

## Course Descriptions and Prescribed Sequence of Courses

### First Year

#### Fall Semester

ENG 1301	College Reading & Writing	(3)
HIST 1301	US History to 1877	(3)
COSC 1436	Programming Fundamentals I	(4)
Math 2413	Calculus I	(4)

**Semester Total    14**

#### Spring Semester

ENG 1302	Written Argument & Research	(3)
HIST 1302	US History from 1865	(3)
COSC 1437	Programming Fundamentals II	(4)
Math 2414	Calculus II	(4)
Elective	Visual/Performing Arts	(3)

**Semester Total    17**

### Second Year

#### Fall Semester

COSC 2325	Machine Lang/Computer Org	(3)
PHYS 2425	University Physics I	(4)
PSCI 2305	Prin of US and Texas Gov	(3)
MATH 2305	Discrete Mathematics	(3)

**Semester Total    13**

#### Spring Semester

ECO 2301	Principles of Macro Econ OR	(3)
ECO 2302	Principles of Micro Econ	(3)
PSCI 2306	US & Texas Gov Inst & Policies	(3)
COSC 2336	Data Structures & Algorithms	(3)
Elective	Lang, Phil, & Culture	(3)
PHYS 2426	University Physics II	(4)

**Semester Total    16**

### Third Year

#### Fall Semester

CSCI 303	Technical Communication	(3)
CSCI 310	Cybersecurity	(3)
CSCI 340	Introduction to Databases	(3)
CSCI 430	Intro to Operating Systems	(3)
CSCI 434	Intro to Computer Networks	(3)

**Semester Total    15**

#### Spring Semester

CSCI 345	Big Data Security	(3)
CSCI 360	Cryptography	(3)
CSCI 458	Network Security & Mgmt	(3)
CSCI XXX	Advanced Cyber Elective	(3)
CSCI 399	Junior Cyber Design Project	(3)

**Semester Total    15**

### Fourth Year

#### Fall Semester

MATH 403	Mathematical Statistics	(3)
CSCI 415	Ethics, Law, & Cybersecurity	(3)
CSCI 451	Wireless & Mobile Security	(3)
CSCI 463	Sys Security & Trusted Comp	(3)
CSCI XXX	Advanced Cyber Elective	(3)

**Semester Total    15**

#### Spring Semester

CSCI 452	Malware Analysis	(3)
CSCI 459	AI Enhanced Security	(3)
CSCI 465	Smart Things Security	(3)
CSCI XXX	Advanced Cyber Elective	(3)
CSCI 499	Senior Cyber Design Project	(3)

**Semester Total    15**

**Program Total:    120 semester hours**

Advanced Cyber Electives (Select three (3) for a total of 9 sch from the following)

CSCI 323	Secure Programming	3	CSCI 419	Secure Software Development	3
CSCI 324	Software Engineering	3	CSCI 421	Intrusion Detection & Prevention	3
CSCI 352	Introduction to Digital Forensics	3	CSCI 422	Cloud Computing & Security	3
CSCI 353	Vulnerability Analysis	3	CSCI 467	Server Security & Maintenance	3
CSCI 397	Special Topics (in cybersecurity)	3	CSCI 489	Independent Study	3
			CSCI 497	Special Topics (in cybersecurity)	3