



Cybersecurity and Information Technology – 3 Year Plan
 Bachelor of Applied Science
 Advising Worksheet* 2019-2020

Prescribed Technical Program Total	87-91
General Education Total	36
Total Degree Credits	123-127

Fall Semester I

Prescribed Technical Program Requirements			
CIS	107	Linux Fundamentals	3
CIS	128	Computer Hardware	3
CIS	147	Principles of Information Security	3
CIS	185	Introduction to Programming	3
CIS	212	Windows Operating System Client	3
General Education Courses			
<i>Business, Math, Science & Technology</i>			
CIS	164	Networking Fundamentals I (Required)	3-4 ¹
Total Credits			18-19

Fall Semester III

Prescribed Technical Program Requirements			
CIS	204	Database Design and SQL	3
CIS	214	Implementing a Windows Active Directory Infrastructure	3
CIS	226	Linux Network and Security Administration	3
CIS	267	Intermediate Networking I	3-4
CIS	274	Cybersecurity Operations	3
CIT	367	Cybersecurity Infrastructure Configuration	3
Total Credits			18-19

Fall Semester V

Prescribed Technical Program Requirements			
CIT	310	Enterprise System Administration	3
CIT	410	Wireless Networking and Mobile Security	3
CIT	430	Cloud Computing and Security	3
General Education Courses			
<i>Arts & Humanities</i>			
CIS	280	Cyber Ethics (Required)	3
<i>Business, Math, Science & Technology</i> (select one science course with lab)			
1.			4
Total Credits			16

Spring Semester II

Prescribed Technical Program Requirements			
CIS	165	Networking Fundamentals II	3-4
CIS	216	Implementing a Windows Network Infrastructure	3
CIS	223	Linux System Administration	3
CIS	255	Computer and Network Security	3
CSCI	160	Computer Science I	4
Total Credits			16-17

Spring Semester IV

Prescribed Technical Program Requirements			
CIS	241	Digital Forensics Fundamentals	3
CIS	268	Intermediate Networking II	3-4
CIS	269	Cybersecurity and Computer Networks Capstone <u>or</u>	3
		or CIS 197/297 Cooperative Education/Internship ²	3
CIS	282	Ethical Hacking and Network Defense	3
CIT	368	Cybersecurity Prevention and Countermeasures	3
Total Credits			15-16

Spring Semester VI

Prescribed Technical Program Requirements			
CIT	320	Disaster Recovery and Incident Response	3
CIT	330	Virtualization	3
CIT	450	Database and Web Application Security	3
CIT	470	Penetration Testing	3
CIT	381	IT Project Management <u>or</u>	3
		or CIT 397/497 Cooperative Education/Internship ³	3
Total Credits			15

Summer Semester A

General Education Courses			
<i>Communications I</i>			
ENGL	110	College Composition I (Required)	3
<i>Arts & Humanities</i>			
1.			3
<i>Business, Math, Science & Technology</i>			
MATH	210	Elementary Statistics (Required)	3
Total Credits			9

Summer Semester B

General Education Courses			
<i>Communications II</i> (Select one course.)			
ENGL	120	College Composition II	3
ENGL	125	Introduction to Professional Writing	3
<i>Communications III</i>			
COMM	110	Fundamentals of Public Speaking (Required)	3
<i>Social & Behavioral Sciences</i>			
1.			3
Total Credits			9

Summer Semester C

General Education Courses			
<i>Business, Math, Science & Technology</i> (select one science course with lab)			
1.			4
<i>General Education Course</i>			
<i>Social & Behavioral Sciences</i>			
1.			3
Total Credits			7

¹ Additional General Education classes may be taken to meet the 36 credit requirement.

² CIS 197 or CIS 297 are repeatable for 1, 2, or 3 credits at a time.

³ CIS 397 or CIS 497 are repeatable for 1, 2, or 3 credits at a time.

* This advising worksheet is unofficial and to be used for class planning purposes only. Please refer to the official catalog at <http://catalog.bismarckstate.edu> for the complete listing of college degree requirements.