals I	1
MATH 2413	Calculus I	4
Social and Behavioral Sciences Core Requirement		3
	Hours	**16**

Spring

Course	Title	Hours
UNIV 1102	University Seminar II	1
ENGL 1302 or COMM 1311	Writing and Rhetoric II or Foundation of Communication	3
COSC 1436	Introduction to Problem Solving with Computers II	4
COSC 2325	Game Design	3
COSC 3301	Cyber Security	3
MATH 2305	Discrete Mathematics I	3
	Hours	**17**

Second Year

Fall

Course	Title	Hours
COSC 2334	Computer Architecture	3
COSC 2437	Data Structures	4
PHYS 2425	University Physics I	4
MATH 2414	Calculus II	4
	Hours	**15**

Spring

Course	Title	Hours
PHYS 2426	University Physics II	4
MATH 3311	Linear Algebra	3
COSC 3325	Game Programming	3
COSC 3336	Introduction to Database Systems	3
Language, Philosophy & Culture Core Requirement		3
	Hours	**16**

Third Year

Fall

Course	Title	Hours
COSC 3324	Object-oriented Programming	3
COSC 3346	Operating Systems	3
COSC 3385	Numerical Methods	3
COSC 4328	Computer Graphics	3
POLS 2305	U.S. Government and Politics	3
	Hours	**15**

Spring

Course	Title	Hours
MATH 3342 or MATH 3345	Applied Probability and Statistics or Statistical Modeling and Data Analysis	3
COSC 3370	Software Engineering	3
COSC 4342	Computer Networks	3
COSC 4325	Advanced Game Programming	3
ENGL 3310	Technical and Professional Writing for Computer Science	3
	Hours	**15**

Fourth Year

Fall

Course	Title	Hours
COSC 4330	Introduction to Artificial Intelligence	3
COSC 4343	Algorithms	3
COSC 4100	Skills for Computing Professionals II	1
Theory Group		3
Approved Upper-Division COSC Course		3
American History Core Requirement		3
	Hours	**16**

Spring

Course	Title	Hours
COSC 4354	Senior Capstone Project	3
POLS 2306	State and Local Government	3
American History Core Requirement		3

Creative Arts Core Requirement		3
Hours		**12**
Total Hours		**122**

Computer Information Systems

First Year

Fall

		Hours
UNIV 1101	University Seminar I	1
ENGL 1301	Writing and Rhetoric I	3
COSC 1435	Introduction to Problem Solving with Computers I	4
COSC 3100	Skills for Computing Professionals I	1
MATH 2413	Calculus I	4
Social and Behavioral Sciences Core Requirement		3
Hours		**16**

Spring

UNIV 1102	University Seminar II	1
ENGL 1302 or COMM 1311	Writing and Rhetoric II or Foundation of Communication	3
COSC 1436	Introduction to Problem Solving with Computers II	4
MATH 2305	Discrete Mathematics I	3
Creative Arts Core Requirement		3
Hours		**14**

Second Year

Fall

COSC 2334	Computer Architecture	3
COSC 2437	Data Structures	4
COSC 2470	COBOL Programming	4
Minor Course		3
POLS 2305	U.S. Government and Politics	3
Hours		**17**

Spring

COSC 3336	Introduction to Database Systems	3
Approved Upper-Division COSC Course		3
Minor Course		3
American History Core Requirement		3
POLS 2306	State and Local Government	3
Hours		**15**

Third Year

Fall

MATH 3342 or MATH 3345	Applied Probability and Statistics or Statistical Modeling and Data Analysis	3
COSC 3346	Operating Systems	3
COSC 3324	Object-oriented Programming	3
Minor Course		3
American History Core Requirement		3
Hours		**15**

Spring

COSC 3370	Software Engineering	3
ENGL 3310	Technical and Professional Writing for Computer Science	3

Approved Upper-Division COSC Course		3
Life & Physical Science Core Requirement		3
Component Area Option Core Requirement		3
Hours		**15**

Fourth Year

Fall

COSC 4100	Skills for Computing Professionals II	1
COSC 4342	Computer Networks	3
Approved Upper-Division COSC Course		3
Minor Course		3
Minor Course		3
Life & Physical Science Core Requirement		3
Hours		**16**

Spring

COSC 4354	Senior Capstone Project	3
Approved Upper-Division COSC Course		3
Minor Course		3
Language, Philosophy & Culture Core Requirement		3
Component Area Option Core Requirement		3
Hours		**15**
Total Hours		**123**