



Electrical Transmission Systems Technology

Program Certificate

Advising Worksheet* 2018-2019

Prescribed Technical Program Total	51
General Education Total	4
Total Degree Credits	55

Semester I (Fall/Spring)

Prescribed Technical Program Requirements

ETST	240	Power Industry Concepts	3
ETST	242	Applied Mathematics for System Operators	2
ENRT	106	DC Fundamentals (also offered in summer)	2
ENRT	108	AC Fundamentals (also offered in summer)	3
ETST	260	Electrical Diagram Interpretation	2
Total Credits			12

Semester II (Fall/Spring)

Prescribed Technical Program Requirements

ETST	250	Electrical Generation Theory	4
ETST	254	System Elements I - Substations	3
ETST	256	System Elements II - Transformers	3
ETST	258	System Elements III - Protective Relaying	3
Total Credits			13

Semester III (Fall/Spring)

Prescribed Technical Program Requirements

ETST	262	Power System Operations	3
ETST	266	Interconnected System Operations	3
ETST	268	Power Flow	3
ETST	270	System Operator Work Practices	3
Total Credits			12

Semester IV (Fall/Spring)

Prescribed Technical Program Requirements

ETST	272	Power System Safety	3
ETST	274	Communications & Control Technology	2
ETST	276	Power System Economics	3
ETST	278	Power System Emergency Concepts	3
ETST	280	Reliability Policies & Procedures	3
Total Credits			14

General Education Requirements

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

1.		4
2.		
Total Credits		4

* The 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 the degree requirements.

Program Certificate - Programs Containing 45 or more Prescribed Technical Program Requirements 2018-2019 Catalog

Degree Checklist

- | | | | |
|--------------------------|--|--------------------------|---|
| <input type="checkbox"/> | Completed a prescribed technical program | <input type="checkbox"/> | Cleared all college obligations |
| <input type="checkbox"/> | Earned at least 15 semester hours of institutional credit from BSC | <input type="checkbox"/> | Declared program of study is degree seeking |
| <input type="checkbox"/> | Minimum of 2.00 GPA in a prescribed technical program | <input type="checkbox"/> | Filed an Application for Degree in the Academic Records Office |
| <input type="checkbox"/> | Minimum of 2.00 institutional GPA (BSC only) | | |
| <input type="checkbox"/> | Minimum of 2.00 cumulative GPA (BSC + Transfer) | | Specific programs may require additional degree/program requirements; refer to your 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. Area of study is based on course prefix.

Gr.	Cr.		Gr.	Cr.		Gr.	Cr.	
_____	3	* ACCT 200	_____	3/1	BIOL 151	_____	3	ENGL 125
_____	3	* ACCT 201	_____	3/1	BIOL 220	_____	3	ENGL 211
_____	3	ANTH 170	_____	3/1	BIOL 221	_____	3	ENGL 221
_____	3	ART 110	_____	3/1	BIOL 250	_____	3	ENGL 222
_____	3	ART 122	_____	3/1	BOT 170	_____	3	ENGL 233
_____	3	ART 124	_____	3	* BUSN 120	_____	3	ENGL 236
_____	3	ART 130	_____	3/1	CHEM 110	_____	3	ENGL 238
_____	3	ART 210	_____	3/1	CHEM 112	_____	3	ENGL 251
_____	3	ART 211	_____	3/1	CHEM 114	_____	3	ENGL 252
_____	3	ART 220	_____	4/1	CHEM 115	_____	3	ENGL 261
_____	3	ART 221	_____	4/1	CHEM 116	_____	3	ENGL 262
_____	3	ART 230	_____	4/1	CHEM 121	_____	3	ENGL 278
_____	3	ART 250	_____	4/1	CHEM 122	_____	3/1	GEOG 121
_____	3	ART 251	_____	3	* CIS 147	_____	3	GEOG 161
_____	2	ART 265	_____	4	* CIS 164	_____	3/1	GEOL 102
_____	2	ART 266	_____	3	* CIS 280	_____	3/1	GEOL 105
_____	3/1	ASTR 150	_____	3	CJ 201	_____	3	GIS 105
_____	3	* BADM 202	_____	3	COMM 110	_____	3	* GIS 107
_____	3	* BADM 210	_____	3	COMM 112	_____	3	HIST 101
_____	3	* BADM 240	_____	3	COMM 211	_____	3	HIST 102
_____	3	* BADM 281	_____	3	COMM 212	_____	3	HIST 103
_____	3	* BADM 282	_____	3	CSCI 101	_____	3	HIST 104
_____	1	* BIOL 102	_____	3	CSCI 122	_____	3	HIST 211
_____	3	BIOL 109	_____	4	CSCI 160	_____	3	HIST 212
_____	3/1	BIOL 111	_____	4	CSCI 161	_____	3	HIST 220
_____	3/1	BIOL 115	_____	3	ECON 105	_____	3	HIST 222
_____	3	BIOL 124	_____	3	ECON 201	_____	3	HIST 224
_____	3/1	BIOL 125	_____	3	ECON 202	_____	3	HIST 225
_____	3/1	BIOL 126	_____	3	ENGL 110	_____	1-3	* HIST 243
_____	3/1	BIOL 150	_____	3	ENGL 120	_____	3	HUMS 210
					General Biology II/Lab			Introduction to Professional Writing
					Anatomy and Physiology I/Lab			Introduction to Creative Writing
					Anatomy and Physiology II/Lab			Introduction to Drama
					Survey of Tropical Biology/Lab			Introduction to Poetry
					Plant Form and Diversity/Lab			Fantasy and Science Fiction
					Fundamentals of Business			Women and Literature
					Survey of Chemistry/Lab			Children's Literature
					Introduction to Forensic Science/Lab			British Literature I
					Chemistry in Art/Lab			British Literature II
					Introductory Chemistry/Lab			American Literature I
					Intro to Organic and Biochemistry/Lab			American Literature II
					General Chemistry I/Lab			Alternative Literature
					General Chemistry II/Lab			Physical Geography/Lab
					Principles of Information Security			World Regional Geography
					Networking Fundamentals I			Historical Geology/Lab
					Cyber Ethics			Physical Geology/Lab
					Introduction to Criminal Justice			Fundamentals of GIS
					Fundamentals of Public Speaking			GIS Applications
					Understanding Media and Social Change			Western Civilization I
					Oral Interpretation			Western Civilization II
					Interpersonal Communications			United States to 1877
					Introduction to Computers			United States Since 1877
					Beginning Visual Basic			World Civilizations to 1500
					Computer Science I			World Civilizations since 1500
					Computer Science II			North Dakota History
					Elements of Economics			History of the Western Frontier
					Principles of Microeconomics			American Studies I
					Principles of Macroeconomics			American Studies II
					College Composition I			Historical Investigations
					College Composition II			Integrated Cultural Studies

