

## **Power Plant Technology**

Associate in Applied Science Advising Worksheet\* 2017-2018

Semester I							
Prescri	bed Techr	nical 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								
Prescribed Technical Program Requirements								
ENRT	112	Print Reading		3				
ENRT	103	Applied Math		3				
ENRT	104	Electrical Fundamentals		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				

Prescribed Technical Program Total	52
General Education Total	15
Total Degree Credits	67

Semester IV						
Prescrib	oed Tech	nical Program Requirements				
PWRP	203	Energy Sources & Conversions	3			
PWRP	207	Boilers & Environmental Protection	3			
PWRP	210	Turbines & Combined Cycle	3			
PWRP	224	Power Generation Components & Protection	3			
ENRT	220	Practical Applications	2			
			14			

Gener	General Education Requirements							
Arts & H	lumanities/	Social & Behavioral Sciences						
1.								
Busines	s, Math, Sci	ence & Technology (Two areas of study required.)						
1.			3					
2.			3					
Commu	nications I							
ENGL	110	College Composition I (Required)	3					
Сотти	nications II	(Select one course.)						
ENGL	120	College Composition II						
ENGL	125	Introduction to Professional Writing	3					
COMM	110	Fundamentals of Public Speaking						
		Total Credits	15					

\* 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.

# Associate in Applied Science (AAS) 2017-2018 Catalog

Earned a minimum of 3 credits in ENGL 110

Earned a minimum of 3 credits in ENGL 120, ENGL 125 or COMM 110

Earned a minimum of 6 credits in Business, Math, Science & Technology

Completed prescribed technical program requirements

-Academic Skills Courses (ASC) do not count toward graduation

Earned a minimum of 3 credits in Arts & Humanities/Social & Behavioral Sciences

	Advisor:
	Office:
	Phone:
	Email:
Earned at leas	st 15 semester hours of institutional credit from BSC
Minimum of 2	2.00 institutional GPA (BSC only)

Needed

Minimum of 2.00 cumulative GPA (BSC + Transfer)

Minimum of 2.00 GPA in a prescribed technical program

Cleared all college obligations

Legend

Declared program of study is degree seeking

(\*) Course not approved as GERTA

Filed an Application for Degree in the Academic Records Office

Completed

## General Education Requirements Category I: COMMUNICATIONS

Earned a minimum of 60 credits

Communications I								
(3 Credits) - ENGL 110								
Gr. Cr. 3 ENGL	110 College Compo	sition I						
Transfer Course								

#### Communications II

**Degree Checklist** 

Credits

(3 Credits) -E	(3 Credits) -ENGL 120, 125, COMM 110 (Select one)							
Gr. Cr.								
3	ENGL 120	College Composition II						
3	ENGL 125	Introduction to Professional Writing						
	COMM 110	Fundamentals of Public Speaking						
Transfer Course	2							

