



Instrumentation & Control Technology

Program Certificate

Advising Worksheet* 2017-2018

Prescribed Technical Program Total	52
General Education Total	4
Total Degree Credits	62

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

Complete 4 credits of general education from any two areas of study.

1.		4
2.		
Total Credits		4

*This advising worksheet is unofficial and to be used for class planning purposes only. Please refer to official catalog at <http://catalog.bismarckstate.edu/> for the complete listing of the degree requirements.

Program Certificate - Programs Containing 45 or more Prescribed Technical Program Requirements 2017-2018 Catalog

Degree Checklist

- | | | | |
|--------------------------|--|--------------------------|--|
| <input type="checkbox"/> | Earned at least 15 semester hours of institutional credit from BSC | <input type="checkbox"/> | Completed prescribed technical program requirements |
| <input type="checkbox"/> | Minimum of 2.00 institutional GPA (BSC only) | <input type="checkbox"/> | Cleared all college obligations |
| <input type="checkbox"/> | Minimum of 2.00 cumulative GPA (BSC + Transfer) | <input type="checkbox"/> | Filed an Application for Degree in the Academic Records Office |
| <input type="checkbox"/> | Minimum of 2.00 GPA in a prescribed technical program | | |
| <input type="checkbox"/> | Earned a minimum of 4 semester hours of general education credit from two areas of study | | |

Legend

(*) Course not approved as GERTA

General Education Requirements

Programs containing 45 or more credits must complete 4 credits of general education from two areas of study.

Gr.	Cr.			Gr.	Cr.			Gr.	Cr.		
3	*	ACCT 200	Elements of Accounting I	3		ENGL 110	College Composition I	1		MUSC 137	Jazz Ensemble
3	*	ACCT 201	Elements of Accounting II	3		ENGL 120	College Composition II	1	*	MUSC 138	Percussion Ensemble
3		ART 110	Introduction to the Visual Arts	3		ENGL 125	Introduction to Professional Writing	1		MUSC 145	Applied Music
3		ART 122	Two-Dimensional Design	3		ENGL 211	Introduction to Creative Writing	1		MUSC 146	Applied Music - Major
3		ART 124	Three-Dimensional Design	3		ENGL 221	Introduction to Drama	3	*	NUTR 240	Principles of Nutrition
3		ART 130	Drawing I	3		ENGL 222	Introduction to Poetry	3		PHIL 101	Introduction to Philosophy
3		ART 210	Art History I	3		ENGL 233	Fantasy and Science Fiction	3		PHIL 210	Ethics
3		ART 211	Art History II	3		ENGL 236	Women and Literature	3		PHIL 220	Introduction to Logic
3		ART 220	Painting I	3		ENGL 238	Children's Literature	3		PHIL 250	Philosophy in Cinema
3		ART 221	Painting II	3		ENGL 251	British Literature I	3		PHIL 253	Environmental Ethics
3		ART 230	Drawing II	3		ENGL 252	British Literature II	3/1		PHYS 100	Concepts of Physics/Lab
3		ART 250	Ceramics I	3		ENGL 261	American Literature I	3/1		PHYS 110	Introductory Astronomy/Lab
3		ART 251	Ceramics II	3		ENGL 262	American Literature II	3/1		PHYS 211	College Physics I/Lab
2		ART 265	Sculpture I	3		ENGL 278	Alternative Literature	3/1		PHYS 212	College Physics II/Lab
2		ART 266	Sculpture II	3/1		GEOG 121	Physical Geography/Lab	4/1		PHYS 251	University Physics I/Lab
3/1		ASTR 150	Meteorology/Lab	3		GEOG 161	World Regional Geography	4/1		PHYS 252	University Physics II/Lab
3	*	BADM 202	Principles of Management	3/1		GEOG 102	Historical Geology/Lab	2/1		PLSC 110	World Food Crops/Lab
3	*	BADM 210	Advertising I	3/1		GEOG 105	Physical Geology/Lab	3		POLS 115	American Government
3		BADM 240	Sales	3		GIS 105	Fundamentals of GIS	3		POLS 116	State and Local Government
3	*	BADM 281	Organizational Behavior	3	*	GIS 107	GIS Applications	3		POLS 220	International Politics
3	*	BADM 282	Human Resource Management	3		HIST 101	Western Civilization I	3		PSYC 111	Introduction to Psychology
1	*	BIOL 102	Introduction to Aquarium Keeping	3		HIST 102	Western Civilization II	3	*	PSYC 211	Introduction to Behavior Modification
3		BIOL 109	The Living World	3		HIST 103	United States to 1877	3		PSYC 250	Developmental Psychology
3/1		BIOL 111	Concepts of Biology/Lab	3		HIST 104	United States since 1877	3	*	PSYC 261	Psychology of Adjustment
3/1		BIOL 115	Human Structure and Function/Lab	3		HIST 211	World Civilizations to 1500	3		PSYC 270	Abnormal Psychology
3		BIOL 124	Environmental Science	3		HIST 212	World Civilizations since 1500	3		RELS 120	Religion in America
3/1		BIOL 125	Introduction to Ecology/Lab	3		HIST 220	North Dakota History	3		RELS 201	Life and Letters of Paul
3/1		BIOL 126	Human Biology/Lab	3		HIST 222	History of the Western Frontier	3		RELS 203	World Religions
3/1		BIOL 150	General Biology I/Lab	3		HIST 224	American Studies I	3		RELS 220	Old Testament
3/1		BIOL 151	General Biology II/Lab	3		HIST 225	American Studies II	3		RELS 230	New Testament
3/1		BIOL 220	Anatomy and Physiology I/Lab	1-3	*	HIST 243	Historical Investigations	3/1		SCNC 101	Physical Science I/Lab (Biology & Chemistry)
3/1		BIOL 221	Anatomy and Physiology II/Lab	3		HUMS 210	Integrated Cultural Studies				Physical Science II/Lab (Physics & Geology)
3/1		BIOL 250	Survey of Tropical Biology/Lab	1-4		HUMS 211	Integrated Cultural Excursion	3/1		SCNC 102	
3/1		BOT 170	Plant Form and Diversity/Lab	2		HUMS 212	Integrated Cultural Enrichment				

