

## **Power Plant Technology**

## Program Certificate Advising Worksheet\* 2019-2020

Prescribed Technical Program Total	52
General Education Total	4
<b>Total Degree Credits</b>	56

Semester I							
Prescribed Technical Program Requirements							
ENRT	101	Introduction to Energy Technology		4			
ENRT	105	Safety, Health & Environment		3			
ENRT	107	Mechanical Fundamentals		2			
ENRT	110	Plant Equipment & Systems	_	4			
			Total Credits	13			

Semester II							
Prescri	Prescribed Technical Program Requirements						
ENRT	112	Print Reading		3			
ENRT	103	Applied Math		3			
ENRT	104	<b>Electrical Fundamentals</b>		3			
ENRT	116	Instrumentation & Control	_	4			
			Total Credits	13			

Semester III						
Prescribed Technical Program Requirements						
ENRT	118	Heat Transfer, Fluid Flow & Thermodynamics	3			
ENRT	120	Water Purification & Treatment	3			
ENRT	205	Steam Generation	3			
ENRT	215	Operations, Troubleshooting & Communications	3			
		Total Credits	12			

Semester IV							
Prescribed Technical Program Requirements							
PWRP	203	Energy Sources & Conversions	3				
PWRP	WRP 207 Boilers & Environmental Protection 3						
PWRP	210	Turbines & Combined Cycle	3				
PWRP	224	Power Generation Components & Protection	3				
ENRT	220	Practical Applications	2				
		Total Credits	14				
General Education Requirements							
Complet	e 4 credit	s of general education from any two areas of study.					

Total Credits 4

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<sup>\*</sup> 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 2019-2020 Catalog**