## General Education Requirements Continued

### Category II: ARTS & HUMANITES/SOCIAL & BEHAVIORAL SCIENCES

Completed\_\_\_\_\_

Needed\_

Credits)									
ir. Cr.			Gr. Cr.			Gr. C	r.		
3	ART 110	Introduction to the Visual Arts	3	HIST 101	Western Civilization I	3	3 P(	OLS 115	American Government
3	ART 122	Two-Dimensional Design	3	HIST 102	Western Civilization II	3	3 P(	DLS 116	State and Local Government
3	ART 124	Three-Dimensional Design	3	HIST 103	United States to 1877	3	3 P(	OLS 220	International Politics
3	ART 130	Drawing I	3	HIST 104	United States since 1877	3	8 PS	SYC 111	Introduction to Psychology
3	ART 210	Art History I	3	HIST 211	World Civilizations to 1500	3	3 * PS	SYC 211	Introduction to Behavior Modification
3	ART 211	Art History II	3	HIST 212	World Civilizations since 1500	3	3 PS	SYC 250	Developmental Psychology
3	ART 220	Painting I	3	HIST 220	North Dakota History	3	3 * PS	SYC 261	Psychology of Adjustment
3	ART 221	Painting II	3	HIST 222	History of the Western Frontier	3	3 PS	SYC 270	Abnormal Psychology
3	ART 230	Drawing II	3	HIST 224	American Studies I	3	B RI	ELS 120	Religion in America
3	ART 250	Ceramics I	3	HIST 225	American Studies II	3	B RI	ELS 201	Life and Letters of Paul
3	ART 251	Ceramics II	1-3	* HIST 243	Historical Investigations	3	B RI	ELS 203	World Religions
2	ART 265	Sculpture I	3	HUMS 210	Integrated Cultural Studies	3	B RI	ELS 220	Old Testament
2	ART 266	Sculpture II	1-4	HUMS 211	Integrated Cultural Excursion	3	B RI	ELS 230	New Testament
3	CJ 201	Introduction to Criminal Justice	2	HUMS 212	Integrated Cultural Enrichment	3	3 SC	DC 110	Introduction to Sociology
3	COMM 112	Understanding Media and Social Change	3	MUSC 100	Music Appreciation	3	3 SC	DC 115	Social Problems
3	COMM 211	Oral Interpretation	1	MUSC 117	Concert Choir	3	3 SC	DC 220	Family
3	COMM 212	Interpersonal Communications	1	MUSC 118	Chamber Choir	3	3 SC	DC 221	Minority Relations
3	ECON 105	Elements of Economics	1	MUSC 121	String Ensemble	3	3 SC	DC 235	Cultural Diversity
3	ECON 201	Principles of Microeconomics	1	MUSC 132	Wind Ensemble	3	3 SC	DC 251	Gerontology
3	ECON 202	Principles of Macroeconomics	1	MUSC 133	Woodwind Ensemble I	3	3 SC	DC 252	Criminology
3	ENGL 211	Introduction to Creative Writing	1	MUSC 134	Woodwind Ensemble II	3	3 SC	DC 275	American Indian Studies
3	ENGL 221	Introduction to Drama	1	MUSC 135	Brass Ensemble I	4	1 SF	PAN 101	First Year Spanish I
3	ENGL 222	Introduction to Poetry	1	MUSC 136	Brass Ensemble II		1 SF	PAN 102	First Year Spanish II
3	ENGL 233	Fantasy and Science Fiction	1	MUSC 137	Jazz Ensemble		1 SF	PAN 201	Second Year Spanish I
3	ENGL 236	Women and Literature	1	* MUSC 138	Percussion Ensemble	4	1 SF	PAN 202	Second Year Spanish II
3	ENGL 238	Children's Literature	1	MUSC 145	Applied Music	3	3 SI	NK 256	Development of Social Welfare
3	ENGL 251	British Literature I	1	MUSC 146	Applied Music - Major	3	3 ТІ	HEA 110	Introduction to Theatre Arts
3	ENGL 252	British Literature II	3	PHIL 101	Introduction to Philosophy	3	3 ТІ	HEA 161	Acting I
3	ENGL 261	American Literature I	3	PHIL 210	Ethics	3	3 ТІ	HEA 261	Acting II
3	ENGL 262	American Literature II	3	PHIL 220	Introduction to Logic				-
3	ENGL 278	Alternative Literature	3	PHIL 250	Philosophy in Cinema				
3	GEOG 161	World Regional Geography	3	PHIL 253	Environmental Ethics				

Transfer Courses

Transfer Courses

Transfer Courses

## General Education Requirements Continued

#### Category III: BUSINESS, MATH, SCIENCE & TECHNOLOGY

(6 Credits) Must be satisfied with courses from two areas of study. Area of study is based on course prefix.

