



Energy Services & Renewable Technician
Program Certificate
 Advising Worksheet* 2017-2018

Prescribed Technical Program Total	54
General Education Total	4
Total Degree Credits	58

Semester I offered fall semesters

Prescribed Technical Program Requirements

ESRE	210	Electrical & Safe Work Practices	3
ESRE	216	Mechanical Drive Systems	4
ESRE	213	Hydraulic Fundamentals	3
ESRE	218	Solar & Distributed Grid Systems	4
Total Credits			14

Semester II offered spring semesters

Prescribed Technical Program Requirements

ESRE	224	Automation & Control	3
ESRE	221	Applied Electronics	3
ESRE	226	Commercial Wind Systems	3
ESRE	228	Energy Technician Applications & Troubleshooting	5
Total Credits			14

Semester III

Prescribed Technical Program Requirements

ENRT	122	Industrial Composition and Communication	4
ENRT	105	Safety, Health & Environment	3
ENRT	107	Mechanical Fundamentals	2
ENRT	110	Plant Equipment & Systems	4
Total Credits			13

Semester IV

Prescribed Technical Program Requirements

ENRT	112	Print Reading	3
ENRT	103	Applied Math	3
PWRP	224	Power Generation Components & Protection	3
ENRT	116	Instrumentation & Control	4
Total Credits			13

