



# Cybersecurity and Computer Networks 2 Year Plan

Associate in Applied Science  
Advising Worksheet\* 2021-2022

Prescribed Technical Program Total	44-48
General Education Total	16
<b>Total Degree Credits</b>	<b>60-64</b>

## 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
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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

## 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.)*

COMM 110	Fundamentals of Public Speaking	
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 <i>or</i>	3
or CIS 197/297	Cooperative Education/Internship <sup>1</sup>	
CIS 282	Ethical Hacking and Network Defense	3

### General Education Course

#### *Arts & Humanities /Social & Behavioral Sciences*

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

<sup>1</sup> CIS 197 or CIS 297 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.

# Associate in Applied Science (AAS) 2021-2022 Catalog

Advisor: \_\_\_\_\_  
 Office: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Email: \_\_\_\_\_

## Degree Checklist

### Credits

- \_\_\_\_\_ Earned a minimum of 3 credits in ENGL 110
- \_\_\_\_\_ Earned a minimum of 3 credits in ENGL 120, ENGL 125 or COMM 110 <sup>1</sup>
- \_\_\_\_\_ Earned a minimum of 3 credits in Arts & Humanities/Social & Behavioral Sciences <sup>1</sup>
- \_\_\_\_\_ Earned a minimum of 6 credits in Business, Math, Science & Technology <sup>1,2</sup>
- \_\_\_\_\_ Completed prescribed technical program requirements
- Earned a minimum of 60 credits  
 -Academic Skills Courses (ASC) do not count toward graduation

- Earned at least 15 semester hours of institutional credit from BSC
- Minimum of 2.00 institutional GPA (BSC only)
- Minimum of 2.00 cumulative GPA (BSC + Transfer)
- Minimum of 2.00 GPA in a prescribed technical program
- Cleared all college obligations
- Satisfied all degree seeking admission requirements
- Filed an Application for Degree in the Academic Records Office immediately following enrollment in final semester

**Specific programs may require additional degree/program requirements; refer to your program.**

<sup>1</sup> Programs may have specific General Education requirements; refer to your program degree plan.

<sup>2</sup> Must be from any two areas of study. For example, a Biology course and a Math course, but not two Biology courses or two Math courses.

### Legend

(\*) Course not approved as GERTA

## General Education Requirements

### WRITTEN OR ORAL COMMUNICATIONS

Completed \_\_\_\_\_ Needed \_\_\_\_\_

#### (3 Credits) - ENGL 110

Gr.	Cr.	
_____	3	ENGL 110 College Composition I

Transfer Course \_\_\_\_\_

#### (3 Credits) - ENGL 120, ENGL 125, or COMM 110 (Select one)

Gr.	Cr.	
_____	3	ENGL 120 College Composition II
_____	3	ENGL 125 Introduction to Professional Writing
_____	3	COMM 110 Fundamentals of Public Speaking

Transfer Course \_\_\_\_\_

# General Education Requirements Continued

## ARTS & HUMANITIES/SOCIAL & BEHAVIORAL SCIENCES

Completed \_\_\_\_\_

Needed \_\_\_\_\_

(3 Credits)

Gr.	Cr.		Gr.	Cr.		Gr.	Cr.	
_____	3	ANTH 170	_____	3	HIST 101	_____	3	POLS 115
_____	3	ANTH 171	_____	3	HIST 102	_____	3	POLS 116
_____	3	ART 110	_____	3	HIST 103	_____	3	POLS 220
_____	3	ART 122	_____	3	HIST 104	_____	3	PSYC 100
_____	3	ART 124	_____	3	HIST 211	_____	3	PSYC 111
_____	3	ART 130	_____	3	HIST 212	_____	3	* PSYC 211
_____	3	ART 210	_____	3	HIST 220	_____	3	PSYC 250
_____	3	ART 211	_____	3	HIST 222	_____	3	* PSYC 261
_____	3	ART 220	_____	3	HIST 224	_____	3	PSYC 270
_____	3	ART 221	_____	3	HIST 225	_____	3	RELS 120
_____	3	ART 230	_____	1-3	* HIST 243	_____	3	RELS 201
_____	3	ART 250	_____	3	HUMS 210	_____	3	RELS 203
_____	3	ART 251	_____	1-4	HUMS 211	_____	3	RELS 220
_____	2	ART 265	_____	2	HUMS 212	_____	3	RELS 230
_____	2	ART 266	_____	3	MUSC 100	_____	3	SOC 110
_____	3	* CIS 280	_____	1	MUSC 117	_____	3	SOC 115
_____	3	CJ 201	_____	1	MUSC 118	_____	3	SOC 220
_____	3	COMM 112	_____	1	MUSC 121	_____	3	SOC 221
_____	3	COMM 211	_____	1	MUSC 132	_____	3	SOC 235
_____	3	COMM 212	_____	1	MUSC 133	_____	3	SOC 251
_____	3	ECON 105	_____	1	MUSC 134	_____	3	SOC 252
_____	3	ECON 201	_____	1	MUSC 135	_____	3	SOC 275
_____	3	ECON 202	_____	1	MUSC 136	_____	4	SPAN 101
_____	3	ENGL 211	_____	1	MUSC 137	_____	4	SPAN 102
_____	3	ENGL 221	_____	1	* MUSC 138	_____	4	SPAN 201
_____	3	ENGL 222	_____	1	MUSC 145	_____	4	SPAN 202
_____	3	ENGL 233	_____	1	MUSC 146	_____	3	SWK 256
_____	3	ENGL 236	_____	3	PHIL 101	_____	3	THEA 110
_____	3	ENGL 238	_____	3	PHIL 210	_____	3	THEA 161
_____	3	ENGL 251	_____	3	PHIL 220	_____	3	THEA 180
_____	3	ENGL 252	_____	3	PHIL 250	_____	3	THEA 181
_____	3	ENGL 261	_____	3	PHIL 253	_____	3	THEA 261
_____	3	ENGL 262						
_____	3	ENGL 278						
_____	3	GEOG 161						

Transfer Courses

Transfer Courses

Transfer Courses

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# General Education Requirements Continued

## BUSINESS, MATH, SCIENCE & TECHNOLOGY

Completed \_\_\_\_\_

Needed \_\_\_\_\_

(6 Credits) Must be satisfied with courses from two areas of study. Area of study is based on course prefix.

