

Name: \_\_\_\_\_ Date: \_\_\_\_\_



## Nuclear Power Technology

Associate in Applied Science  
Advising Worksheet\* 2021-2022

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

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

### 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
<b>Total Credits</b>			<b>12</b>

### 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
<b>Total Credits</b>			<b>13</b>

### 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
<b>Total Credits</b>			<b>14</b>

### 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
<b>Total Credits</b>			<b>13</b>

### 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
<b>Total Credits</b>			<b>13</b>

### 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
<b>Total Credits</b>			<b>13</b>

### 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
<b>Total Credits</b>			<b>16</b>

### 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
<b>Total Credits</b>			<b>15</b>

### General Education Requirements

#### Arts & Humanities/Social & Behavioral Sciences

1.			3
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#### Business, Math, Science & Technology (Two areas of study required.)

1.			3
2.			3

#### Communications I

ENGL	110	College Composition I (Required)	3
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#### 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

# Associate in Applied Science (AAS) 2021-2022 Catalog

Advisor: \_\_\_\_\_  
 Office: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Email: \_\_\_\_\_

## Degree Checklist

### Credits

- \_\_\_\_\_ Earned a minimum of 3 credits in ENGL 110
- \_\_\_\_\_ Earned a minimum of 3 credits in ENGL 120, ENGL 125 or COMM 110 <sup>1</sup>
- \_\_\_\_\_ Earned a minimum of 3 credits in Arts & Humanities/Social & Behavioral Sciences <sup>1</sup>
- \_\_\_\_\_ Earned a minimum of 6 credits in Business, Math, Science & Technology <sup>2</sup>
- \_\_\_\_\_ Completed prescribed technical program requirements

Earned a minimum of 60 credits  
 -Academic Skills Courses (ASC) do not count toward graduation

- Earned at least 15 semester hours of institutional credit from BSC
- Minimum of 2.00 institutional GPA (BSC only)
- Minimum of 2.00 cumulative GPA (BSC + Transfer)
- Minimum of 2.00 GPA in a prescribed technical program
- Cleared all college obligations
- Satisfied all degree seeking admission requirements
- Filed an Application for Degree in the Academic Records Office immediately following enrollment in final semester

**Specific programs may require additional degree/program requirements; refer to your program.**

<sup>1</sup> Programs may have specific General Education requirements; refer to your program degree plan.

<sup>2</sup> Must be from any two areas of study. For example, a Biology course and a Math course, but not two Biology courses or two Math courses.

Legend  
 (\*) Course not approved as GERTA

## General Education Requirements

**Category I: COMMUNICATIONS** Completed \_\_\_\_\_ Needed \_\_\_\_\_

### Communications I

(3 Credits) - ENGL 110

Gr.	Cr.	ENGL 110	College Composition I
_____	3	ENGL 110	College Composition I

Transfer Course \_\_\_\_\_

### Communications II

(3 Credits) - ENGL 120, ENGL 125, COMM 110 (Select one)

Gr.	Cr.	ENGL 120	ENGL 125	COMM 110	College Composition II	Introduction to Professional Writing	Fundamentals of Public Speaking
_____	3	ENGL 120	ENGL 125	COMM 110	College Composition II	Introduction to Professional Writing	Fundamentals of Public Speaking
_____	3						
_____	3						

Transfer Course \_\_\_\_\_

## General Education Requirements Continued

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

Completed

Needed

(3 Credits)

Gr.	Cr.		Gr.	Cr.		Gr.	Cr.	
___	3	ANTH 170	___	3	HIST 101	___	3	POLS 115
___	3	ANTH 171	___	3	HIST 102	___	3	POLS 116
___	3	ART 110	___	3	HIST 103	___	3	POLS 220
___	3	ART 122	___	3	HIST 104	___	3	PSYC 100
___	3	ART 124	___	3	HIST 211	___	3	PSYC 111
___	3	ART 130	___	3	HIST 212	___	3	* PSYC 211
___	3	ART 210	___	3	HIST 220	___	3	PSYC 250
___	3	ART 211	___	3	HIST 222	___	3	* PSYC 261
___	3	ART 220	___	3	HIST 224	___	3	PSYC 270
___	3	ART 221	___	3	HIST 225	___	3	RELS 120
___	3	ART 230	___	1-3	* HIST 243	___	3	RELS 201
___	3	ART 250	___	3	HUMS 210	___	3	RELS 203
___	3	ART 251	___	1-4	HUMS 211	___	3	RELS 220
___	2	ART 265	___	2	HUMS 212	___	3	RELS 230
___	2	ART 266	___	3	MUSC 100	___	3	SOC 110
___	3	* CIS 280	___	1	MUSC 117	___	3	SOC 115
___	3	CJ 201	___	1	MUSC 118	___	3	SOC 220
___	3	COMM 112	___	1	MUSC 121	___	3	SOC 221
___	3	COMM 211	___	1	MUSC 132	___	3	SOC 235
___	3	COMM 212	___	1	MUSC 133	___	3	SOC 251
___	3	ECON 105	___	1	MUSC 134	___	3	SOC 252
___	3	ECON 201	___	1	MUSC 135	___	3	SOC 275
___	3	ECON 202	___	1	MUSC 136	___	4	SPAN 101
___	3	ENGL 211	___	1	MUSC 137	___	4	SPAN 102
___	3	ENGL 221	___	1	* MUSC 138	___	4	SPAN 201
___	3	ENGL 222	___	1	MUSC 145	___	4	SPAN 202
___	3	ENGL 233	___	1	MUSC 146	___	3	SWK 256
___	3	ENGL 236	___	3	PHIL 101	___	3	THEA 110
___	3	ENGL 238	___	3	PHIL 210	___	3	THEA 161
___	3	ENGL 251	___	3	PHIL 220	___	3	THEA 180
___	3	ENGL 252	___	3	PHIL 250	___	3	THEA 181
___	3	ENGL 261	___	3	PHIL 253	___	3	THEA 261
___	3	ENGL 262						
___	3	ENGL 278						
___	3	GEOG 161						

Transfer Courses

Transfer Courses

Transfer Courses

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## 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	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	GEOG 102	Historical Geology/Lab	_____	2/1	PLSC 110	World Food Crops/Lab
_____	3/1		BIOL 150	General Biology I/Lab	_____	3/1	GEOG 105	Physical Geology/Lab	_____	3/1	SCNC 101	Physical Science I/Lab (Biology & Chemistry)
_____	3/1		BIOL 151	General Biology II/Lab	_____	3	GIS 105	Fundamentals of GIS	_____	3/1	SCNC 102	Physical Science II/Lab (Physics & Geology)
_____	3/1		BIOL 170	General Zoology/Lab	_____	3	* GIS 107	GIS Applications	_____	3/1	SCNC 103	Physical Science III/Lab (Astronomy & Meteorology)
_____	3/1		BIOL 220	Anatomy and Physiology I/Lab	_____	4	MATH 103	College Algebra	_____	2/1	* SOIL 210	Introduction to Soil Science/Lab
_____	3/1		BIOL 221	Anatomy and Physiology II/Lab	_____	3	MATH 104	Finite Mathematics				
_____	3/1		BIOL 250	Survey of Tropical Biology/Lab	_____	2	MATH 105	Trigonometry				
_____	3/1		BOT 170	Plant Form and Diversity/Lab	_____	4	MATH 107	Pre-Calculus				
_____	3	*	BUSN 120	Fundamentals of Business	_____	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	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

\*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.