

# BS: Meteorology (120 S.H. required to complete the degree)

Name: \_\_\_\_\_ Adviser: \_\_\_\_\_



## General Education Requirements (44 S.H.)

<b>COMMUNICATION SKILLS (3 S.H.)</b> Choose one of the following: COM 160 Public Speaking, COM 161 Decision Making in Groups, COM 162 Interpersonal Communication <b>or</b> COM 163 Introduction to Communication Skills		
COM:	3	
<b>WRITING INTENSIVE (W)</b> All students must complete at least one writing intensive course. W courses can be found in several disciplines. The credits will be counted in the discipline associated with the course. <i>NOTE: WRT 101 does not satisfy the writing intensive requirement.</i>		
Course:	Y/N	
<b>HUMANITIES (15 S.H.)</b> Including 3 of 6 fields: Fine and Applied Arts ( <i>NOTE: only one studio course accepted toward minimum</i> ), Literature, History, Humanistic Studies, Philosophy and Foreign Language. <b>NOTE: For foreign language courses you must complete Elementary II or higher before counting Elementary I as Humanities credit.</b>		
Elective:	3	
Elective:	3	
Elective:	3	
Elective:	3	
Elective:	3	
<b>SOCIAL AND BEHAVIORAL SCIENCES (12 S.H.)</b> Courses that satisfy this requirement can be found in Social Sciences (Anthropology, Economics, Political Science, Social Sciences, and Sociology), Non-Western Cultures, and Psychology. <i>You must select courses from at least 2 of the 3 main areas: Social Sciences, Psychology and Non-Western Cultures.</i>		
Elective:	3	
Elective:	3	
Elective:	3	
Elective:	3	
<b>NATURAL SCIENCES, MATHEMATICS &amp; COMPUTER SCIENCE (12 S.H.)</b> Students must complete the courses listed below to satisfy this general education category. <i>NOTE: MAT 100 does not satisfy a gen ed requirement.</i>		
CHE 110 General Chemistry I	4	
CHE 111 General Chemistry II	4	
MAT 171 Calculus with Review (MAT 170 must be taken to receive credit) or MAT 181 Calculus I	4	
<b>HEALTH PROMOTION AND EXERCISE SCIENCES (2 S.H.)</b>		
HPX 177 Fitness for Life — Lecture	1	
HPX 177 Fitness for Life — Activity	1	

\*Chemistry and Calculus are required for meteorology majors. This makes your general education requirement 44 S.H. which is 2 more than the average 42 S.H.

Foreign language is not required for this major.

## Major Requirements (69-78 S.H.)

<b>CORE COURSES IN MATH AND COMPUTER SCIENCE</b>		
CS 140 Intro to Programming <b>or</b> CS143 Visual Basic	4	
MAT 120 Elementary Statistics	3	
MAT 182 Calculus II	4	
MAT 281 Calculus III	4	
MAT 282 Ordinary Differential Equations	3	
<b>CORE COURSES IN PHYSICS</b>		
PHY 110 General Physics I	4	
PHY 111 General Physics II	4	
<b>CORE COURSES IN EARTH AND PLANETARY SCIENCES</b>		
ES 210 Intro to Physical Oceanography	4	
AST 150 General Astronomy <b>OR</b> ES 110 Physical Geology	4	
<b>CORE COURSES IN METEOROLOGY</b>		
MTR 150 Meteorology	4	
MTR 230 Weather Analysis and Forecasting I	4	
MTR 231 Weather Analysis and Forecasting II	4	
MTR 240 Climatology	3	
MTR 310 Atmospheric Thermodynamics	3	
MTR 311 Atmospheric Dynamics	3	
MTR 340 Mesoscale Meteorology & Numerical Forecasting	3	
MTR 430 Meteorological Instrumentation	4	
MTR 440 Atmospheric Physics & Remote Sensing	4	
MTR 370 Internship in Meteorology <b>or</b> MTR 450 Senior Research	4	
<b>OPTIONAL TRACK: BROADCAST METEOROLOGY</b>		
MTR 330 Operational Forecasting & Weathercasting I	3	
MTR 331 Operational Forecasting & Weathercasting II	3	
Choose one of the following: THR 260 Voice & Diction, COM 268 Public Communication, COM 310 Business & Professional Speaking	3	
<b>FREE ELECTIVES (7 S.H.)</b>		
Free Elective:		
Free Elective:		
Free Elective:		

**Free electives offer an opportunity to complete a minor, study a second language, study abroad, or participate in an internship. Make a plan.**

### NOTES

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## Four-Year Plan This is a sample sequence of courses. Other combinations are possible.