Degree	Checklist	t							
	Satisfied all degree seeking admission requirements				Cleared all college obligations				
	Completed a prescribed technical program				Filed an Application for Degree in th	ne Academic Records Office imm	nediately		
	Earned at least 15 semester hours of institutional credit from BSC				following enrollment in final semest	ter			
	Minimum of	2.00 GPA in a prescribed technical prog	ram		Specific programs may require additiona	al dearee/proaram reauiremen	ts: refer to vour program.		
		2.00 institutional GPA (BSC only)			., ., ., ., ., ., ., ., ., ., ., ., ., .		., ., ., . , . ,		
		2.00 cumulative GPA (BSC + Transfer)							
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	Earned a minimum of 4 semester hours of general education credit from two areas of study								
	Legend (*) Cours	e not approved as GERTA							
General	l Educati	on Requirements							
				ion from two are	as of study. Area of study is based on cours	se prefix. Gr. Cr.			
Gr. Cr. 3 *	ACCT 200	Elements of Accounting I	Gr. Cr. 3/1	BIOL 151	General Biology II/Lab	3 ENGL 125	Introduction to Professional Writing		
— 3 *	ACCT 200	Elements of Accounting II	3/1	BIOL 170	General Zoology/Lab	3 ENGL 211	Introduction to Creative Writing		
3	ANTH 170	Physical Anthropolgy and Archeology	3/1	BIOL 220	Anatomy and Physiology I/Lab	3 ENGL 221	Introduction to Drama		
3	ANTH 171	Introduction to Cultural Anthropology	3/1	BIOL 221	Anatomy and Physiology II/Lab	3 ENGL 222	Introduction to Poetry		
3 3	ART 110 ART 122	Introduction to the Visual Arts Two-Dimensional Design	3/1 3/1	BIOL 250 BOT 170	Survey of Tropical Biology/Lab Plant Form and Diversity/Lab	3 ENGL 233 3 ENGL 236	Fantasy and Science Fiction Women and Literature		
3	ART 122 ART 124	Three-Dimensional Design	3/1	* BUSN 120	Fundamentals of Business	3 ENGL 238	Children's Literature		
3	ART 130	Drawing I	3/1	CHEM 110	Survey of Chemistry/Lab	3 ENGL 251	British Literature I		
3	ART 210	Art History I	3/1	CHEM 112	Introduction to Forensic Science/Lab	3 ENGL 252	British Literature II		
—— <sup>3</sup>	ART 211 ART 220	Art History II Painting I	3/1	CHEM 114 CHEM 115	Chemistry in Art/Lab Introductory Chemistry/Lab	3 ENGL 261 3 ENGL 262	American Literature I American Literature II		
<sub>3</sub>	ART 221	Painting I	4/1 4/1	CHEM 116	Intro to Organic and Biochemistry/Lab	3 ENGL 278	Alternative Literature		
<sub>3</sub>	ART 230	Drawing II	4/1	CHEM 121	General Chemistry I/Lab	3/1 GEOG 121	Physical Geography/Lab		
3	ART 250	Ceramics I	4/1	CHEM 122	General Chemistry II/Lab	3 GEOG 161	World Regional Geography		
3	ART 251	Ceramics II		* CIS 147	Principles of Information Security	3/1 GEOL 102	Historical Geology/Lab		
2	ART 265 ART 266	Sculpture I Sculpture II		* CIS 164 * CIS 280	Networking Fundamentals I Cyber Ethics	3/1 GEOL 105 3 GIS 105	Physical Geology/Lab Fundamentals of GIS		
3/1	ASTR 150	Meteorology/Lab	— ³	CJ 201	Introduction to Criminal Justice	3 * GIS 107	GIS Applications		
3 *	BADM 202	Principles of Management	3	COMM 110	Fundamentals of Public Speaking	3 HIST 101	Western Civilization I		
3 *	BADM 210	Advertising I	3	COMM 112	Understanding Media and Social Change	3 HIST 102	Western Civilization II		
3 *	BADM 240	Sales	3	COMM 211	Oral Interpretation	3 HIST 103	United States to 1877		
3 * 3 *	BADM 281 BADM 282	Organizational Behavior	3 3	COMM 212 CSCI 101	Interpersonal Communications	3 HIST 104 3 HIST 211	United States Since 1877 World Civilizations to 1500		
— i *	BIOL 102	Human Resource Management Introduction to Aquarium Keeping	— ³	CSCI 101	Introduction to Computers Beginning Visual Basic	3 HIST 212	World Civilizations to 1500 World Civilizations since 1500		
3	BIOL 109	The Living World	4	CSCI 160	Computer Science I	3 HIST 220	North Dakota History		
3/1	BIOL 111	Concepts of Biology/Lab	4	CSCI 161	Computer Science II	3 HIST 222	History of the Western Frontier		
