

Current Curriculum and Recommended Schedule: B.S. degree in Meteorology

First Year

MATH 1241 Calculus I	3	MATH 1242 Calculus II	3
CHEM 1251 Principles of Chemistry	3	PHYS 2101 Physics for Science I	3
CHEM 1251L Principles of Chemistry Lab	1	PHYS 2101L Physics for Science I - Lab	1
ENGL 1101 English Composition	3	ENGL 1102 Academic Writing	3
ESCI 1101 Physical Geography	3	GEOL 1200 Physical Geology	3
ESCI 1101L Physical Geography Lab	1	GEOL 1200L Physical Geology Lab	1
Semester Total	14	Semester Total	14

Second Year

METR 3140 Intro to Meteor and Clim	3	METR 3210 Atmospheric Thermodynamics	3
MATH 2171 Differential Equations	3	STAT 2122 Intro to Prob and Stats	3
ETME 3133 Fluid Mechanics	3	LBST 2101 Western Culture and History	3
PHYS 2102 Physics for Science II	3	Social Science Elective	3
PHYS 2102L Physics for Science II - Lab	1	General Elective	3
LBST 11xx Arts and Society	3		
Semester Total	16	Semester Total	15

Third Year

METR 3220 Physical Meteorology	3	METR 3250 Dynamic Meteorology	4
METR 3245 Synoptic Meteorology	4	LBST 22xx Liberal Studies Elective	3
ESCI 3105 Oceanography	3	Writing (W) Comm Elective	3
LBST 2102 Global Connections	3	FORL 1202 (or proficiency)	4
FORL 1201 (or proficiency)	4	General Elective	2
Semester Total	17	Semester Total	16

Fourth Year

METR 4245 Advanced Synoptic Meteo	3	ESCI 4600 Earth Science Seminar (O)	1
METR 4250 Advanced Dynamic Meteo	3	Major Elective	3
Major Elective	4	General Elective	3
Writing (W) Comm Elective (METR 4150)	3	General Elective	3
General Elective	2	General Elective	3
Semester Total	15	Semester Total	13

METR BS Requirement	
General Education Requirement	Red

Required Degree Total 120

Major Electives - Fall Offerings

METR 3340 Weather Communications	3
METR 4150 Applied Climatology	3
METR 4320 Tropical Meteorology	3
ESCI 4140 Hydrologic Processes	4
ESCI 4170 Fundamental Remote Sensing	4

Major Electives - Spring Offerings

METR 3240 Boundary Layer Meteorology	4
METR 3330 Forecasting	3
METR 4350 Mesoscale Meteorology	3
ESCI 4180 Advanced Remote Sensing	4

**** See the next page for suggestions on useful electives for (1) a career in the National Weather Service or a private company, (2) a broadcast meteorology career, (3) an environmental monitoring career, or (4) preparation for graduate studies or research in meteorology**

Recommendations for Elective Courses

1. NATIONAL WEATHER SERVICE and PRIVATE COMPANIES

- a. ESCI 4140 Hydrologic Processes
- b. ESCI 4170 Fundamentals of Remote Sensing
- c. METR 3330 Weather Forecasting
- d. METR 4150 Applied Climatology
- e. METR 4320 Tropical Meteorology
- f. METR 4350 Mesoscale Meteorology

Using general electives to help complete **all** of the suggested courses is recommended. A formal internship with, or volunteering for, a NWS office is highly recommended to increase employment chances.

2. BROADCAST METEOROLOGY

- a. METR 3330 Weather Forecasting
- b. METR 3340 Weather Communications
- c. Additional courses in communication, journalism, writing and speech
- d. Additional courses in publishing or broadcast media

Using general electives for communications courses may increase your chances for employment. An internship with a television or radio station is highly recommended to increase employment chances.

3. ENVIRONMENTAL MONITORING

- a. ESCI 4140 Hydrologic Processes
- b. ESCI 4170 Fundamentals of Remote Sensing
- c. METR 3240 Boundary Layer Meteorology
- d. METR 4150 Applied Climatology
- e. GEOG 4120 Introduction to Geographic Information Systems
- f. Additional courses in chemistry
- g. Additional courses in the environmental sciences

Using general electives to help complete **all** of the suggested courses is recommended. A formal internship with, or volunteering for, an environmental firm is highly recommended to increase employment chances.

4. GRADUATE STUDIES or RESEARCH

- a. ESCI 4140 Hydrologic Processes
- b. ESCI 4170 Fundamentals of Remote Sensing
- c. METR 3240 Boundary Layer Meteorology
- d. METR 3330 Forecasting
- e. METR 4150 Applied Climatology
- f. METR 4320 Tropical Meteorology
- g. METR 4350 Mesoscale Meteorology
- h. GEOG 4120 Introduction to Geographic Information Systems
- i. Additional coursework in mathematics, statistics, or computer science

Using general electives to complete as many of the suggested courses as possible is recommended. Participation in a Research Experience for Undergraduates (REU) or any other research-related activity is highly advantageous for acceptance into meteorology or atmospheric science graduate programs.

**ADVISING WORKSHEET UNC CHARLOTTE
GENERAL EDUCATION PROGRAM**

I. Development of Fundamental Skills of Inquiry		Credit Hours	Courses taken
Basic writing skills	Either <i>ENGL</i> 1101 or <i>ENGL</i> 1103	3	
Basic writing skills	<i>ENGL</i> 1102 (students who take <i>ENGL</i> 1103 do not have to take <i>ENGL</i> 1102)	0-3	
Mathematics and logical reasoning	<i>MATH</i> 1xxx	3	
Mathematics and logical reasoning	One of the following: <i>MATH</i> 1xxx, <i>STAT</i> 1xxx, or <i>PHIL</i> 2105	3	

II. Inquiry in the Sciences		Credit Hours	Courses taken
Life sciences and/or physical sciences	Two of the following, and one of them must be with a lab: <i>ANTH</i> 2141; <i>BIOL</i> 1110, 1115, 1273, 1274; <i>CHEM</i> 1111, 1112, 1203, 1204, 1251, 1252; <i>ESCI</i> 1101; <i>GEOL</i> 1200, 1210; <i>PHYS</i> 1101, 1102, 1130, 2101, 2102; <i>PSYC</i> 1101	4	(with lab)
		3-4	(with or without lab)
Social science	One of the following: <i>ANTH</i> 1101; <i>ECON</i> 1101, <i>ECON</i> 2101; <i>GEOG</i> 1105; <i>POLS</i> 1110; <i>SOCY</i> 1101	3	

III. Themes of Liberal Education for Private and Public Life		Credit Hours	Courses taken
Arts and society	One of the following: <i>LBST</i> 1101, 1102, 1103, 1104, 1105	3	
Western culture	<i>LBST</i> 2101	3	
Global understanding	<i>LBST</i> 2102	3	
Ethical and cultural critique	One of the following: <i>LBST</i> 2211, 2212, 2213, 2214, 2215	3	

IV. Communication Skills		Credit Hours	Courses taken
Writing in the discipline course in the major	One three semester hour course or its equivalent totaling three semester hours in the major with the W designation	3	
Writing in the discipline course	A second course with the W designation (Can be in the major or outside the	3	
Oral communication	A course with the O designation (If a course is designated for both O and W, the one course can be applied to both.)	1-3	

The following applies only to students majoring in a program in the College of Arts and Sciences, College of Architecture, or College of Health and Human Services.		Credit Hours	Courses taken, if applicable
Foreign language	A 1202-level course in a foreign language	4-8	