CCT 200     Elements of Accounting I       CCT 201     Elements of Accounting II       STR 150     Meteorology/Lab       ADM 202     Principles of Management       ADM 210     Advertising I       ADM 240     Sales       ADM 281     Organizational Behavior       ADM 282     Human Resource Management       IOL 102     Introduction to Aquarium Keeping       IOL 109     The Living World       IOL 111     Concepts of Biology/Lab	4	CHEM 110 CHEM 112 CHEM 114 CHEM 115 CHEM 116 CHEM 121 CHEM 122 * CIS 164 CSCI 101	Survey of Chemistry/Lab Introduction to Forensic Science/Lab Chemistry in Art/Lab Introductory Chemistry/Lab Intro to Organic and Biochemistry/Lab General Chemistry I/Lab General Chemistry II/Lab Networking Fundamentals I	$ \begin{array}{c}     3 \\     4 \\     4 \\     3 \\     4 \\     3 \\     4 \\     3 \\     4 \\     3 \\     4 \\     3 \\     4 \\     3 \\     4 \\     3 \\     4 \\     3 \\     4 \\     3 \\     4 \\     3 \\     4 \\     3 \\     4 \\     3 \\     4 \\     3 \\     3 \\     4 \\     3 \\     3 \\     4 \\     3 \\     3 \\     4 \\     3 \\     3 \\     4 \\     3 \\     3 \\     4 \\     3 $	MATH 146 MATH 165 MATH 166 MATH 208 MATH 210 MATH 277 MICR 202	Applied Calculus I Calculus I Calculus II Discrete Mathematics Elementary Statistics Math for Elementary Teachers I
STR 150     Meteorology/Lab       ADM 202     Principles of Management       ADM 210     Advertising I       ADM 240     Sales       ADM 281     Organizational Behavior       ADM 282     Human Resource Management       IOL 102     Introduction to Aquarium Keeping       IOL 109     The Living World	$ \begin{array}{c}     3/1 \\     4/1 \\     4/1 \\     4/1 \\     4/1 \\     4/1 \\     4/1 \\     4/1 \\     4 \end{array} $	CHEM 114 CHEM 115 CHEM 116 CHEM 121 CHEM 122 * CIS 164	Chemistry in Art/Lab Introductory Chemistry/Lab Intro to Organic and Biochemistry/Lab General Chemistry I/Lab General Chemistry II/Lab		MATH 166 MATH 208 MATH 210 MATH 277	Calculus II Discrete Mathematics Elementary Statistics Math for Elementary Teachers I
ADM 202     Principles of Management       ADM 210     Advertising I       ADM 240     Sales       ADM 281     Organizational Behavior       ADM 282     Human Resource Management       IOL 102     Introduction to Aquarium Keeping       IOL 109     The Living World	$ \begin{array}{c}                                     $	CHEM 115 CHEM 116 CHEM 121 CHEM 122 * CIS 164	Introductory Chemistry/Lab Intro to Organic and Biochemistry/Lab General Chemistry I/Lab General Chemistry II/Lab		MATH 208 MATH 210 MATH 277	Discrete Mathematics Elementary Statistics Math for Elementary Teachers I
ADM 210     Advertising I       ADM 240     Sales       ADM 281     Organizational Behavior       ADM 282     Human Resource Management       IOL 102     Introduction to Aquarium Keeping       IOL 109     The Living World	4/1 4/1 4/1 4/1 4	CHEM 116 CHEM 121 CHEM 122 * CIS 164	Intro to Organic and Biochemistry/Lab General Chemistry I/Lab General Chemistry II/Lab		MATH 210 MATH 277	Elementary Statistics Math for Elementary Teachers I
ADM 240 Sales ADM 281 Organizational Behavior ADM 282 Human Resource Management IOL 102 Introduction to Aquarium Keeping IOL 109 The Living World	4/1 4/1 4	CHEM 121 CHEM 122 * CIS 164	General Chemistry I/Lab General Chemistry I/Lab		MATH 277	Math for Elementary Teachers I
ADM 281         Organizational Behavior           ADM 282         Human Resource Management           IOL 102         Introduction to Aquarium Keeping           IOL 109         The Living World	4/1	CHEM 122 * CIS 164	General Chemistry II/Lab			
ADM 282 Human Resource Management IOL 102 Introduction to Aquarium Keeping IOL 109 The Living World	4	* CIS 164			MICR 202	
IOL 102 Introduction to Aquarium Keeping IOL 109 The Living World	4		Networking Fundamentals I		IIII CIT LOL	Introductory Microbiology/Lab
IOL 109 The Living World	3	CCCI 101		3*	NUTR 240	Principles of Nutrition
5		C2CI 101	Introduction to Computers	3/1	PHYS 100	Concepts of Physics/Lab
IOL 111 Concents of Biology/Lab	5	CSCI 122	Beginning Visual Basic	3/1	PHYS 110	Introductory Astronomy/Lab
	4	CSCI 160	Computer Science I	3/1	PHYS 211	College Physics I/Lab
IOL 115 Human Structure and Function/La	b 4	CSCI 161	Computer Science II	3/1	PHYS 212	College Physics II/Lab
IOL 124 Environmental Science	3/1	GEOG 121	Physical Geography/Lab	4/1	PHYS 251	University Physics I/Lab
