



Cybersecurity and Information Technology – 4 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 128	Computer Hardware	3
CIS 147	Principles of Information Security	3
CIS 212	Windows Operating System Client	3

General Education Courses

Business, Math, Science & Technology

CIS 164	Networking Fundamentals I (Required)	3-4 ¹
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Communications I

ENGL 110	College Composition I (required)	3
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Total Credits 15-16

Fall Semester III

Prescribed Technical Program Requirements

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

General Education Course

Business, Math, Science & Technology

MATH 210	Elementary Statistics (Required)	3
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Total Credits 15-16

Fall Semester V

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

General Education Course

Communications III

COMM 110	Fundamentals of Public Speaking (Required)	3
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Total Credits 16

Fall Semester VII

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

Arts & Humanities

CIS 280	Cyber Ethics (Required)	3
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Business, Math, Science & Technology (select one science course and lab)

1.		4
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Total Credits 16

Spring Semester II

Prescribed Technical Program Requirements

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

General Education Course

Communications II (Required - Select one course.)

ENGL 120	College Composition II	3
ENGL 125	Introduction to Professional Writing	

Total Credits 15-16

Spring Semester IV

Prescribed Technical Program Requirements

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 ²	
CIS 282	Ethical Hacking and Network Defense	3

General Education Course

Arts & Humanities

PHIL 220	Introduction to Logic (Recommended)	3
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Total Credits 15-16

Spring Semester VI

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

General Education Course

Social & Behavioral Sciences

1.		3
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Total Credits 15

Spring Semester VII

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 ³	

General Education Courses

Social & Behavioral Sciences

1.		3
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Business, Math, Science & Technology (select one science course and lab)

1.		4
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Total Credits 16

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.