Name:	Date:



# **Nuclear Power Technology**

Associate in Applied Science Advising Worksheet\* 2019-2020

## 1st Semester (Fall Only) -Non-License Operator Track only

Prescribed Technical Program Requirements			
NUPT	101	Overviw of Nuclear Energy	2
NUPT	103	Nuclear Mathematics Fundamentals	3
NUPT	105	Classical Physics	4
NUPT	107	Engineering Drawings, Diagrams, Schematics	3

Total Credits 12

## 2nd Semester (Spring Only) - Non-License Operator Track

Prescr	ibed Te	chnical Program Requirements		
NUPT	113	Mechanical Science		3
NUPT	215	Nuclear Plant Chemistry		3
NUPT	109	Electrical Science		4
NUPT	213	Nuclear Physics	_	3
			Total Credits	13

# 3rd Semester (Fall Only) - Non-License Operator Track

Prescr	ibed Te	chnical Program Requirements	
NUPT	217	Heat Transfer, Fluid Flow & Thermodynamics	4
NUPT	111	Instrumentation & Control	4
NUPT	221	Science of Radiological Protection	3
NUPT	219	Material Science	3
		Total Credits	14

#### 4th Semester (Spring Only) - Non-License Operator Track Proceed and Tochnical Program Possissements

Prescr	ibea i	echnical Program Requirements	
NUPT	220	Reactor Theory	2
NUPT	225	Nuclear Plant Sys. Comp., Design & Function	4
NUPT	223	Reactor Safety Design	3
NUPT	227	Conduct of Facility Operations	4
		Total Credits	13

#### **Non-License Operator Track**

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

**Total Degree Credits** 

### **Instrumentation & Control Track**

Prescribed Technical Program Total	57
General Education Total	15

72

**Total Degree Credits** 

# 1st Semester (Fall Only) -I&C Track

Prescrib	ed Techr	ical Program Requirements	
NUPT	103	Nuclear Mathematics Fundamentals	3
NUPT	105	Classical Physics	4
NUPT	219	Material Science	3
NUPT	221	Science of Radiological Protection	3
		Total Credits	13

## 2nd Semester (Spring Only) - I&C Track

		(Spring Ciny) rac rrack	
Prescrib	oed Techn	ical Program Requirements	
NUPT	113	Mechanical Science	3
NUPT	215	Nuclear Plant Chemistry	3
NUPT	109	Electrical Science	4
NUPT	213	Nuclear Physics	3
		Total Credits	13

## 3rd Semester (Fall Only) - I&C Track

		· ,,	
Prescril	bed Techr	nical Program Requirements	
ICTL	215	Instrumentation Drawings & Documentation	4
NUPT	217	Heat Transfer, Fluid Flow & Thermodynamics	4
NUPT	111	Instrumentation & Control	4
ICTL	225	Input & Output Devices	4
		Total Credits	16

## 4th Semester (Spring Only) - I&C Track

Prescrib	oed Techr	ical Program Requirements	
ICTL	235	Motors & Controllers	4
NUPT	225	Nuclear Plant Sys. Comp., Design & Function	4
NUPT	223	Reactor Safety Design	3
NUPT	229	Instrumentation & Control II	4
		Total Credits	15

## **General Education Requirements**

Arts & H	umanities,	/Social & Behavioral Sciences	_
1.			3
Business,	, Math, Sc	ience & Technology (Two areas of study required.)	_
1.			3
2.			3
Commun	ications I		_
ENGL	110	College Composition I (Required)	3
Commun	ications II	(Select one course.)	
ENGL	120	College Composition II	-
ENGL	125	Intro to Professional Writing	3
COMM	110	Fundamentals of Public Speaking	
		Total Credits	15

# Associate in Applied Science (AAS) 2019-2020 Catalog

Advisor:	
Office:	
Phone:	
Email:	

