



**Cybersecurity and Information
Technology – 4 Year Plan**
Bachelor of Applied Science
Advising Worksheet* 2021-2022

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 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

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	3
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 381	IT Project Management <u>or</u>	3
or CIT 397/497	Cooperative Education/Internship ³	3
CIT 470	Penetration Testing	3
CIT 475	Emerging Threats and Defenses	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.

Bachelor of Applied Science (BAS) 2021-2022 Catalog

Legend

(*) Course not approved as GERTA

(F) Course designated as Fine Arts

General Education Requirements ¹

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 ²
- _____ 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 ³
- _____ Completed defined courses leading to an academic major
- Earned a minimum of 120 credits ⁴

- 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: _____

¹ Programs may have specific General Education requirements; refer to your program degree plan

² No more than 3 hours of Fine Arts may be used

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

⁴ 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