



**Cybersecurity and Information Technology – 4 Year Plan**  
 Bachelor of Applied Science  
 Advising Worksheet\* 2020-2021

Prescribed Technical Program Total	87-91
General Education Total	36
<b>Total Degree Credits</b>	<b>123-127</b>

**Fall Semester I**

<b>Prescribed Technical Program Requirements</b>			
CIS	128	Computer Hardware	3
CIS	147	Principles of Information Security	3
CIS	212	Windows Operating System Client	3
<b>General Education Courses</b>			
<i>Business, Math, Science &amp; Technology</i>			
CIS	164	Networking Fundamentals I (Required)	3-4 <sup>1</sup>
<i>Communications I</i>			
ENGL	110	College Composition I (Required)	3
<b>Total Credits</b>			<b>15-16</b>

**Fall Semester III**

<b>Prescribed Technical Program Requirements</b>			
CIS	107	Linux Fundamentals	3
CIS	214	Implementing a Windows Active Directory Infrastructure	3
CIS	267	Intermediate Networking I	3-4
CIS	274	Cybersecurity Operations	3
<b>General Education Course</b>			
<i>Business, Math, Science &amp; Technology</i>			
MATH	210	Elementary Statistics (Required)	3
<b>Total Credits</b>			<b>15-16</b>

**Fall Semester V**

<b>Prescribed Technical Program Requirements</b>			
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
<b>General Education Course</b>			
<i>Communications III</i>			
COMM	110	Fundamentals of Public Speaking (Required)	3
<b>Total Credits</b>			<b>16</b>

**Fall Semester VII**

<b>Prescribed Technical Program Requirements</b>			
CIT	410	Wireless Networking and Mobile Security	3
CIT	430	Cloud Computing and Security	3
CIT	450	Database and Web Application Security	3
<b>General Education Courses</b>			
<i>Arts &amp; Humanities</i>			
CIS	280	Cyber Ethics (Required)	3
<i>Business, Math, Science &amp; Technology</i> (select one science course and lab)			
1.			4
<b>Total Credits</b>			<b>16</b>

**Spring Semester II**

<b>Prescribed Technical Program Requirements</b>			
CIS	165	Networking Fundamentals II	3-4
CIS	185	Introduction to Programming	3
CIS	216	Implementing a Windows Network Infrastructure	3
CIS	255	Computer and Network Security	3
<b>General Education Course</b>			
<i>Communications II</i> (Required - Select one course.)			
ENGL	120	College Composition II	3
ENGL	125	Introduction to Professional Writing	
<b>Total Credits</b>			<b>15-16</b>

**Spring Semester IV**

<b>Prescribed Technical Program Requirements</b>			
CIS	223	Linux System Administration	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 <sup>2</sup>	3
CIS	282	Ethical Hacking and Network Defense	3
<b>General Education Course</b>			
<i>Arts &amp; Humanities</i>			
PHIL	220	Introduction to Logic (Recommended)	3
<b>Total Credits</b>			<b>15-16</b>

**Spring Semester VI**

<b>Prescribed Technical Program Requirements</b>			
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
<b>General Education Course</b>			
<i>Social &amp; Behavioral Sciences</i>			
1.			3
<b>Total Credits</b>			<b>15</b>

**Spring Semester VII**

<b>Prescribed Technical Program Requirements</b>			
CIT	381	IT Project Management <u>or</u>	3
	or CIT 397/497	Cooperative Education/Internship <sup>3</sup>	3
CIT	470	Penetration Testing	3
CIT	475	Emerging Threats and Defenses	3
<b>General Education Courses</b>			
<i>Social &amp; Behavioral Sciences</i>			
1.			3
<i>Business, Math, Science &amp; Technology</i> (select one science course and lab)			
1.			4
<b>Total Credits</b>			<b>16</b>

<sup>1</sup> Additional General Education classes may be taken to meet the 36 credit requirement.

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

<sup>3</sup> 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.