Degree	Checklis <sup>-</sup>	t				
Credits						
						I 19 6 - 20 -
		of 3 credits in ENGL 110		Earned	at least 15 semester hours of institutiona	I credit from BSC
Earr	ned a minimum	of 3 credits in ENGL 120, ENGL 125 o	r COMM 110 <sup>1</sup>	Minimu	um of 2.00 institutional GPA (BSC only)	
Earr	ned a minimum	of 3 credits in Arts & Humanities/Soc	ial & Behavioral Sciences 1	Minimu	um of 2.00 cumulative GPA (BSC + Transfe	r)
Earr	ned a minimum	of 6 credits in Business, Math, Science	e & Technology 2	Minimu	um of 2.00 GPA in a prescribed technical p	rogram
		bed technical program requirements				rogram
Con	npietea prescri	bed technical program requirements			d all college obligations	
				Satisfie	ed all degree seeking admission requireme	nts
Earr	ned a minimum	of 60 credits		Filed ar	n Application for Degree in the Academic F	Records Office immediately following
-Acc	ademic Skills Co	ourses (ASC) do not count toward grad	duation	enrollm	nent in final semester	
					rams may require additional degree/prog	ram roquiroments: refer to your program
1 -					rums may require additional degree/prog	rum requirements, rejer to your program
		ecific General Education requirement				
<sup>2</sup> Must be	from any two	areas of study. For example, a Biology	course and a Math course, b	ut not		
two Biol	logy courses or	two Math courses.			Legend	
					(*) Course not approved as GERTA	
General	Educati	on Requirements				
Category I:					Completed	Needed
30.0001 9 11						
Communica	ntions I					
(3 Credits) - E						
Gr. Cr.	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
3	ENGL 110	College Composition I				
Transfer Course						
-						
Communica	itions II					
(3 Credits) - El	NGL 120, ENGL	125, COMM 110 (Select one)				
Gr. Cr.						
3	ENGL 120	College Composition II				
3	ENGL 125	Introduction to Professional Writing				
3	COMM 110	Fundamentals of Public Speaking				
Transfer Course						
C I	Educati	D :	attenne al			
General	Educati	on Requirements Con	tinuea			
Category II:	ARTS & HU	JMANITES/SOCIAL & BEHAVIO	RAL SCIENCES		Completed	Needed
(3 Credits)		-				
Gr. Cr.			Gr. Cr.		Gr. Cr.	
3	ANTH 170	Physical Anthropology and Archeology	3 HIST 101	Western Civilization I	3 POLS 115	American Government
3	ANTH 171	Introduction to Cultural Anthropology	3 HIST 102	Western Civilization II	3 POLS 116	State and Local Government
	ART 110	Introduction to the Visual Arts	3 HIST 103	United States to 1877	3 POLS 220	International Politics
3	ART 122	Two-Dimensional Design	3 HIST 104	United States Since 1877	3 PSYC 100	Human Relations In Organizations
3	ART 124	Three-Dimensional Design	3 HIST 211	World Civilizations to 1500		Introduction to Psychology
3	ART 130	Drawing I	3 HIST 212	World Civilizations since 15		Introduction to Behavior Modification
3	ART 210	Art History I	3 HIST 220	North Dakota History	3 PSYC 250	Developmental Psychology
3	ART 211 ART 220	Art History II Painting I	3 HIST 222 3 HIST 224	History of the Western Fro American Studies I	3 * PSYC 261 3 PSYC 270	Psychology of Adjustment Abnormal Psychology
;	ART 220 ART 221	Painting I	3 HIST 224 3 HIST 225	American Studies II	3 PSYC 270 3 RELS 120	Religion in America
3	ART 230	Drawing II	1-3 * HIST 243	Historical Investigations	3 RELS 201	Life and Letters of Paul
3	ART 250	Ceramics I	3 HUMS 210	Integrated Cultural Studies		World Religions
3	ART 251	Ceramics II	1-4 HUMS 211	Integrated Cultural Excursion	ion 3 RELS 220	Old Testament
2	ART 265	Sculpture I	2 HUMS 212	Integrated Cultural Enrichn		New Testament
2	ART 266	Sculpture II	3 MUSC 100	Music Appreciation	3 SOC 110	Introduction to Sociology
3 *	CIS 280 CJ 201	Cyber Ethics Introduction to Criminal Justice	1 MUSC 117 1 MUSC 118	Concert Choir	3 SOC 115 3 SOC 220	Social Problems
3	CJ 201 COMM 112	Understanding Media and Social Change	1 MUSC 118 1 MUSC 121	Chamber Choir String Ensemble	3 SOC 220 3 SOC 221	Family Minority Relations
3	COMM 211	Oral Interpretation	1 MUSC 132	Wind Ensemble	3 SOC 221 3 SOC 235	Cultural Diversity
š	COMM 212	Interpretation	1 MUSC 133	Woodwind Ensemble I	3 SOC 251	Gerontology
3	ECON 105	Elements of Economics	1 MUSC 134	Woodwind Ensemble II	3 SOC 252	Criminology
3	ECON 201	Principles of Microeconomics	1 MUSC 135	Brass Ensemble I	3 SOC 275	American Indian Studies
3	ECON 202	Principles of Macroeconomics	1 MUSC 136	Brass Ensemble II	4 SPAN 101	First Year Spanish I
3	ENGL 211	Introduction to Creative Writing	1 MUSC 137	Jazz Ensemble	4 SPAN 102	First Year Spanish II
3	ENGL 221	Introduction to Drama	1 * MUSC 138 1 MUSC 145	Percussion Ensemble	4 SPAN 201	Second Year Spanish I Second Year Spanish II
3	ENGL 222 ENGL 233	Introduction to Poetry Fantasy and Science Fiction	1 MUSC 145 1 MUSC 146	Applied Music Applied Music - Major	4 SPAN 202 3 SWK 256	Development of Social Welfare
3	ENGL 235	Women and Literature	3 PHIL 101	Introduction to Philosophy		Introduction to Theatre Arts
š		Children's Literature	3 PHIL 210	Ethics	3 THEA 161	Acting I
	ENGL 238	Children's Literature				
3	ENGL 238 ENGL 251	British Literature I	3 PHIL 220	Introduction to Logic	3 THEA 180	Dramatic Literature and Style I
3 3	ENGL 251 ENGL 252	British Literature I British Literature II	3 PHIL 250	Philosophy in Cinema	3 THEA 181	Dramatic Literature and Style II
3 3 3	ENGL 251 ENGL 252 ENGL 261	British Literature I British Literature II American Literature I				
3 3 3 3	ENGL 251 ENGL 252 ENGL 261 ENGL 262	British Literature I British Literature II American Literature I American Literature II	3 PHIL 250	Philosophy in Cinema	3 THEA 181	Dramatic Literature and Style II
3 3 3 3 3	ENGL 251 ENGL 252 ENGL 261	British Literature I British Literature II American Literature I	3 PHIL 250	Philosophy in Cinema	3 THEA 181	Dramatic Literature and Style II

