

Department of Computer Science & Cybersecurity Curriculum
Grambling State University

Name:

G#

Semester	Grade	Substitution	Course Number	Course Name	Hrs.	Prerequisites	Completed	Remaining
Year-1				Freshman				
			BIOL 113	Principles of Biology -I	3		0	3
			BIOL 115	Principles of Biology – I Lab	1		0	1
			FYE 101	First Year Experience I	1		0	1
			FYE102	First Year Experience II	1		0	1
			ENG 101	Freshman Composition	3		0	3
			ENG 102	Freshman Composition	3		0	3
			HIST 103	World History I	3		0	3
			CBS 115	Foundations of Cybersecurity	3		0	3
			MATH 147	Pre-Calculus I	3		0	3
			MATH 148	Pre-Calculus II	3	MATH 147	0	3
			CS 110	Computer Science I	3		0	3
			CS 120	Computer Science II	3	CS 110	0	3
				TOTAL	30		0	0
Year 2				Sophomore			0	0
			GET 300	Rising Junior Exam	0		0	0
			MATH 273	Probability and Statistics I	3	MATH 131/147	0	3
			ENG 200	World Literature I	3		0	3
			ENG 207	Intro. to Technical Writing	3		0	3
			PHYS 153	General Physics I	3		0	3
			PHYS 153L	General Physics Laboratory	1		0	1
			Theat 212	Fund. of Public Speaking	3		0	3
			CS 201	Social, legal, and Ethical issues in Information Age.	3	CS 120 or with the permission of Instructor	0	3
			MATH 153	Calculus I	3	MATH 148	0	3
			CS 210	Discrete Structures	3	CS 110	0	3
			CBS 255	Information System Threats, Attacks, and Defenses	3	CS 120	0	3
			CS 236	Data Structures & Algorithm Analysis	3	CS 120, CS 210	0	3
				TOTAL	31		0	0
Year-3				Junior			0	0
			PHYS 154	General Physics II	3		0	3
			PHYS 154L	General Physics Laboratory	1		0	1
			SOC 101	Introduction to Social Science	3		0	3
			ART 105	Intro. To Fine & Performing Arts	3		0	3
			MATH 154	Calculus II	3	MATH 153	0	3
			ECON 201	Principles of Economics	3		0	3
			Math 274	Probability and Statistics II	3	MATH 273	0	3
			CBS 322	Introduction to Databases and Database security	3	CS 236, CBS 255	0	3
			CS 325	Computer Organization & Architecture	3	CS 236	0	3
			CBS 346	Operating Systems and security	3	CS 236, CBS 255	0	3
			CBS 355	Software Security	3	CS 236	0	3
				TOTAL	31		0	0
Year-4				Senior			0	0
			CS 407	Capstone Course (Cyber security)	3	CBS 355	0	3
			CBS 401	Cybersecurity Seminar	1	CBS 355	0	1
			CS 410	Applied Cryptography	3	CBS 355	0	3

			CBS 412	Organizational Security	3	CBS 355	0	3
			CBS 431	Computer network security	3	CBS 355	0	3
			CBS 436/CBS 454	Usable Security/Application Security	3	CBS 355	0	3
			CS 4xx	Major Elective	3	See list	0	3
			CS 4xx	Major Elective	3	See list	0	3
			SPAN101	Foreign language	3		0	3
			SPAN102	Foreign Language	3		0	3
				TOTAL	28		0	0
							0	0
				TOTAL	120		0	120

- Students deficient in Math are required to take MATH147/148 before taking MATH153.

Foreign Languages: Spanish 101 and Spanish 102 or French 101 or French 102 or Germ; Hours Need for Graduation

Selective General Education electives

(ACCT 201 and ACCCT 202) or (GB 150 and GB202) or (MC 303 and MC 304) or (GB 150 and MAN 301)

Transfer Students

Student must have 30 transfer credit hours to exempt FYE 101 and FYE 102

(CHEM 111 and CEHM 113L) can be substituted for (BIOL 113 and BIOL 115L)

Cybersecurity Electives

Course Number	Course Name	Prerequisites	Hrs.	Hrs.
CS 426	Artificial Intelligence			3
CBS 434	Big data and Cloud Security			3
CBS 452	Computer Risk Management			3
CBS 454	Application Security			3
CBS 455	Cyber Gaming			3
CBS 457	Vulnerability Assessment and Risk Management			3
CBS 460	Cybercrime Investigations and Digital Forensics			3
CBS 461	Intrusion Detection and Protection Systems			3
CS 371	CO-OP-1			3
CS 372	CO-OP-2			3
CS 471	CO-OP-3			3
CS 472	CO-OP-4			3