IOL 125 Introduction to Ecology/Lab	3/1	GEOL 102	Historical Geology/Lab	4/1	PHYS 252	University Physics II/Lab
IOL 126 Human Biology/Lab	3/1	GEOL 105	Physical Geology/Lab	2/1	PLSC 110	World Food Crops/Lab
IOL 150 General Biology I/Lab	3	GIS 105	Fundamentals of GIS	3/1	SCNC 101	Physical Science I/Lab
IOL 151 General Biology II/Lab	3	* GIS 107	GIS Applications			(Biology & Chemistry)
IOL 220 Anatomy and Physiology I/Lab	4	MATH 103	College Algebra	3/1	SCNC 102	Physical Science II/Lab
IOL 221 Anatomy and Physiology II/Lab	3	MATH 104	Finite Mathematics			(Physics & Geology)
IOL 250 Survey of Tropical Biology/Lab	2	MATH 105	Trigonometry	3/1	SCNC 103	Physical Science III/Lab
OT 170 Plant Form and Diversity/Lab	4	MATH 107	Pre-Calculus			(Astronomy & Meteorology)
USN 120 Fundamentals of Business	3	* MATH 137	Applied Algebra	2/1 *	SOIL 210	Introduction to Soil Science/Lab
	Transfer Cou	rses		Transfer Cou	rses	
				·		
				·		
	DL 126     Human Biology/Lab       DL 150     General Biology I/Lab       DL 151     General Biology I/Lab       DL 220     Anatomy and Physiology I/Lab       DL 221     Anatomy and Physiology I/Lab       DL 220     Survey of Tropical Biology/Lab       T 170     Plant Form and Diversity/Lab	DL 126     Human Biology/Lab     3/1       DL 150     General Biology I/Lab     3       DL 151     General Biology I/Lab     3       DL 220     Anatomy and Physiology I/Lab     4       DL 221     Anatomy and Physiology I/Lab     3       DL 250     Survey of Tropical Biology/Lab     2       T 170     Plant Form and Diversity/Lab     4       SN 120     Fundamentals of Business     3	DL 126     Human Biology/Lab     3/1     GEOL 105       DL 150     General Biology I/Lab     3     GIS 105       DL 151     General Biology I/Lab     3     * GIS 107       DL 220     Anatomy and Physiology I/Lab     4     MATH 103       DL 221     Anatomy and Physiology I/Lab     3     MATH 104       DL 250     Survey of Tropical Biology/Lab     2     MATH 105       T 170     Plant Form and Diversity/Lab     4     MATH 107	DL 126       Human Biology/Lab       3/1       GEOL 105       Physical Geology/Lab         DL 150       General Biology I/Lab       3       GIS 105       Fundamentals of GIS         DL 151       General Biology II/Lab       3       * GIS 107       GIS Applications         DL 220       Anatomy and Physiology II/Lab       4       MATH 103       College Algebra         DL 221       Anatomy and Physiology II/Lab       3       MATH 104       Finite Mathematics         DL 250       Survey of Tropical Biology/Lab       2       MATH 105       Trigonometry         T 170       Plant Form and Diversity/Lab       4       MATH 107       Pre-Calculus         SN 120       Fundamentals of Business       3       * MATH 137       Applied Algebra	DL 126       Human Biology/Lab       3/1       GEOL 105       Physical Geology/Lab       2/1         DL 150       General Biology I/Lab       3       GIS 105       Fundamentals of GIS       3/1         DL 151       General Biology I/Lab       3       * GIS 107       GIS Applications       3/1         DL 220       Anatomy and Physiology I/Lab       4       MATH 103       College Algebra       3/1         DL 221       Anatomy and Physiology I/Lab       3       MATH 104       Finite Mathematics       3/1         DL 250       Survey of Tropical Biology/Lab       2       MATH 105       Trigonometry       3/1         T 170       Plant Form and Diversity/Lab       4       MATH 107       Pre-Calculus       2/1 *         SN 120       Fundamentals of Business       3       * MATH 137       Applied Algebra       2/1 *	DL 126Human Biology/Lab3/1GEOL 105Physical Geology/Lab2/1PLSC 110DL 150General Biology I/Lab3GIS 105Fundamentals of GIS3/1SCNC 101DL 151General Biology I/Lab3* GIS 107GIS Applications3/1SCNC 101DL 220Anatomy and Physiology I/Lab4MATH 103College Algebra3/1SCNC 102DL 221Anatomy and Physiology I/Lab3MATH 104Finite Mathematics3/1SCNC 102DL 220Survey of Tropical Biology/Lab2MATH 105Trigonometry3/1SCNC 103T 170Plant Form and Diversity/Lab4MATH 107Pre-Calculus2/1 * SOIL 210SN 120Fundamentals of Business3* MATH 137Applied Algebra2/1 * SOIL 210

Completed\_

Needed

## 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	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				

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