

# CYBERSECURITY (BS)

## Program Map

Course	Title	Credit Hours
<b>First Year</b>		
<b>Fall</b>		
ENGL 1101	English Composition I (minimum grade of C)	3
MATH 1113	Pre-Calculus (minimum grade of C)	4
Institutional Priorities	COMM 1110 Public Speaking or foreign language 1001, 1002, 2001, 2002 <sup>1</sup>	3
CPSC 1301K	Computer Science I (minimum grade of C)	4
Arts, Humanities, and Ethics	Fine Arts <sup>2</sup>	3
<b>Credit Hours</b>		<b>17</b>
<b>Spring</b>		
ENGL 1102	English Composition II (minimum grade of C)	3
MATH 2125	Introduction to Discrete Mathematics (minimum grade of C)	3
CPSC 1302K	Computer Science II (minimum grade of C)	4
Technology, Mathematics, and Sciences	Science Elective with Lab <sup>1,3</sup>	4
Institutional Priorities	ITDS 1779 (2), LEAD 1705 (2), PERS 1506 (1; may be repeated with different topic), PERS 1507 (2) <sup>1</sup>	1
<b>Credit Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
CYBR 2159	Fundamentals of Computer Networks (minimum grade of C)	3
CPSC 2105	Computer Organization (minimum grade of C)	3
CPSC 2108	Data Structures (minimum grade of C)	3
Arts, Humanities, and Ethics	Humanities Elective <sup>2</sup>	3
Technology, Mathematics, and Sciences	Science Elective with Lab <sup>1,3</sup>	4
<b>Credit Hours</b>		<b>16</b>
<b>Spring</b>		
CYBR 2160	Intro to Information Security (minimum grade of C)	3
CPSC 3131	Database Systems I (minimum grade of C)	3
STAT 1401	Elementary Statistics	3
HIST 2111 or HIST 2112	U. S. History to 1865 or U. S. History since 1865	3
CPSC 3125	Operating Systems (minimum grade of C)	3
KINS 1106 or PHED 1205	Lifetime Wellness or Concepts of Fitness	2
<b>Credit Hours</b>		<b>17</b>

### Third Year

CYBR 3136	Wireless, IoT and Mobile Security (minimum grade of C)	3
CPSC 4157	Computer Networks (minimum grade of C)	3
CYBR 3106	Cybersecurity Risk Management (minimum grade of C)	3
POLS 1101	American Government	3
Social Sciences	Social Sciences Elective (Behavioral Science)	3
Health and Wellness	PEDS Elective	1

**Credit Hours 16**

### Spring

CPSC 3165	Professionalism in Computing (minimum grade of C)	2
CYBR 3108	Defensive Programming (minimum grade of C)	3
Program Elective	CYBR or CPSC 3000 and above course (minimum grade of C)	3
CYBR 3119	Fundamentals of Digital Forensics (minimum grade of C)	3
Social Sciences	Social Science Elective (World Culture)	3

**Credit Hours 14**

### Fourth Year

#### Fall

CYBR 4160	Applied Cryptography (minimum grade of C)	3
CYBR 4127	Computer and Network Security (minimum grade of C)	3
CYBR 4128	Penetration Testing and Countermeasures (minimum grade of C)	3
Program Elective	CYBR or CPSC 3000 above course (minimum grade of C)	3
General Electives	General Electives	3

**Credit Hours 15**

#### Spring

CYBR 4416	Cybersecurity Practicum (minimum grade of C)	1
CPSC 4000	Baccalaureate Survey	0
CYBR 4166	Intrusion Detection and Prevention (minimum grade of C)	3
Program Electives	CYBR or CPSC 3000 and above course (minimum grade of C)	3
General Electives	General Electives	3
General Electives	General Electives	3

**Credit Hours 13**

**Total Credit Hours 123**

<sup>1</sup> The hours applied in the Institutional Priorities; Mathematics & Quantitative Skills; and Technology, Mathematics, and Sciences areas must add to 18 credit hours.

<sup>2</sup> ITDS 1145 Comparative Arts, though listed under both Fine Arts and Humanities, may be taken only once.

<sup>3</sup> At least 4 of the credit hours in this area must be in a lab science course.