Gr.	Cr.		Gr.	Cr.		Gr.	Cr.	
_____	3	* ACCT 200	_____	3/1	CHEM 110	_____	3	MATH 146
		Elements of Accounting I			Survey of Chemistry/Lab			Applied Calculus I
_____	3	* ACCT 201	_____	3/1	CHEM 112	_____	4	MATH 165
		Elements of Accounting II			Introduction to Forensic Science/Lab			Calculus I
_____	3/1	ASTR 150	_____	3/1	CHEM 114	_____	4	MATH 166
		Meteorology/Lab			Chemistry in Art/Lab			Calculus II
_____	3	* BADM 202	_____	4/1	CHEM 115	_____	3	* MATH 208
		Principles of Management			Introductory Chemistry/Lab			Discrete Mathematics
_____	3	* BADM 210	_____	4/1	CHEM 116	_____	3	MATH 210
		Advertising I			Intro to Organic and Biochemistry/Lab			Elementary Statistics
_____	3	* BADM 240	_____	4/1	CHEM 121	_____	4	* MATH 277
		Sales			General Chemistry I/Lab			Mathematics for Elementary Teachers I
_____	3	* BADM 281	_____	4/1	CHEM 122	_____	3/1	MICR 202
		Organizational Behavior			General Chemistry II/Lab			Introductory Microbiology/Lab
_____	3	* BADM 282	_____	3	CIS 147	_____	3	* NUTR 240
		Human Resource Management			Principles of Information Security			Principles of Nutrition
_____	1	* BIOL 102	_____	4	* CIS 164	_____	3/1	PHYS 100
		Introduction to Aquarium Keeping			Networking Fundamentals I			Concepts of Physics/Lab
_____	3	BIOL 109	_____	3	CSCI 101	_____	3/1	PHYS 110
		The Living World			Introduction to Computers			Introductory Astronomy/Lab
_____	3/1	BIOL 111	_____	3	CSCI 122	_____	4/1	PHYS 211
		Concepts of Biology/Lab			Beginning Visual Basic			College Physics I/Lab
_____	3/1	BIOL 115	_____	4	CSCI 160	_____	4/1	PHYS 212
		Concepts of Anatomy & Physiology/Lab			Computer Science I			College Physics II/Lab
_____	3	BIOL 124	_____	4	CSCI 161	_____	4/1	PHYS 251
		Environmental Science			Computer Science II			University Physics I/Lab
_____	3/1	BIOL 125	_____	3/1	GEOG 121	_____	4/1	PHYS 252
		Introduction to Ecology/Lab			Physical Geography/Lab			University Physics II/Lab
_____	3/1	BIOL 126	_____	3/1	GEO 102	_____	2/1	PLSC 110
		Human Biology/Lab			Historical Geology/Lab			World Food Crops/Lab
_____	3/1	BIOL 150	_____	3/1	GEO 105	_____	3/1	SCNC 101
		General Biology I/Lab			Physical Geology/Lab			Physical Science I/Lab
_____	3/1	BIOL 151	_____	3	GIS 105			(Biology & Chemistry)
		General Biology II/Lab			Fundamentals of GIS			
_____	3/1	BIOL 170	_____	3	* GIS 107	_____	3/1	SCNC 102
		General Zoology/Lab			GIS Applications			Physical Science II/Lab
_____	3/1	BIOL 220	_____	4	MATH 103	_____	3/1	SCNC 103
		Anatomy and Physiology I/Lab			College Algebra			(Physics & Geology)
_____	3/1	BIOL 221	_____	3	MATH 104	_____	3/1	SCNC 103
		Anatomy and Physiology II/Lab			Finite Mathematics			Physical Science III/Lab
_____	3/1	BIOL 250	_____	2	MATH 105	_____		(Astronomy & Meteorology)
		Survey of Tropical Biology/Lab			Trigonometry			
_____	3/1	BOT 170	_____	4	MATH 107	_____	2/1	* SOIL 210
		Plant Form and Diversity/Lab			Pre-Calculus			Introduction to Soil Science/Lab
_____	3	* BUSN 120	_____	3	* MATH 137	_____		
		Fundamentals of Business			Applied Algebra			

Transfer Courses

Transfer Courses

Transfer Courses

## Academic Skills Courses (ASC)

The following Academic Skills Courses (ASC) are pre-college courses that indicate the need for college preparation work before enrollment in college level courses. These courses will not fulfill general education requirements, institutional credit requirements and cannot be included in the semester hours required for an Associate in Applied Science degree.

Gr.	Cr.		Gr.	Cr.	
_____	2	ASC 082	_____	2	ASC 94
		Effective Reading			College Writing Prep I
_____	2	ASC 91	_____	2	ASC 95
		Algebra Prep I			College Writing Prep II
_____	2	ASC 92	_____	2	ASC 96
		Algebra Prep II			College Writing Prep III
_____	2	ASC 93	_____	3/1	ASC 098
		Algebra Prep III			Basic Biology/Lab