

College of Science - Atmospheric Sciences, BS				
Catalog Year: 2019 - 2020			Grades	
Mason Core Requirements (27 credits)	Course Information	Credits	Earned	Needed
Written Communication:	ENGH 101 (100)	3		
Oral Communication:		3		
*Quantitative Reasoning	*Satisfied by Major Requirements			
*Information Technology	*Satisfied by Major Requirements			
Arts		3		
Global Understanding		3		
Literature		3		
*Natural Science	*Satisfied by Major Requirements			
Social & Behavioral Sciences		3		
Western Civilization/World History		3		
Written Communication:	ENGH 302	3		
Synthesis/Capstone		3		
<b>Major Requirements (71-72 credits) A GPA of at least 2.00 is required for all core courses, with an overall GPA of at least 2.50</b>				
Atmospheric Science Core (24 credits)		Credits	Earned	Needed
CLIM 102	Introduction to Global Climate Change Science	4		
CLIM 111	Intro to the Fundamentals of Atmospheric Sci.	3		
CLIM 112	Intro to the Fundamentals of Atmospheric Sci. Lab	1		
CLIM 301	Weather Analysis and Prediction	4		
CLIM 408	Senior Research	3		
CLIM 411	Atmospheric Dynamics	3		
CLIM 429	Atmospheric Thermodynamics	3		
PHYS 475	Atmospheric Physics	3		
Additional Supporting Courework (29-30 credits)		Credits	Earned	Needed
CHEM 211/213	General Chemistry I with Lab	4		
CDS 130 or CS 112	Computing for Scientists or Introduction to Computer Pr	3-4		
MATH 113	Analytic Geometry and Calculus I	4		
MATH 114	Analytic Geometry and Calculus II	4		
MATH 213	Analytic Geometry and Calculus III	3		
STAT 250	Introductory Statistics	3		
PHYS 160/161	University Physics I	4		
PHYS 260/261	University Physics II	4		
<b>Options (9 credits) Students in the atmospheric sciences major will select one of the following options in addition to the required courses above:</b>				
<b>Meteorology:</b> CLIM 312 or GGS 312; CLIM 314/GGS 314 or CLIM 319/GGS 319				
<b>Computational Atmospheric Sciences:</b> CLIM 440 or CLIM 470; MATH 214; One from: CDS 251, 301-303				
Option Course #1:				
Option Course #2:				
Option Course #3:				
<b>Required Electives (9 credits):</b> Must be chosen from this list and courses cannot also apply to option above. CLIM/GGS 312, 314, 319, 456; CLIM 409, 412, 429, 438, 440, 470; GEOL 420; CDS 251, 301; GGS 354; MATH 214				
Required Elective #1:				
Required Elective #2				
Required Elective #3				
Degree Notes				
Approx 21-22 remaining credits may be completed with elective courses to bring the degree total to 120 with 45 of these credits at the 300/400 level.				
Advisor Notes:				

FALL YEAR 1	CREDITS	SPRING YEAR 1	CREDITS	NOTES
MATH 113	4	MATH 114	4	*can be
CLIM 111	3	CDS 130 or CS 112	3 or 4	substituted for
CLIM 112	1	CLIM 102	4	a different core
COMM 100 or 101*	3	ENGH 101*	3	requirement.
SOCI 101*	3			1. CS 112 will also
UNIV 100	1			Require CS 105 or
Total:	15 credits	Total:	14 or 15 credits	CDS 151.

FALL YEAR 2	CREDITS	SPRING YEAR 2	CREDITS	NOTES
MATH 213	3	CHEM 211	3	1. CS 105/CDS
PHYS 160	3	CHEM 212	1	151 are not
PHYS 161	1	PHYS 260	3	necessary if CDS
CLIM 301	4	PHYS 261	1	130 is taken.
ARTH 101*	3	CLIM Elective	3	2. CLIM electives
CS 105 or CDS 151	1	STAT 250	3	include CLIM 314,
		Lit. Requirement*	3	GGs 312, or
Total:	15 credits	Total:	17 credits	CLIM 456.

FALL YEAR 3	CREDITS	SPRING YEAR 3	CREDITS	NOTES
CLIM 429	3	CLIM 411	3	1. Course option in
Course from option	3	HIST 100 or 105*	3	fall: CDS 251, 301, 303
Course from option	3	CDS 302	3	2. CDS 302 not req.
CLIM 319 or 412	3	CLIM Elective	3	if a CDS course taken
ENGH 302	3			in fall.
				4. Spring Elective:
				CLIM 314, GGS 312,
Total:	15 credits	Total:	12 credits	or CLIM 456.

FALL YEAR 4	CREDITS	SPRING YEAR 4	CREDITS	NOTES
GEOL 420 (Synth.)	3	Course from option	3	1. Fall elective: CLIM
CLIM 470	3	PHYS 475	3	319, 412, or 409.
GGs 101*	3	CLIM 408	3	2. Spring elective:
CLIM Elective	3-6	CLIM Elective	3	CLIM 314, 409, 456 or
Total:	12-15 credits	Total:	12-15 credits	GGs 312.

\*Students must earn 120 credits for graduation; 45 credits must be upper-level (courses 300+).

Options for this major are: meteorology and computational atmospheric sciences