3/1	BIOL 115	Concepts of Anatomy & Physiology/Lab	3	ECON 105	Elements of Economics	3 HIST 224	American Studies I		
3 3/1	BIOL 124 BIOL 125	Environmental Science Introduction to Ecology/Lab	3 3	ECON 201 ECON 202	Principles of Microeconomics Principles of Macroeconomics	3 HIST 225 1-3 * HIST 243	American Studies II Historical Investigations		
3/1	BIOL 125	Human Biology/Lab	3	ENGL 110	College Composition I	3 HUMS 210	Integrated Cultural Studies		
3/1	BIOL 150	General Biology I/Lab	3	ENGL 120	College Composition II				
1-4	HUMS 211	Integrated Cultural Excursion	3	PHIL 101	Introduction to Philosophy	3/1 SCNC 102	Physical Science II/Lab		
<sup>2</sup>	HUMS 212 MATH 103	Integrated Cultural Enrichment College Algebra	<sup>3</sup>	PHIL 210 PHIL 220	Ethics Introduction to Logic	3/1 SCNC 103	(Physics & Geology) Physical Science III/Lab		
—— <sub>3</sub>	MATH 104	Finite Mathematics	3	PHIL 250	Philosophy in Cinema		(Astronomy & Meteorology)		
2	MATH 105	Trigonometry	3	PHIL 253	Environmental Ethics	3 SOC 110	Introduction to Sociology		
4	MATH 107	Pre-Calculus	3/1	PHYS 100	Concepts of Physics/Lab	3 SOC 115	Social Problems		
3 *	MATH 137	Applied Algebra	3/1	PHYS 110	Introductory Astronomy/Lab	3 SOC 220	Family		
3 4	MATH 146 MATH 165	Applied Calculus I Calculus I	4/1 4/1	PHYS 211 PHYS 212	College Physics I/Lab College Physics II/Lab	3 SOC 221 3 SOC 235	Minority Relations Cultural Diversity		
<sub>4</sub>	MATH 166	Calculus II	4/1	PHYS 251	University Physics I/Lab	3 SOC 251	Gerontology		
<del></del> 3 *	MATH 208	Discrete Mathematics	4/1	PHYS 252	University Physics II/Lab	3 SOC 252	Criminology		
3	MATH 210	Elementary Statistics	2/1	PLSC 110	World Food Crops/Lab	3 SOC 275	American Indian Studies		
4 *	MATH 277	Mathematics for Elementary Teachers I	3 3	POLS 115	American Government State and Local Government	2/1 * SOIL 210	Introduction to Soil Science/Lab First Year Spanish I		
3/1 3	MICR 202 MUSC 100	Introductory Microbiology/Lab Music Appreciation	3	POLS 116 POLS 220	International Politics	4 SPAN 101 4 SPAN 102	First Year Spanish II		
ĭ	MUSC 117	Concert Choir	š	PSYC 100	Human Relations In Organizations	4 SPAN 201	Second Year Spanish I		
1	MUSC 118	Chamber Choir	3	PSYC 111	Introduction to Psychology	4 SPAN 202	Second Year Spanish II		
1	MUSC 121	String Ensemble		* PSYC 211	Introduction to Behavior Modification	3 SWK 256	Development of Social Welfare		
1	MUSC 132	Wind Ensemble	3	PSYC 250	Developmental Psychology	3 THEA 110	Introduction to Theatre Arts		
— 1 1	MUSC 133 MUSC 134	Woodwind Ensemble I Woodwind Ensemble II	3 3	* PSYC 261 PSYC 270	Psychology of Adjustment Abnormal Psychology	3 THEA 161 3 THEA 180	Acting I Dramatic Literature and Style I		
— <u>i</u>	MUSC 134	Brass Ensemble I	<sup>3</sup>	RELS 120	Religion in America	3 THEA 181	Dramatic Literature and Style II		
	MUSC 136	Brass Ensemble II	3	RELS 201	Life and Letters of Paul	3 THEA 261	Acting II		
1	MUSC 137	Jazz Ensemble	3	RELS 203	World Religions				
1 *	MUSC 138	Percussion Ensemble	3	RELS 220	Old Testament				
1	MUSC 145 MUSC 146	Applied Music Applied Music - Major	3 3/1	RELS 230 SCNC 101	New Testament Physical Science I/Lab				
— i *	NUTR 240	Principles of Nutrition	5/1	SCINC 101	(Biology & Chemistry)				
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Transfer Course	2		Transfer Cou	irse		Transfer Course			

The John Will 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 re	quirements, in	nstitutional credit requirements ar	nd cannot be inclu	uded ir	the semeste	r hours required for a Program Certificate.
Gr. Cr.			Gr.	Cr.		
2	ASC 082	Effective Reading		2	ASC 94	College Writing Prep I
2 2	ASC 91	Algebra Prep I		2	ASC 95	College Writing Prep II
2	ASC 92	Algebra Prep II		2	ASC 96	College Writing Prep III
2	ASC 93	Algebra Prep III		3/1	ASC 098	Basic Biology/Lab
Advisor:						
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Office:						
Phone:						
Email:						
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