# Coastal Meteorology B.S. Program

ADMISSION to the B.S. in Coastal Meteorology curriculum requires that a student be admissible to the College of the Coast & Environment; earned at least 24 semester hours of college credit; have a Cumulative and LSU GPA of at least 2.0; and have passed all courses in mathematics and science with a "C" or better; or received special approval from the dean of the school.

### BASIC SCHOLASTIC EXPECTATIONS.

\* Maintain a minimum 2.0 Cumulative and LSU GPA.
\* Maintain a minimum 2.0 GPA in the major field.
\*At least 30 of the hours required for this degree must be taken at the 3000/4000-level. See the LSU General Catalog for information on University, College, major, and minor residency requirements.

### **CRITICAL REQUIREMENTS**

Sem 1: Credit in MATH 1022/1023; 2.0 Cumulative and LSU GPA.
Sem 2: "C" or better in CHEM 1201; "C" or better in ENGL 1001 or 1004; 2.0 Cumulative and LSU GPA.
Sem 3: "C" or better in BIOL 1201; 2.0 Cumulative and LSU GPA.

Sem 5: "C" or better in MATH 1550; 2.0 Cumulative and LSU GPA. Sem 5: "C" or better in EXST 2201; 2.0 Cumulative and LSU GPA.

## RECOMMENDED PATH

## Semester 1

Critical: Credit in MATH 1022/1023; 2.0 Cumulative and LSU GPA

### Semester 2

#### Critical: "C" or better in CHEM 1201/1421; "C" or better in ENGL 1001/1004; 2.0 Cumulative and LSU GPA.

OCS 1005/1006 INTRODUCTION TO OCEANOGRAPHY	3
OCS 1013 ATMOSPHERIC SCIENCE FOR THE COAST	3
CHEM 1202/1422 GENERAL CHEMISTRY II	3
MATH 1540 INTEGRAL CALCULUS	3
GEN. ED. COURSE – HUMANITIES	3
Total Semester Hours:	15

### Semester 3

#### Critical: "C" or better in CHEM 1202/1422: "C" or better in MATH 1540; 2.0 Cumulative and LSU GPA.

OCS 2013/2014 EXTREME COASTAL WEATHER	3
PHYS 2110 PARTICLE MECHANICS	3
OCS 2011 INTRODUCTION TO CODING	
FOR COASTAL SCIENCES	3
MATH 1552/1553 ANALYTIC GEOMETRY & CALCULUS II	4
GEN. ED. COURSE – SOCIAL SCIENCES	3
Total Semester Hours:	16

#### Semester 4

### Critical: "C" or better in PHYS 2110; "C" or better in MATH 1552; 2.0 Cumulative and LSU GPA.

PHYS 2112 FLUIDS, THERMODYNAMICS, WAVES, AND	
MODERN PHYSICS	3
PHYS 2108 INTRODUCTORY PHYSICS LABORATORY	1
EXST 2201 INTRODUCTION TO STATISTICAL ANALYSIS	4
ENGL 2000 ENGLISH COMPOSITION	3
MATH 2065 ELEMENTARY DIFFERENTIAL EQUATIONS	3
Total Semester Hours:	14

#### Semester 5

### Critical: "C" or better in ENGL 2000; 2.0 Cumulative and LSU GPA.

OCS 3013 ATMOSPHERIC & OCEANIC CIRCULATION	3
OCS 4021 FORECASTING COASTAL WEATHER	3
ENVS 4145 REMOTE SENSING FUNDAMENTALS FOR	
ENVIRONMENTAL SCIENTISTS or GEOG 4045	
ENVIRONMENTAL REMOTE SENSING	3
GEN. ED. COURSE – SOCIAL SCIENCES (2000-level)	3
GEN. ED. COURSE – HUMANITIES	3
Total Semester Hours:	15

#### Semester 6

OCS 4013 SURVEY OF COASTAL METEOROLOGY	3
OCS 4023 MESOSCALE METEOROLOGY	3
OCS 4011 RADAR & SATELLITE SYSTEMS IN COASTAL	
METEOROLOGY	1
APPROVED COASTAL METEOROLOGY ELECTIVE*	3
APPROVED COASTAL SCIENCE ELECTIVE*	3
GEN. ED. COURSE – HUMANITIES	3
Total Semester Hours:	16

#### Semester 7

OCS 4019 SURFACE-ATMOSPHERE INTERACTIONS	3
OCS 4111 ATMOSPHERIC THERMODYNAMICS	3
APPROVED COASTAL METEOROLOGY ELECTIVE*	3
APPROVED COASTAL SCIENCE ELECTIVE*	3
APPROVED ELECTIVE*	3
Total Semester Hours:	1

5

120

#### Semester 8

OCS 4113 ATMOSPHERIC DYNAMICS	3
OCS 4999 CAPSTONE IN OCS	1
APPROVED COASTAL METEOROLOGY ELECTIVE*	3
APPROVED COASTAL SCIENCE ELECTIVE*	3
APPROVED ELECTIVE*	<u>3</u>
Total Semester Hours:	13

### **Required Total Hours**

### \*Approved Coastal Science Electives

OCS 3998 Internship in Oceanography & Coastal Sciences (1-3) OCS 4024 Coastal Morphodynamics (3) OCS 4038 Scientific Writing and Collaboration (2) OCS 4061 Introductory Oceanographic Data Analysis (3) OCS 4126 Chemical Oceanography (3) OCS 4128 Wetland Hydrology and Hydrodynamics (3) OCS 4210 Geological Oceanography (3) OCS 4560 Wetland Loss, Restoration and Management (3)

## \*Approved Coastal Meteorology Electives

ENVS 4045 Air Pollution and Society (3) GEOG 4016 Methods of Climatological Analysis (3) GEOG 4017 Hurricane Climatology (3) OCS 3200 Hurricanes & Typhoons (3) OCS 3999 Undergraduate Research (3) OCS 4017 Field Course in Coastal Meteorology (3) OCS 4170 Physical Oceanography (3)

#### \*Approved Electives

ENVS 4149 Design of Environmental Management Systems (3) ENVS 4262 Management of Environmental Hazards Analysis (3) EXST 3201 Statistical Analysis II (4) EXST 4142 Introduction to R and Statistical Data Mining (3) GEOG 4014 Climatology (3) GEOG 4018 Geographical Hydrology (3) GEOG 4047 Geographical Information Systems (3) GEOG 4221 The Tropical Atmosphere (3) OCS 3103 Global Environmental Cycles (3) OCS 4210 Ecosystem Modeling and Analysis (3) OCS 4600 Global Environmental Change: Past, Present and Future (3)