

B.S. Cybersecurity Degree – System and Network Security Concentration

This is not an official list of degree requirements. Adjustments may be required due to curriculum changes.

First Year

Fall

Course	Prerequisite	Credit
SAT 1000 Intro to Applied Computing* or CS 1000 Explorations in Computing*	—	1
SAT 1700 Cyber Ethics*	—	3
MA 1160 or MA 1161 Calculus I*	placement	4 or 5
CS 1121 Introduction to Programming I* or CS 1131 Accelerated Introduction to Programming* (both Java)	placement	3 5
UN 1015 Composition	—	3
Total		14-17

Spring

Course	Prerequisite	Credit
CS 1122 Intro to Programming II	CS 1121	3
CS 2311 Discrete Structures	CS 1121 and MA 1160 or 1161	3
MA 2320 Elementary Linear Algebra	MA 1160 or 1161	2
Essential Education: Arts & Culture	varies	3
Essential Education: Natural and Physical Science	varies	3 or 4
Total		14-15

Second Year

Fall

Course	Prerequisite	Credit
SAT 2711 Linux Fundamentals	CS 1121	3
SAT 2343 Network Administration I	CS 1121	3
MA 2720 Statistical Methods	MA 1160 or 1161	4
Essential Education: Intercultural Competency	varies	3
Essential Education: Activities for Well- being and Success	—	1
Total		14

Spring

Course	Prerequisite	Credit
SAT 3812 Cybersecurity I	SAT 2711	3
SAT 3343 Network Administration II	SAT 2343	3
SAT 3820 Wireless System Admin.	SAT 2343	3
Technical elective	varies	3
Essential Education: SHAPE	varies	3
Total		15

Third Year

Fall

Course	Prerequisite	Credit
SAT 3210 Database Management	SAT 2711	3
SAT 3611 Infrastructure Service Admin and Security	SAT 2711	3
OSM 4300 Project Management	—	3
Technical elective	varies	3
ENT 3950 Enterprise work**	—	1
Essential Education: Communication Intensive	varies	3
Total		15-16

Spring

Course	Prerequisite	Credit
SAT 4411 Data Center Engineering	SAT 3210 or 3611	3
SAT 4812 Cybersecurity II	SAT 3812	3
Technical elective	varies	3
ENT 3960 Enterprise work**	—	1
Essential Education: Experience	varies	3
Essential Education: Activities for Well- being and Success	—	1
Total		16-17

Fourth Year

Fall

Course	Prerequisite	Credit
SAT 4310 Advanced Scripting Programming	CS 1121	3
CS 4001 Cybersecurity Policy and Law	—	3
SAT 4816 Digital Forensics	SAT 3812	3
SAT 4283 Information Governance and Risk Management	—	3
ENT 4950 Enterprise Capstone or SAT 4480 Senior Project I**	permission	2
Essential Education: Activities for Well- being and Success	—	1
Total		15

Spring

Course	Prerequisite	Credit
SAT 4520 Machine Learning in Cybersecurity	SAT 3812	3
CS/EE 4723 Network Security		3
SAT 4817 Security Penetration Testing and Audit	SAT 3812	3
SAT 4880 Senior Project II**	SAT 4480	2
Free elective	varies	3
Free elective	varies	3
Total		15-17

Grand Total = 120 Credits

* Satisfies a major requirement and an Essential Education requirement.

** Culminating experience consists of 4 credits of: {ENT 3950 (1), 3960 (1), 4950 (2)} or {SAT 4480 (2), 4880 (2)} or {UN 3002 (2), 3003 (2)}