

BS IN CYBER SECURITY

Code	Title	Hours
CSET 1100	Introduction to Computer Science and Engineering Technology	4
PHIL 1010	Introduction To Logic	3
ENGT 1000	Engineering Technology Orientation	1
ENGL 1110	College Composition I	3
Social Science Elective. Select one approved 3 semester hour course from Anthropology (ANTH), Economics (ECON), Geography (GEPL), Political Science (PSC), Psychology (PSY), Social Work (SOCW) or Sociology (SOC).		3
CSET 1200	Object Oriented Programming and Data Structures	3
PHYS 2070	General Physics I	5
Select one of the following Communications Elective		3
COMM 2600	Public Presentations	
COMM 2820	Group Communication	
COMM 2840	Interpersonal Communication	
ENGL 2950	Technical Writing	3
MATH 2450	Calculus For Engineering Technology I	4
PHYS 2080	General Physics II	5
Multicultural Elective. Select one 3 semester hour course that satisfies the Diversity of U.S. Culture requirement.		3
CSET 2200	PC and Industrial Networks	4
MATH 2460	Calculus For Engineering Technology II	4
CYBR 1400	Ethical Behavior in Computing	4
CSET 2520	Discrete Structures	3
CYBR 2410	Digital Forensics	3
Social Science Elective. Select one approved 3 semester hour course from Anthropology (ANTH), Economics (ECON), Geography (GEPL), Political Science (PSC), Psychology (PSY), Social Work (SOCW) or Sociology (SOC).		3
MATH 2890	Numerical Methods And Linear Algebra	3
ENGT 2000	Professional Development	1
ENGT 3010	Applied Statistics And Design Of Experiments	4
CYBR 3350	Managing Security Projects	3
CYBR 3200	Client-Server Security Models	3
Natural Science Elective. Select one course from: Anatomy/ Physiology (EXSC), Astronomy (ASTR), Biology (BIOL), Chemistry (CHEM), Earth, Ecology and Environmental Science (EEES), or Physics (PHYS).		4
CSET 3150	Introduction to Algorithms	4
CSET 3300	Database-Driven Web Sites	4
EECS 4720	Fundamentals of Cyber Security	3
INFS 3400	Principles of Information Systems Security	3
CSET 4250	Applied Programming Languages	3
CSET 3600	Software Engineering and Human Interfacing	4
CSET 4350	Operating Systems	3
CSET 4750	Computer Networks And Data Communication	4
CYBR 4500	Risk Vulnerability Analysis	3

Humanities/Multicultural Elective. Select one 3 semester hour Humanities/Fine Arts elective that also satisfies one of the two multi-cultural elective requirements ("double-dip"). Do not select a Philosophy (PHIL) course.

CYBR 4200	Software Assurance	4
ENGT 4050	Senior Technology Capstone	3
CSET 4850	Computer and Network Security	4

Total Hours 124

First Year

First Term

	Hours	
CSET 1100	Introduction to Computer Science and Engineering Technology	4
PHIL 1010	Introduction To Logic	3
ENGT 1000	Engineering Technology Orientation	1
ENGL 1110	College Composition I	3
Social Science Elective		3

Hours 14

Second Term

CSET 1200	Object Oriented Programming and Data Structures	3
PHYS 2070	General Physics I	5
Communication Elective		3
ENGL 2950	Technical Writing	3

Hours 14

Second Year

First Term

MATH 2450	Calculus For Engineering Technology I	4
PHYS 2080	General Physics II	5
CSET 2200	PC and Industrial Networks	4
Multicultural Elective		3

Hours 16

Second Term

MATH 2460	Calculus For Engineering Technology II	4
CYBR 1400	Ethical Behavior in Computing	4
CSET 2520	Discrete Structures	3
CYBR 2410	Digital Forensics	3
Social Science Elective		3

Hours 17

Third Year

First Term

MATH 2890	Numerical Methods And Linear Algebra	3
ENGT 2000	Professional Development	1
ENGT 3010	Applied Statistics And Design Of Experiments	4
CYBR 3350	Managing Security Projects	3
CYBR 3200	Client-Server Security Models	3

Hours 14

Second Term

Natural Sciences Elective		4
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CSET 3150	Introduction to Algorithms	4
CSET 3300	Database-Driven Web Sites	4
EECS 4720	Fundamentals of Cyber Security	3
Hours		15
Fourth Year		
First Term		
INFS 3400	Principles of Information Systems Security	3
CSET 4250	Applied Programming Languages	3
CSET 3600	Software Engineering and Human Interfacing	4
CSET 4350	Operating Systems	3
CSET 4750	Computer Networks And Data Communication	4
Hours		17
Second Term		
CYBR 4500	Risk Vulnerability Analysis	3
Humanities/Multicultural Elective		3
CYBR 4200	Software Assurance	4
ENGT 4050	Senior Technology Capstone	3
CSET 4850	Computer and Network Security	4
Hours		17
Total Hours		124

- 1. An ability to apply knowledge, techniques, skills, and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline.
- 2. An ability to design systems, components, or processes meeting specified needs for broadly defined engineering problems appropriate to the discipline.
- 3. An ability to apply written, oral, and graphical communication in broadly defined technical and non-technical environments, and an ability to identify and use appropriate technical literature.
- 4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes.
- 5. An ability to function effectively as a member as well as a leader on technical teams.
- 6. An ability to apply security principles and practices to maintain operations in the presence of risks and threats.