



Cybersecurity and Information Technology – 4 Year Plan
 Bachelor of Applied Science
 Advising Worksheet* 2019-2020

Cybersecurity and Information Technology	43
Foundation	27-28
Electives	14-15
General Education	36
Total Degree Credits	120-122

General Education Courses

Arts & Humanities			
PHIL	220	Introduction to Logic (Recommended)	3
CIS	280	Cyber Ethics (Required)	3
Social & Behavioral Sciences			
1.			3
2.			3
Communications I			
ENGL	110	College Composition I (Required)	3
Communications II (Required - select one course.)			
ENGL	120	College Composition II	3
ENGL	125	Introduction to Professional Writing	
Communications III			
COMM	110	Fundamentals of Public Speaking	3
Business, Math, Science & Technology			
CIS	164	Networking Fundamentals I (Required)	3-4 ¹
Business, Math, Science & Technology			
MATH	210	Elementary Statistics (Required)	3
Business, Math, Science & Technology (select two science courses with labs)			
1.			4
2.			4
Total Credits			36

Foundation Courses

CIS	107	Linux Fundamentals	3
CIS	147	Principles of Information Security	3
CIS	165	Networking Fundamentals II	3-4
CIS	185	Introduction to Programming	3
CIS	212	Windows Operating System Client	3
CIS	216	Implementing a Windows Network Infrastructure	3
CIS	223	Linux System Administration	3
CIS	255	Computer and Network Security	3
CIS	274	Cybersecurity Operations	3
Total Credits			27-28

Elective Courses

1.			
2.			
3.			
4.			
5.			
Total Credits			14-15

Fall Semester I

Prescribed Technical Program Requirements			
CSCI	160	Computer Science I	4
CIS	204	Database Design and SQL	3
CIS	226	Linux Network and Security Administration	3
CIT	367	Cybersecurity Infrastructure Configuration	3

Spring Semester II

Prescribed Technical Program Requirements			
CIS	241	Digital Forensics Fundamentals	3
CIT	320	Disaster Recovery and Incident Response	3
CIT	330	Virtualization	3
CIT	368	Cybersecurity Prevention and Countermeasures	3

Fall Semester III

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

Spring Semester IV

Prescribed Technical Program Requirements			
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 ²	

¹ Additional General Education classes may be taken to meet the 36 credit requirement.
² 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.