



Instrumentation & Control Technology

Associate in Applied Science

Advising Worksheet* 2021-2022

Prescribed Technical Program Total	58
General Education Total	16
Total Degree Credits	74

Freshman Fall Semester

Prescribed Technical Program Requirements			
ELEC	100/100L	Direct Current Analysis/Lab	5
ELEC	118/118L	Solid State Devices I/Lab	5
ELEC	114/114L	Digital Electronics I/Lab	4
Total Credits			14

Freshman Spring Semester

Prescribed Technical Program Requirements			
ELEC	130/130L	Active Devices/Lab	5
ELEC	120/120L	AC Analysis/Lab	5
ELEC	115/115L	Digital Electronics II/Lab	4
Total Credits			14

Sophomore Fall Semester

Prescribed Technical Program Requirements			
ICTL	205/205L	Mechanical Practices/Lab	5
ICTL	215/215L	Instrument Drawings & Documentation/Lab	5
ICTL	225/225L	Input & Output Devices/Lab	5
Total Credits			15

Sophomore Spring Semester

Prescribed Technical Program Requirements			
ICTL	235/235L	Motors & Controllers/Lab	5
ICTL	245/245L	Controls/Lab	5
ICTL	255/255L	Automation Overview/Lab	5
Total Credits			15

General Education Requirements

Arts & Humanities/Social & Behavioral Science			
1.			3
Business, Math, Science & Technology (Two areas of study required.)			
CIS	164	Networking Fundamentals I (Required)	4
MATH	137	Applied Algebra or higher (Required)	3
Communications I			
ENGL	110	College Composition I (Required)	3
Communications II (Select one course.)			
ENGL	120	College Composition II	
ENGL	125	Introduction to Professional Writing	3
COMM	110	Fundamentals of Public Speaking	
Total Credits			16

Students with a Journeyman Electrician License or at least 28 college credits from an accredited electrician program may move directly into the Sophomore year of the program (ICTL coursework)

*Unofficial advising worksheet used for planning purposes only

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 ¹
- _____ Earned a minimum of 3 credits in Arts & Humanities/Social & Behavioral Sciences ¹
- _____ Earned a minimum of 6 credits in Business, Math, Science & Technology ²
- _____ 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.

¹ Programs may have specific General Education requirements; refer to your program degree plan.
² 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

Category I: COMMUNICATIONS Completed _____ Needed _____

Communications I

(3 Credits) - ENGL 110

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

Transfer Course _____

Communications II

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

Gr.	Cr.	Course
_____	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

Category II: 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

General Education Requirements Continued

Category III: 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		GEOL 102	2/1		PLSC 110
		Human Biology/Lab			Historical Geology/Lab			World Food Crops/Lab
3/1		BIOL 150	3/1		GEOL 105	3/1		SCNC 101
		General Biology I/Lab			Physical Geology/Lab			Physical Science I/Lab (Biology & Chemistry)
3/1		BIOL 151	3		GIS 105			Physical Science II/Lab (Physics & Geology)
		General Biology II/Lab			Fundamentals of GIS			Physical Science III/Lab (Astronomy & Meteorology)
3/1		BIOL 170	3	*	GIS 107	3/1		SCNC 102
		General Zoology/Lab			GIS Applications			Introduction to Soil Science/Lab
3/1		BIOL 220	4		MATH 103	3/1		SCNC 103
		Anatomy and Physiology I/Lab			College Algebra			
3/1		BIOL 221	3		MATH 104			
		Anatomy and Physiology II/Lab			Finite Mathematics			
3/1		BIOL 250	2		MATH 105			
		Survey of Tropical Biology/Lab			Trigonometry			
3/1		BOT 170	4		MATH 107	2/1	*	SOIL 210
		Plant Form and Diversity/Lab			Pre-Calculus			
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

*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.