

Sample Plan of Study

Computational Atmospheric Sciences Concentration

1st Year – Freshman Year

Fall Semester		Spring Semester	
MATH 113 Analytic Geom & Calc I ¹	4	MATH 114 Analytic Geom & Calc II	4
CLIM 111 Intro Fund Atmos Sci*	3	CS 112 Intro Comp Program or CDS 130 Computing for Scientists	3-4
CLIM 112 Intro Fund Atmos Sci Lab*	1	CLIM 102 Intro Global Clim Change Sci*	4
COMM 101 Interpersonal & Group Interact. ²	3	ENGH 101 Composition ⁴	3
Exploration Requirements ³	3		
UNIV 100 Introduction to Mason	2		
Total Credits	16		14-15

*Atmospheric Sciences Core

¹A placement test is required (visit http://math.gmu.edu/placement_test.php)

²Foundation Requirements: Oral Communication

³One from the following categories: Arts, Global Contexts, Global History, Literature

⁴Foundation Requirements: Written Communication (lower-level)

2nd Year - Sophomore Year

Fall Semester		Spring Semester	
MATH 213 Analytic Geom and Calc. III	3	CHEM 211 General Chemistry I and CHEM 213 General Chemistry I Lab	4
PHYS 160 University Physics I	3	PHYS 260 University Physics II	3
PHYS 161 University Physics I Lab	1	PHYS 261 University Physics II Lab	1
CLIM 301 Weather Analysis and Pred*	4	STAT 250 Introductory Statistics	3
CLIM 319 Air Pollution**	3	ENGH 302 Advanced Composition ⁵	3
Exploration Requirements ³	3	Exploration Requirements ³	3
Total Credits	17	Total Credits	17

**Concentration Requirement

⁵Integration Requirements: Written Communication (upper-level)

3rd Year - Junior Year

Fall Semester	Spring Semester
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CLIM 429 Atmospheric Thermodynamics*	3	CLIM 411 Atmospheric Dynamics*	3
CLIM 470 Numerical Weather Prediction**	3	Exploration Requirements ³	3
CLIM Elective ⁷	3	GGIS 311 Geographic Information Sys. **	3
Exploration Requirements ³	3	CDS XXX Computing requirement** ⁸	3
Total Credits	12	Total Credits	12

⁶Offered every other year on even calendar years

⁷One of the following: CLIM 312 Physical Climatology, CLIM 401 Synoptic Meteorology, CLIM 409 Research Internship, CLIM 412 Physical Oceanography, CLIM 425 Unlocking Past Climates: Models and Proxies, CLIM 456 Introduction to atmospheric Radiation, MATH 214 Elementary Differential Equations

⁸One of the following: CDS 251 Introduction to Scientific Programming, CDS 301 Scientific Information and Data Visualization, CDS 302 Scientific Data and Database, CLIM 303 Scientific Data Mining

4th Year - Senior Year

Fall Semester		Spring Semester	
GEOL 420 Earth Science and Policy ⁹	3	PHYS 475 Atmospheric Physics*	3
CLIM Elective ⁷	3 - 6	CLIM 408 Senior Research ¹⁰	3
Global Contexts Requirement	3 - 6	CLIM elective ¹¹	3-6
Total Credits	12-15	Total Credits	9-12

⁹Mason Integration Requirements: Mason Apex

¹⁰ Integration Requirements: Writing Intensive (WI) course in the major

¹¹One of the following: CLIM 409 Research Internship, CLIM 438 Atmospheric Chemistry, CLIM 440 Climate Dynamics