



**Nuclear Power
Technology**
Associate in Applied Science
Advising Worksheet* 2020-2021

Non-License Operator Track	
Prescribed Technical Program Total	52
<u>General Education Total</u>	<u>15</u>
Total Degree Credits	67

Instrumentation & Control Track	
Prescribed Technical Program Total	57
<u>General Education Total</u>	<u>15</u>
Total Degree Credits	72

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

Prescribed Technical Program Requirements			
NUPT	101	Overview 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

Prescribed Technical 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

Prescribed Technical 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

Prescribed Technical 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

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

Prescribed Technical 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

Prescribed Technical 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

Prescribed Technical 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

Prescribed Technical 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 & Humanities/Social & Behavioral Sciences			
1.			3
Business, Math, Science & Technology (Two areas of study required.)			
1.			3
2.			3
Communications I			
ENGL	110	College Composition I (Required)	3
Communications 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

Transfer Courses

Transfer Courses

Transfer Courses

General Education Requirements Continued

Category III: BUSINESS, MATH, SCIENCE & TECHNOLOGY

Completed

Needed

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

Gr.	Cr.		Gr.	Cr.		Gr.	Cr.	
3	*	ACCT 200	3/1	CHEM 110	Survey of Chemistry/Lab	3	MATH 146	Applied Calculus I
3	*	ACCT 201	3/1	CHEM 112	Introduction to Forensic Science/Lab	4	MATH 165	Calculus I
3/1		ASTR 150	3/1	CHEM 114	Chemistry in Art/Lab	4	MATH 166	Calculus II
3	*	BADM 202	4/1	CHEM 115	Introductory Chemistry/Lab	3	* MATH 208	Discrete Mathematics
3	*	BADM 210	4/1	CHEM 116	Intro to Organic and Biochemistry/Lab	3	MATH 210	Elementary Statistics
3	*	BADM 240	4/1	CHEM 121	General Chemistry I/Lab	4	* MATH 277	Mathematics for Elementary Teachers I
3	*	BADM 281	4/1	CHEM 122	General Chemistry II/Lab	3/1	MICR 202	Introductory Microbiology/Lab
3	*	BADM 282	3	* CIS 147	Principles of Information Security	3	* NUTR 240	Principles of Nutrition
1	*	BIOL 102	4	* CIS 164	Networking Fundamentals I	3/1	PHYS 100	Concepts of Physics/Lab
3		BIOL 109	3	CSCI 101	Introduction to Computers	3/1	PHYS 110	Introductory Astronomy/Lab
3/1		BIOL 111	3	CSCI 122	Beginning Visual Basic	4/1	PHYS 211	College Physics I/Lab
3/1		BIOL 115	4	CSCI 160	Computer Science I	4/1	PHYS 212	College Physics II/Lab
3		BIOL 124	4	CSCI 161	Computer Science II	4/1	PHYS 251	University Physics I/Lab
3/1		BIOL 125	3/1	GEOG 121	Physical Geography/Lab	4/1	PHYS 252	University Physics II/Lab
3/1		BIOL 126	3/1	GEOG 102	Historical Geology/Lab	2/1	PLSC 110	World Food Crops/Lab
3/1		BIOL 150	3/1	GEOG 105	Physical Geology/Lab	3/1	SCNC 101	Physical Science I/Lab (Biology & Chemistry)
3/1		BIOL 151	3	GIS 105	Fundamentals of GIS	3/1	SCNC 102	Physical Science II/Lab (Physics & Geology)
3/1		BIOL 170	3	* GIS 107	GIS Applications	3/1	SCNC 103	Physical Science III/Lab (Astronomy & Meteorology)
3/1		BIOL 220	4	MATH 103	College Algebra	2/1	* SOIL 210	Introduction to Soil Science/Lab
3/1		BIOL 221	3	MATH 104	Finite Mathematics			
3/1		BIOL 250	2	MATH 105	Trigonometry			
3/1		BOT 170	4	MATH 107	Pre-Calculus			
3	*	BUSN 120	3	* MATH 137	Applied Algebra			

Transfer Courses

Transfer Courses

Transfer Courses

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	2	ASC 94	College Writing Prep I
2		ASC 91	2	ASC 95	College Writing Prep II
2		ASC 92	2	ASC 96	College Writing Prep III
2		ASC 93	3/1	ASC 098	Basic Biology/Lab

*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.