Genera	al Educati	on Requirements Con	tinued					
Category I	II: BUSINESS,	MATH, SCIENCE & TECHNOLOG	Υ			(	Completed	Needed
(6 Credits)	Must be satisfie	ed with courses from two areas of study	ı. Area of stu	ıdy is based on	course prefix.			
Gr. Cr.			Gr. Cr.			Gr. Cr.		
3	* ACCT 200	Elements of Accounting I	3/1	CHEM 110	Survey of Chemistry/Lab	3	MATH 146	Applied Calculus I
3	* ACCT 201	Elements of Accounting II	3/1	CHEM 112	Introduction to Forensic Science/Lab	4	MATH 165	Calculus I
3/1	ASTR 150	Meteorology/Lab	3/1	CHEM 114	Chemistry in Art/Lab	4	MATH 166	Calculus II
3	* BADM 202	Principles of Management	4/1	CHEM 115	Introductory Chemistry/Lab	3	* MATH 208	Discrete Mathematics
3	* BADM 210	Advertising I	4/1	CHEM 116	Intro to Organic and Biochemistry/Lab	3	MATH 210	Elementary Statistics
3	* BADM 240	Sales	4/1	CHEM 121	General Chemistry I/Lab	4	* MATH 277	Mathematics for Elementary Teachers I
3	* BADM 281	Organizational Behavior	4/1	CHEM 122	General Chemistry II/Lab	3/1	MICR 202	Introductory Microbiology/Lab
3	* BADM 282	Human Resource Management	3	* CIS 147	Principles of Information Security	3	* NUTR 240	Principles of Nutrition
1	* BIOL 102	Introduction to Aquarium Keeping	4	* CIS 164	Networking Fundamentals I	3/1	PHYS 100	Concepts of Physics/Lab
3	BIOL 109	The Living World	3	CSCI 101	Introduction to Computers	3/1	PHYS 110	Introductory Astronomy/Lab
3/1	BIOL 111	Concepts of Biology/Lab	3	CSCI 122	Beginning Visual Basic	4/1	PHYS 211	College Physics I/Lab
3/1	BIOL 115	Concepts of Anatomy & Physiology/Lab	4	CSCI 160	Computer Science I	4/1	PHYS 212	College Physics II/Lab
3	BIOL 124	Environmental Science	4	CSCI 161	Computer Science II	4/1	PHYS 251	University Physics I/Lab
3/1	BIOL 125	Introduction to Ecology/Lab	3/1	GEOG 121	Physical Geography/Lab	4/1	PHYS 252	University Physics II/Lab
3/1	BIOL 126	Human Biology/Lab	3/1	GEOL 102	Historical Geology/Lab	2/1	PLSC 110	World Food Crops/Lab
3/1	BIOL 150	General Biology I/Lab	3/1	GEOL 105	Physical Geology/Lab	3/1	SCNC 101	Physical Science I/Lab
3/1	BIOL 151	General Biology II/Lab	3	GIS 105	Fundamentals of GIS			(Biology & Chemistry)
3/1	BIOL 170	General Zoology/Lab	3	* GIS 107	GIS Applications	3/1	SCNC 102	Physical Science II/Lab
3/1	BIOL 220	Anatomy and Physiology I/Lab	4	MATH 103	College Algebra			(Physics & Geology)
3/1	BIOL 221	Anatomy and Physiology II/Lab	3	MATH 104	Finite Mathematics	3/1	SCNC 103	Physical Science III/Lab
3/1	BIOL 250	Survey of Tropical Biology/Lab	2	MATH 105	Trigonometry			(Astronomy & Meteorology)
3/1	BOT 170	Plant Form and Diversity/Lab	4	MATH 107	Pre-Calculus	2/1	* SOIL 210	Introduction to Soil Science/Lab
3	* BUSN 120	Fundamentals of Business	3	* MATH 137	Applied Algebra			

Transfer Courses

Transfer Courses

Transfer Courses

# Academic Skills Courses (ASC)

Transfer Courses

Transfer Courses

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.

GI.	CI.			GI.	CI.		
	2	ASC 082	Effective Reading		2	ASC 94	College Writing Prep I
	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

Transfer Courses

<sup>\*</sup>This 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 college degree requirements.