



Instrumentation & Control Technology

Associate in Applied Science

Advising Worksheet* 2020-2021

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

*Unofficial advising worksheet used for planning purposes only

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	Survey of Chemistry/Lab	3	MATH 146	Applied Calculus I
3	*	ACCT 201	3/1	CHEM 112	Introduction to Forensic Science/Lab	4	MATH 165	Calculus I
3/1		ASTR 150	3/1	CHEM 114	Chemistry in Art/Lab	4	MATH 166	Calculus II
3	*	BADM 202	4/1	CHEM 115	Introductory Chemistry/Lab	3	* MATH 208	Discrete Mathematics
3	*	BADM 210	4/1	CHEM 116	Intro to Organic and Biochemistry/Lab	3	MATH 210	Elementary Statistics
3	*	BADM 240	4/1	CHEM 121	General Chemistry I/Lab	4	* MATH 277	Mathematics for Elementary Teachers I
3	*	BADM 281	4/1	CHEM 122	General Chemistry II/Lab	3/1	MICR 202	Introductory Microbiology/Lab
3	*	BADM 282	3	* CIS 147	Principles of Information Security	3	* NUTR 240	Principles of Nutrition
1	*	BIOL 102	4	* CIS 164	Networking Fundamentals I	3/1	PHYS 100	Concepts of Physics/Lab
3		BIOL 109	3	CSCI 101	Introduction to Computers	3/1	PHYS 110	Introductory Astronomy/Lab
3/1		BIOL 111	3	CSCI 122	Beginning Visual Basic	4/1	PHYS 211	College Physics I/Lab
3/1		BIOL 115	4	CSCI 160	Computer Science I	4/1	PHYS 212	College Physics II/Lab
3		BIOL 124	4	CSCI 161	Computer Science II	4/1	PHYS 251	University Physics I/Lab
3/1		BIOL 125	3/1	GEOG 121	Physical Geography/Lab	4/1	PHYS 252	University Physics II/Lab
3/1		BIOL 126	3/1	GEOG 102	Historical Geology/Lab	2/1	PLSC 110	World Food Crops/Lab
3/1		BIOL 150	3/1	GEOG 105	Physical Geology/Lab	3/1	SCNC 101	Physical Science I/Lab (Biology & Chemistry)
3/1		BIOL 151	3	GIS 105	Fundamentals of GIS	3/1	SCNC 102	Physical Science II/Lab (Physics & Geology)
3/1		BIOL 170	3	* GIS 107	GIS Applications	3/1	SCNC 103	Physical Science III/Lab (Astronomy & Meteorology)
3/1		BIOL 220	4	MATH 103	College Algebra	2/1	* SOIL 210	Introduction to Soil Science/Lab
3/1		BIOL 221	3	MATH 104	Finite Mathematics			
3/1		BIOL 250	2	MATH 105	Trigonometry			
3/1		BOT 170	4	MATH 107	Pre-Calculus			
3	*	BUSN 120	3	* MATH 137	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	College Writing Prep I
2		ASC 91	2	ASC 95	College Writing Prep II
2		ASC 92	2	ASC 96	College Writing Prep III
2		ASC 93	3/1	ASC 098	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.