

Mechanical Maintenance

Technology

Program Certificate Advising Worksheet* 2018-2019

Freshman Fall Semester								
Prescrib	ed Teo	chnical Program Requirements						
MMAT 101 Introduction to Industrial Operations								
MMAT	103	Safety and Health		2				
MMAT	105	Hand and Portable Tools		2				
MMAT	107	Basic Mechanics		2				
MMAT	109	Measurements		2				
MMAT	111	Schematics Symbols and Blueprints		2				
MMAT	113	Industrial Rigging		1				
MMAT	115	Lubrication, Bearings and Seals		2				
MMAT	117	Material Handling Systems		1				
MMAT	119	Troubleshooting Skills	_	1				
			Total Credits	17				

Freshman Spring Semester									
Prescribed Technical Program Requirements									
MMAT 150 Mechanical & Fluid Drive Systems									
MMAT	155	Hydraulics and Pneumatics		2					
MMAT	160	Valves and Steam Traps		3					
MMAT	162	Piping, Tubing Systems & Pipefitting		2					
MMAT	170	Equipment Installation		2					
MMAT	175	Pumps, Compressors and Turbines		4					
MMAT	180	Metals & Nonmetals in the Plant		2					
			Total Credits	17					

Prescribed Technical Program Total	51
General Education Total	4
Total Degree Credits	55
Total Degree Credits	55

Sophomore Fall Semester									
Prescribed Technical Program Requirements									
WELD	WELD 110 Oxyfuel Operations								
WELD	118	Testing OA in Welding, Brazing, Cutting	2						
WELD	135	Welding Principles	2						
WELD	140	Methods in GMA and FCA Welding	2						
WELD	170	Arc Welding Operations	2						
WELD	173	Methods in Arc Welding Operations	4						
MMAT	MMAT 205 Basic Electricity and Electronics								
		– Total Credits	17						

General Education Requirements

Complete 4 credits of general education from any two areas of study.

1. 4 2. Total Credits 4

* 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 2018-2019 Catalog

Degree Checklist

Completed a prescribed technical program

Earned at least 15 semester hours of institutional credit from BSC

Cleared all college obligations

Declared program of study is degree seeking

Filed an Application for Degree in the Academic Records Office

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

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

Earned a minimum of 4 semester hours of general education credit from two areas of study

Legend

(*) Course not approved as GERTA

General Education Requirements

Programs containing 45 or more credits must complete 4 credits of general education from two areas of study. Area of study is based on course prefix.

r. Cr.			Gr. Cr.			Gr. C	r.		
3 *	ACCT 200	Elements of Accounting I	3/1	BIOL 151	General Biology II/Lab	3	3	ENGL 125	Introduction to Professional Writ
3 *	ACCT 201	Elements of Accounting II	3/1	BIOL 220	Anatomy and Physiology I/Lab		3	ENGL 211	Introduction to Creative Writing
3	ANTH 170	Physical Anthropolgy and Archeology	3/1	BIOL 221	Anatomy and Physiology II/Lab		3	ENGL 221	Introduction to Drama
3	ART 110	Introduction to the Visual Arts	3/1	BIOL 250	Survey of Tropical Biology/Lab		3	ENGL 222	Introduction to Poetry
3	ART 122	Two-Dimensional Design	3/1	BOT 170	Plant Form and Diversity/Lab		3	ENGL 233	Fantasy and Science Fiction
3	ART 124	Three-Dimensional Design	3	* BUSN 120	Fundamentals of Business		3	ENGL 236	Women and Literature
3	ART 130	Drawing I	3/1	CHEM 110	Survey of Chemistry/Lab	3	3	ENGL 238	Children's Literature
3	ART 210	Art History I	3/1	CHEM 112	Introduction to Forensic Science/Lab		3	ENGL 251	British Literature I
3	ART 211	Art History II	3/1	CHEM 114	Chemistry in Art/Lab		3	ENGL 252	British Literature II
3	ART 220	Painting I	4/1	CHEM 115	Introductory Chemistry/Lab		3	ENGL 261	American Literature I
3	ART 221	Painting II	4/1	CHEM 116	Intro to Organic and Biochemistry/Lab		3	ENGL 262	American Literature II
3	ART 230	Drawing II	4/1	CHEM 121	General Chemistry I/Lab		3	ENGL 278	Alternative Literature
3	ART 250	Ceramics I	4/1	CHEM 122	General Chemistry II/Lab	3/	/1	GEOG 121	Physical Geography/Lab
3	ART 251	Ceramics II	3	* CIS 147	Principles of Information Security		3	GEOG 161	World Regional Geography
2	ART 265	Sculpture I	4	* CIS 164	Networking Fundamentals I	3/	/1	GEOL 102	Historical Geology/Lab
2	ART 266	Sculpture II	3	* CIS 280	Cyber Ethics	3/	/1	GEOL 105	Physical Geology/Lab
3/1	ASTR 150	Meteorology/Lab	3	CJ 201	Introduction to Criminal Justice		3	GIS 105	Fundamentals of GIS
3 *	BADM 202	Principles of Management	3	COMM 110	Fundamentals of Public Speaking		3 *	GIS 107	GIS Applications
3 *	BADM 210	Advertising I	3	COMM 112	Understanding Media and Social Change		3	HIST 101	Western Civilization I
3 *	BADM 240	Sales	3	COMM 211	Oral Interpretation		3	HIST 102	Western Civilization II
3 *	BADM 281	Organizational Behavior	3	COMM 212	Interpersonal Communications		3	HIST 103	United States to 1877
3 *	BADM 282	Human Resource Management	3	CSCI 101	Introduction to Computers		3	HIST 104	United States Since 1877
1 *	BIOL 102	Introduction to Aquarium Keeping	3	CSCI 122	Beginning Visual Basic		3	HIST 211	World Civilizations to 1500
3	BIOL 109	The Living World	4	CSCI 160	Computer Science I		3	HIST 212	World Civilizations since 1500
3/1	BIOL 111	Concepts of Biology/Lab	4	CSCI 161	Computer Science II		3	HIST 220	North Dakota History
3/1	BIOL 115	Human Structure and Function/Lab	3	ECON 105	Elements of Economics		3	HIST 222	History of the Western Frontier
3	BIOL 124	Environmental Science	3	ECON 201	Principles of Microeconomics		3	HIST 224	American Studies I
3/1	BIOL 125	Introduction to Ecology/Lab	3	ECON 202	Principles of Macroeconomics		3	HIST 225	American Studies II
3/1	BIOL 126	Human Biology/Lab	3	ENGL 110	College Composition I	1.	3 *	HIST 243	Historical Investigations
3/1	BIOL 150	General Biology I/Lab	3	ENGL 120	College Composition II		3	HUMS 210	Integrated Cultural Studies