_____ 3	*	BUSN 120	Fundamentals of Business	_____ 4	MATH 103	College Algebra	_____ 3/1	SCNC 103	Physical Science III/Lab (Astronomy & Meteorology)
_____ 3/1		CHEM 110	Survey of Chemistry/Lab	_____ 3	MATH 104	Finite Mathematics	_____ 3	SOC 110	Introduction to Sociology
_____ 3/1		CHEM 112	Introduction to Forensic Science/Lab	_____ 2	MATH 105	Trigonometry	_____ 3	SOC 115	Social Problems
_____ 3/1		CHEM 114	Chemistry in Art/Lab	_____ 4	MATH 107	Pre-Calculus	_____ 3	SOC 220	Family
_____ 4/1		CHEM 115	Introductory Chemistry/Lab	_____ 3	* MATH 137	Applied Algebra	_____ 3	SOC 221	Minority Relations
_____ 4/1		CHEM 116	Intro to Organic and Biochemistry/Lab	_____ 3	MATH 146	Applied Calculus I	_____ 3	SOC 235	Cultural Diversity
_____ 4/1		CHEM 121	General Chemistry I/Lab	_____ 4	MATH 165	Calculus I	_____ 3	SOC 251	Gerontology
_____ 4/1		CHEM 122	General Chemistry II/Lab	_____ 4	MATH 166	Calculus II	_____ 3	SOC 252	Criminology
_____ 4	*	CIS 164	Networking Fundamentals I	_____ 3	* MATH 208	Discrete Mathematics	_____ 3	SOC 275	American Indian Studies
_____ 3		CJ 201	Introduction to Criminal Justice	_____ 3	MATH 210	Elementary Statistics	_____ 2/1 *	SOIL 210	Introduction to Soil Science/Lab
_____ 3		COMM 110	Fundamentals of Public Speaking	_____ 4	* MATH 277	Math for Elementary Teachers I	_____ 4	SPAN 101	First Year Spanish I
_____ 3		COMM 112	Understanding Media and Social Change	_____ 3/1	MICR 202	Introductory Microbiology/Lab	_____ 4	SPAN 102	First Year Spanish II
_____ 3		COMM 211	Oral Interpretation	_____ 3	MUSC 100	Music Appreciation	_____ 4	SPAN 201	Second Year Spanish I
_____ 3		COMM 212	Interpersonal Communications	_____ 1	MUSC 117	Concert Choir	_____ 4	SPAN 202	Second Year Spanish II
_____ 3		CSCI 101	Introduction to Computers	_____ 1	MUSC 118	Chamber Choir	_____ 3	SWK 256	Development of Social Welfare
_____ 3		CSCI 122	Beginning Visual Basic	_____ 1	MUSC 121	String Ensemble	_____ 3	THEA 110	Introduction to Theatre Arts
_____ 4		CSCI 160	Computer Science I	_____ 1	MUSC 132	Wind Ensemble	_____ 3	THEA 161	Acting I
_____ 4		CSCI 161	Computer Science II	_____ 1	MUSC 133	Woodwind Ensemble I	_____ 3	THEA 261	Acting II
_____ 3		ECON 105	Elements of Economics	_____ 1	MUSC 134	Woodwind Ensemble II			
_____ 3		ECON 201	Principles of Microeconomics	_____ 1	MUSC 135	Brass Ensemble I			
_____ 3		ECON 202	Principles of Macroeconomics	_____ 1	MUSC 136	Brass Ensemble II			

Transfer Course

Transfer Course

Transfer Course

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 Program Certificate.

Gr.	Cr.			Gr.	Cr.		
_____ 2		ASC 082	Effective Reading	_____ 2		ASC 94	College Writing Prep I
_____ 3		ASC 087	College Writing Prep	_____ 2		ASC 95	College Writing Prep II
_____ 1		ASC 088	Composition Lab	_____ 2		ASC 96	College Writing Prep III
_____ 2		ASC 91	Algebra Prep I	_____ 3/1		ASC 098	Basic Biology/Lab
_____ 2		ASC 92	Algebra Prep II				
_____ 2		ASC 93	Algebra Prep III				

Advisor:	_____
Office:	_____
Phone:	_____
Email:	_____

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