_____	1-4	HUMS 211	Integrated Cultural Excursion
_____	2	HUMS 212	Integrated Cultural Enrichment
_____	4	MATH 103	College Algebra
_____	3	MATH 104	Finite Mathematics
_____	2	MATH 105	Trigonometry
_____	4	MATH 107	Pre-Calculus
_____	3	* MATH 137	Applied Algebra
_____	3	MATH 146	Applied Calculus I
_____	4	MATH 165	Calculus I
_____	4	MATH 166	Calculus II
_____	3	* MATH 208	Discrete Mathematics
_____	3	MATH 210	Elementary Statistics
_____	4	* MATH 277	Mathematics for Elementary Teachers I
_____	3/1	MICR 202	Introductory Microbiology/Lab
_____	3	MUSC 100	Music Appreciation
_____	1	MUSC 117	Concert Choir
_____	1	MUSC 118	Chamber Choir
_____	1	MUSC 121	String Ensemble
_____	1	MUSC 132	Wind Ensemble
_____	1	MUSC 133	Woodwind Ensemble I
_____	1	MUSC 134	Woodwind Ensemble II
_____	1	MUSC 135	Brass Ensemble I
_____	1	MUSC 136	Brass Ensemble II
_____	1	MUSC 137	Jazz Ensemble
_____	1	* MUSC 138	Percussion Ensemble
_____	1	MUSC 145	Applied Music
_____	1	MUSC 146	Applied Music - Major
_____	3	* NUTR 240	Principles of Nutrition

Transfer Course

_____	3	PHIL 101	Introduction to Philosophy
_____	3	PHIL 210	Ethics
_____	3	PHIL 220	Introduction to Logic
_____	3	PHIL 250	Philosophy in Cinema
_____	3	PHIL 253	Environmental Ethics
_____	3/1	PHYS 100	Concepts of Physics/Lab
_____	3/1	PHYS 110	Introductory Astronomy/Lab
_____	4/1	PHYS 211	College Physics I/Lab
_____	4/1	PHYS 212	College Physics II/Lab
_____	4/1	PHYS 251	University Physics I/Lab
_____	4/1	PHYS 252	University Physics II/Lab
_____	2/1	PLSC 110	World Food Crops/Lab
_____	3	POLS 115	American Government
_____	3	POLS 116	State and Local Government
_____	3	POLS 220	International Politics
_____	3	PSYC 111	Introduction to Psychology
_____	3	* PSYC 211	Introduction to Behavior Modification
_____	3	PSYC 250	Developmental Psychology
_____	3	* PSYC 261	Psychology of Adjustment
_____	3	PSYC 270	Abnormal Psychology
_____	3	RELS 120	Religion in America
_____	3	RELS 201	Life and Letters of Paul
_____	3	RELS 203	World Religions
_____	3	RELS 220	Old Testament
_____	3	RELS 230	New Testament
_____	3/1	SCNC 101	Physical Science I/Lab (Biology & Chemistry)

Transfer Course

_____	3/1	SCNC 102	Physical Science II/Lab (Physics & Geology)
_____	3/1	SCNC 103	Physical Science III/Lab (Astronomy & Meteorology)
_____	3	SOC 110	Introduction to Sociology
_____	3	SOC 115	Social Problems
_____	3	SOC 220	Family
_____	3	SOC 221	Minority Relations
_____	3	SOC 235	Cultural Diversity
_____	3	SOC 251	Gerontology
_____	3	SOC 252	Criminology
_____	3	SOC 275	American Indian Studies
_____	2/1 *	SOIL 210	Introduction to Soil Science/Lab
_____	4	SPAN 101	First Year Spanish I
_____	4	SPAN 102	First Year Spanish II
_____	4	SPAN 201	Second Year Spanish I
_____	4	SPAN 202	Second Year Spanish II
_____	3	SWK 256	Development of Social Welfare
_____	3	THEA 110	Introduction to Theatre Arts
_____	3	THEA 161	Acting I
_____	3	THEA 180	Dramatic Literature and Style I
_____	3	THEA 181	Dramatic Literature and Style II
_____	3	THEA 261	Acting II

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

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

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