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 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	3		ENGL 110	1		MUSC 137
		Elements of Accounting I			College Composition I			Jazz Ensemble
3	*	ACCT 201	3		ENGL 120	1	*	MUSC 138
		Elements of Accounting II			College Composition II			Percussion Ensemble
3		ART 110	3		ENGL 125	1		MUSC 145
		Introduction to the Visual Arts			Introduction to Professional Writing			Applied Music
3		ART 122	3		ENGL 211	1		MUSC 146
		Two-Dimensional Design			Introduction to Creative Writing			Applied Music - Major
3		ART 124	3		ENGL 221	3	*	NUTR 240
		Three-Dimensional Design			Introduction to Drama			Principles of Nutrition
3		ART 130	3		ENGL 222	3		PHIL 101
		Drawing I			Introduction to Poetry			Introduction to Philosophy
3		ART 210	3		ENGL 233	3		PHIL 210
		Art History I			Fantasy and Science Fiction			Ethics
3		ART 211	3		ENGL 236	3		PHIL 220
		Art History II			Women and Literature			Introduction to Logic
3		ART 220	3		ENGL 238	3		PHIL 250
		Painting I			Children's Literature			Philosophy in Cinema
3		ART 221	3		ENGL 251	3		PHIL 253
		Painting II			British Literature I			Environmental Ethics
3		ART 230	3		ENGL 252	3/1		PHYS 100
		Drawing II			British Literature II			Concepts of Physics/Lab
3		ART 250	3		ENGL 261	3/1		PHYS 110
		Ceramics I			American Literature I			Introductory Astronomy/Lab
3		ART 251	3		ENGL 262	3/1		PHYS 211
		Ceramics II			American Literature II			College Physics I/Lab
2		ART 265	3		ENGL 278	3/1		PHYS 212
		Sculpture I			Alternative Literature			College Physics II/Lab
2		ART 266	3/1		GEOG 121	4/1		PHYS 251
		Sculpture II			Physical Geography/Lab			University Physics I/Lab
3/1		ASTR 150	3		GEOG 161	4/1		PHYS 252
		Meteorology/Lab			World Regional Geography			University Physics II/Lab
3	*	BADM 202	3/1		GEOL 102	2/1		PLSC 110
		Principles of Management			Historical Geology/Lab			World Food Crops/Lab
3	*	BADM 210	3/1		GEOL 105	3		POLS 115
		Advertising I			Physical Geology/Lab			American Government
3	*	BADM 240	3		GIS 105	3		POLS 116
		Sales			Fundamentals of GIS			State and Local Government
3	*	BADM 281	3	*	GIS 107	3		POLS 220
		Organizational Behavior			GIS Applications			International Politics
3	*	BADM 282	3		HIST 101	3		PSYC 111
		Human Resource Management			Western Civilization I			Introduction to Psychology
1	*	BIOL 102	3		HIST 102	3	*	PSYC 211
		Introduction to Aquarium Keeping			Western Civilization II			Introduction to Behavior Modification
3		BIOL 109	3		HIST 103	3		PSYC 250
		The Living World			United States to 1877			Developmental Psychology
3/1		BIOL 111	3		HIST 104	3	*	PSYC 261
		Concepts of Biology/Lab			United States since 1877			Psychology of Adjustment
3/1		BIOL 115	3		HIST 211	3		PSYC 270
		Human Structure and Function/Lab			World Civilizations to 1500			Abnormal Psychology
3		BIOL 124	3		HIST 212	3		RELS 120
		Environmental Science			World Civilizations since 1500			Religion in America
3/1		BIOL 125	3		HIST 220	3		RELS 201
		Introduction to Ecology/Lab			North Dakota History			Life and Letters of Paul
3/1		BIOL 126	3		HIST 222	3		RELS 203
		Human Biology/Lab			History of the Western Frontier			World Religions
3/1		BIOL 150	3		HIST 224	3		RELS 220
		General Biology I/Lab			American Studies I			Old Testament
3/1		BIOL 151	3		HIST 225	3		RELS 230
		General Biology II/Lab			American Studies II			New Testament
3/1		BIOL 220	1-3	*	HIST 243	3/1		SCNC 101
		Anatomy and Physiology I/Lab			Historical Investigations			Physical Science I/Lab
3/1		BIOL 221	3		HUMS 210			(Biology & Chemistry)
		Anatomy and Physiology II/Lab			Integrated Cultural Studies			Physical Science II/Lab
3/1		BIOL 250	1-4		HUMS 211	3/1		(Physics & Geology)
		Survey of Tropical Biology/Lab			Integrated Cultural Excursion			
3/1		BOT 170	2		HUMS 212			
		Plant Form and Diversity/Lab			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			
3/1		CHEM 112	Introduction to Forensic Science/Lab	2	MATH 105	Trigonometry	3	SOC 110	Introduction to Sociology
3/1		CHEM 114	Chemistry in Art/Lab	4	MATH 107	Pre-Calculus	3	SOC 115	Social Problems
4/1		CHEM 115	Introductory Chemistry/Lab	3	* MATH 137	Applied Algebra	3	SOC 220	Family
4/1		CHEM 116	Intro to Organic and Biochemistry/Lab	3	MATH 146	Applied Calculus I	3	SOC 221	Minority Relations
4/1		CHEM 121	General Chemistry I/Lab	4	MATH 165	Calculus I	3	SOC 235	Cultural Diversity
4/1		CHEM 122	General Chemistry II/Lab	4	MATH 166	Calculus II	3	SOC 251	Gerontology
4	*	CIS 164	Networking Fundamentals I	3	* MATH 208	Discrete Mathematics	3	SOC 252	Criminology
3		CJ 201	Introduction to Criminal Justice	3	MATH 210	Elementary Statistics	3	SOC 275	American Indian Studies
3		COMM 110	Fundamentals of Public Speaking	4	* MATH 277	Math for Elementary Teachers I	2/1 *	SOIL 210	Introduction to Soil Science/Lab
3		COMM 112	Understanding Media and Social Change	3/1	MICR 202	Introductory Microbiology/Lab	4	SPAN 101	First Year Spanish I
3		COMM 211	Oral Interpretation	3	MUSC 100	Music Appreciation	4	SPAN 102	First Year Spanish II
3		COMM 212	Interpersonal Communications	1	MUSC 117	Concert Choir	4	SPAN 201	Second Year Spanish I
3		CSCI 101	Introduction to Computers	1	MUSC 118	Chamber Choir	4	SPAN 202	Second Year Spanish II
3		CSCI 122	Beginning Visual Basic	1	MUSC 121	String Ensemble	3	SWK 256	Development of Social Welfare
4		CSCI 160	Computer Science I	1	MUSC 132	Wind Ensemble	3	THEA 110	Introduction to Theatre Arts
4		CSCI 161	Computer Science II	1	MUSC 133	Woodwind Ensemble I	3	THEA 161	Acting I
3		ECON 105	Elements of Economics	1	MUSC 134	Woodwind Ensemble II	3	THEA 261	Acting 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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