1-4	HUMS 211	Integrated Cultural Excursion	3	PHIL 101	Introduction to Philosophy		3/1	SCNC 102	Physical Science II/Lab
2	HUMS 212	Integrated Cultural Enrichment	3	PHIL 210	Ethics		-, -		(Physics & Geology)
4	MATH 103	College Algebra	3	PHIL 220	Introduction to Logic		3/1	SCNC 103	Physical Science III/Lab
3	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	MATH 146	Applied Calculus I	4/1	PHYS 211	College Physics I/Lab		3	SOC 221	Minority Relations
4	MATH 165	Calculus I	4/1	PHYS 212	College Physics II/Lab		3	SOC 235	Cultural Diversity
4	MATH 166	Calculus II	4/1	PHYS 251	University Physics I/Lab		3	SOC 251	Gerontology
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	POLS 115	American Government		2/1 *	SOIL 210	Introduction to Soil Science/Lab
3/1	MICR 202	Introductory Microbiology/Lab	3	POLS 116	State and Local Government		4	SPAN 101	First Year Spanish I
3	MUSC 100	Music Appreciation	3	POLS 220	International Politics		4	SPAN 102	First Year Spanish II
1	MUSC 117	Concert Choir	3	PSYC 111	Introduction to Psychology		4	SPAN 201	Second Year Spanish I
1	MUSC 118	Chamber Choir	3	* PSYC 211	Introduction to Behavior Modification		4	SPAN 202	Second Year Spanish II
1	MUSC 121	String Ensemble	3	PSYC 250	Developmental Psychology		3	SWK 256	Development of Social Welfare
1	MUSC 132	Wind Ensemble	3	* PSYC 261	Psychology of Adjustment		3	THEA 110	Introduction to Theatre Arts
1	MUSC 133	Woodwind Ensemble I	3	PSYC 270	Abnormal Psychology		3	THEA 161	Acting I
1	MUSC 134	Woodwind Ensemble II	3	RELS 120	Religion in America		3	THEA 180	Dramatic Literature and Style I
1	MUSC 135	Brass Ensemble I	3	RELS 201	Life and Letters of Paul		3	THEA 181	Dramatic Literature and Style II
1	MUSC 136	Brass Ensemble II	3	RELS 203	World Religions		3	THEA 261	Acting II
1	MUSC 137	Jazz Ensemble	3	RELS 220	Old Testament				
1 *	MUSC 138	Percussion Ensemble	3	RELS 230	New Testament				
1	MUSC 145	Applied Music	3/1	SCNC 101	Physical Science I/Lab				
1	MUSC 146	Applied Music - Major	·		(Biology & Chemistry)				
3 *	NUTR 240	Principles of Nutrition							
Transfer Course			Transfer Cou	rse		Transf	er Cou	rse	

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 a Program Certificate.

Gr. Cr.			Gr.	Cr.			G	r. Cr.		
2	ASC 082	Effective Reading		2	ASC 91	Algebra Prep I		2	ASC 94	College Writing Prep I
3	ASC 087	College Writing Prep		2	ASC 92	Algebra Prep II		2	ASC 95	College Writing Prep II
1	ASC 088	Composition Lab		2	ASC 93	Algebra Prep III		2	ASC 96	College Writing Prep III
								3/1	ASC 098	Basic Biology/Lab

Advisor:	-
Office:	
Phone:	
Email:	_

*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.