



**Cybersecurity and Information Technology – 3 Year Plan**  
 Bachelor of Applied Science  
 Advising Worksheet\* 2021-2022

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

**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 &amp; Technology</i>			
CIS	164	Networking Fundamentals I (Required)	3-4 <sup>1</sup>
<b>Total Credits</b>			<b>18-19</b>

**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
<b>Total Credits</b>			<b>18-19</b>

**Fall Semester V**

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

**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
<b>Total Credits</b>			<b>16-17</b>

**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 <sup>2</sup>	3
CIS	282	Ethical Hacking and Network Defense	3
CIT	368	Cybersecurity Prevention and Countermeasures	3
<b>Total Credits</b>			<b>15-16</b>

**Spring Semester VI**

Prescribed Technical Program Requirements			
CIT	320	Disaster Recovery and Incident Response	3
CIT	330	Virtualization	3
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>Total Credits</b>			<b>15</b>

**Summer Semester A**

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

**Summer Semester B**

General Education Courses			
<i>Communications II</i> (Required - 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 &amp; Behavioral Sciences</i>			
1.			3
<b>Total Credits</b>			<b>9</b>

**Summer Semester C**

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

# Bachelor of Applied Science (BAS) 2021-2022 Catalog

## Legend

(\*) Course not approved as GERTA

(F) Course designated as Fine Arts

## General Education Requirements <sup>1</sup>

### COMMUNICATIONS

#### Written Communications

(3 Credits) - ENGL 110

Gr.	Cr.	Course	Description
_____	3	ENGL 110	College Composition I

(3 Credits) - ENGL 120 or ENGL 125 (Select one)

Gr.	Cr.	Course	Description	Gr.	Cr.	Course	Description
_____	3	ENGL 120	College Composition II	_____	3	ENGL 125	Introduction to Professional Writing

#### Oral Communications

(3 credits) - COMM 110

Gr.	Cr.	Course	Description
_____	3	COMM 110	Fundamentals of Public Speaking

### ARTS & HUMANITIES

(6 Credits) - No more than 3 credits of Fine Arts may be used

Gr.	Cr.	Course	Description	Gr.	Cr.	Course	Description	Gr.	Cr.	Course	Description
_____	3	ART 110	Introduction to the Visual Art	_____	3	ENGL 262	American Literature II	_____	1	F MUSC 136	Brass Ensemble II
_____	3	F ART 122	Two-Dimensional Design	_____	3	ENGL 278	Alternative Literature	_____	1	F MUSC 137	Jazz Ensemble
_____	3	F ART 124	Three-Dimensional Design	_____	3	HIST 101	Western Civilization I	_____	1	F/* MUSC 138	Percussion Ensemble
_____	3	F ART 130	Drawing I	_____	3	HIST 102	Western Civilization II	_____	1	F MUSC 145	Applied Music
_____	3	ART 210	Art History I	_____	3	HIST 103	United States to 1877	_____	1	F MUSC 146	Applied Music - Major
_____	3	ART 211	Art History II	_____	3	HIST 104	United States Since 1877	_____	3	PHIL 101	Introduction to Philosophy
_____	3	F ART 220	Painting I	_____	3	HIST 211	World Civilizations to 1500	_____	3	PHIL 210	Ethics
_____	3	F ART 221	Painting II	_____	3	HIST 212	World Civilizations since 1500	_____	3	PHIL 220	Introduction to Logic
_____	3	F ART 230	Drawing II	_____	3	HIST 220	North Dakota History	_____	3	PHIL 250	Philosophy in Cinema
_____	3	F ART 250	Ceramics I	_____	3	HIST 222	History of the Western Frontier	_____	3	PHIL 253	Environmental Ethics
_____	3	F ART 251	Ceramics II	_____	3	HIST 224	American Studies I	_____	3	RELS 120	Religion in America
_____	2	F ART 265	Sculpture I	_____	3	HIST 225	American Studies II	_____	3	RELS 201	Life and Letters of Paul
_____	2	F ART 266	Sculpture II	_____	1-3	* HIST 243	Historical Investigations	_____	3	RELS 203	World Religions
_____	3	* CIS 280	Cyber Ethics	_____	3	HUMS 210	Integrated Cultural Studies	_____	3	RELS 220	Old Testament
_____	3	COMM 211	Oral Interpretation	_____	1-4	HUMS 211	Integrated Cultural Excursion	_____	3	RELS 230	New Testament
_____	3	ENGL 211	Introduction to Creative Writing	_____	2	HUMS 212	Integrated Cultural Enrichment	_____	4	SPAN 101	First Year Spanish I
_____	3	ENGL 221	Introduction to Drama	_____	3	MUSC 100	Music Appreciation	_____	4	SPAN 102	First Year Spanish II
_____	3	ENGL 222	Introduction to Poetry	_____	1	F MUSC 117	Concert Choir	_____	4	SPAN 201	Second Year Spanish I
_____	3	ENGL 233	Fantasy & Science Fiction	_____	1	F MUSC 118	Chamber Choir	_____	4	SPAN 202	Second Year Spanish II
_____	3	ENGL 236	Women & Literature	_____	1	F MUSC 121	String Ensemble	_____	3	THEA 110	Introduction to Theatre Arts
_____	3	ENGL 238	Children's Literature	_____	1	F MUSC 132	Wind Ensemble	_____	3	F THEA 161	Acting I
_____	3	ENGL 251	British Literature I	_____	1	F MUSC 133	Woodwind Ensemble I	_____	3	THEA 180	Dramatic Literature and Style I
_____	3	ENGL 252	British Literature II	_____	1	F MUSC 134	Woodwind Ensemble II	_____	3	THEA 181	Dramatic Literature and Style II
_____	3	ENGL 261	American Literature I	_____	1	F MUSC 135	Brass Ensemble I	_____	3	F THEA 261	Acting II



## 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 a Bachelor of Applied Science degree.

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

## Degree Checklist

### Credits

- \_\_\_\_\_ Earned a minimum of 3 credits in ENGL 110
- \_\_\_\_\_ Earned a minimum of 3 credits in ENGL 120 or ENGL 125
- \_\_\_\_\_ Earned a minimum of 3 credits in COMM 110
- \_\_\_\_\_ Earned a minimum of 6 credits in Arts & Humanities <sup>2</sup>
- \_\_\_\_\_ Earned a minimum of 6 credits in Social & Behavioral Sciences
- \_\_\_\_\_ Earned a minimum of 9 credits in Business, Math, Science & Technology
- \_\_\_\_\_ Earned a minimum of 6 credits in Program Specific general education courses <sup>3</sup>
- \_\_\_\_\_ Completed defined courses leading to an academic major
- Earned a minimum of 120 credits <sup>4</sup>

- Earned at least 30 semester hours of institutional credit from BSC
- Minimum of 2.00 institutional GPA (BSC only)
- Minimum of 2.00 cumulative GPA (BSC + Transfer)
- Earned at least 30 semester hours of upper division (300/400) level courses
- 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

Advisor: \_\_\_\_\_

Office: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

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

<sup>2</sup> No more than 3 hours of Fine Arts may be used

<sup>3</sup> Must be chosen from one of the following categories: Communications; Social & Behavioral Sciences; Arts & Humanities; and/or Business, Math, Science & Technology

<sup>4</sup> Academic Skills Courses (ASC) will not fulfill general education requirements, institutional credit requirements and cannot be included in the semester hours required for a Bachelor of Applied Science Degree