Pre-requisites are in parentheses; see catalog for details.

Class standing by credit: Freshman: 0-29 credits; Sophomore: 30-59 credits; Junior: 60-89 credits; Senior: 90+ credits

FIRST YEAR (29-31 S.H.)	SEMESTER 1 (15-16 S.H.)			SEMESTER 2 (14-15 S.H.)		
	WRT 101 Composition I: Habit of Writing or Writing Intensive	3		Writing Intensive or Gen Ed: Humanities	3	
	Gen Ed: Communication Skills	3		CS 140 Intro to Programming or CS 143 Visual Basic (Mat100 minimum req.)	3 - 4	
	MTR 150 Meteorology (MAT 100 minimum req.)	4		MTR 240 Climatology (MTR150)	4	
	MAT 170* or MAT 171 Calculus with Precalculus II or MAT 181 Calculus I	3 - 4		MAT 171 Calculus with Review OR MAT181 Calculus I or MAT 182 Calc II	4	
HPX 177 Fitness for Life (Lecture & Activity)	2					

SECOND YEAR (33 S.H.)	SEMESTER 3 (16 S.H.)			SEMESTER 4 (17 S.H.)		
	PHY 110 General Physics I (MAT182 & PHYS103 C or better, or appropriate placement score)	4		PHY 111 General Physics II (PHY110)	4	
	MTR 230 Weather Analysis & Forecasting I (MTR 150 & MAT 182)	4		MTR 231 Weather Analysis and Forecasting II (MTR 230)	4	
	AST 150 Astronomy or ES 110 Physical Geology	4		MAT 120 Elementary Statistics	3	
	MAT 182 Calc II or MAT 281 Calculus III	4		MAT 281 Calculus III or MAT 282 Ordinary Differential Equations (MAT 182)	3	
			THR 260/COM 268/COM 310 or Gen Ed: Humanities	3		

THIRD YEAR (33 S.H.)	SEMESTER 5 (17 S.H.)			SEMESTER 6 (16 S.H.)		
	CHE 110 General Chemistry I (CHE100 or placement exam)	4		CHE111 General Chemistry II (CHE110)	4	
	MTR 310 Atmospheric Thermodynamics (MAT 281, PHYS 110, MTR 175)	3		MTR311 Atmospheric Dynamics (MTR310, PHY111)	3	
	ES 210 Intro to Physical Oceanography	4		Gen Ed: Social and Behavioral Sciences	3	
	MAT 281 Ordinary Differential Equations (can be taken at the same time as MTR 310) or Gen Ed: Humanities	3		Gen Ed: Social and Behavioral Sciences	3	
	Gen Ed: Humanities (Foreign Language if required)	3		Gen Ed: Humanities (Foreign Language if required)	3	
Complete a degree audit and plan for application for graduation						

FOURTH YEAR (33 S.H.)	SEMESTER 7 (16 S.H.)			SEMESTER 8 (17 S.H.)		
	MTR 340 Mesoscale Meteorology & Numerical Forecasting (ES 210. Pre/Co-requisites: MAT 282 and MTR 311)	3		MTR4 40 Atmospheric Physics & Remote Sensing (MAT 120, MAT 182 and ES 210)	4	
	MTR 430 Meteorological Instrumentation (MAT 120, PHY 111. Pre/Co-requisite: MAT 182)	4		MTR 370 Internship (MTR 311 and overall GPA $\geq$ 2.0, MTR 310 and MTR 311 w/GPA $\geq$ 2.33) or MTR 450 Senior Research (MTR 311)	4	
	Gen Ed: Humanities	3		Gen Ed: Social and Behavioral Sciences	3	
	Gen Ed: Social and Behavioral Sciences	3		Gen Ed: Humanities	3	
MTR 330 Operational Forecasting I (MTR 231 and MTR 311) or Free Elective	3		MTR 331 Operational Forecasting II or Free Elective	3		

All major requirements have a pre-requisite of at least MAT 100. If you place out of MAT 100, you may begin the Science sequence as it is shown. Initial math and writing placements will determine the actual rotation of courses. Students who have not taken pre-calculus in high school may need to take summer courses to complete this degree in four years.