

Texas A & M University-Corpus Christi

Curriculum Sheet for 2020-2021 Catalog

Degree: **Bachelor of Science**
 Major: **Environmental Science**
 Concentration: **Earth System Science**

<u>UNIVERSITY CORE CURRICULUM:</u>		<u>HOURS</u>	<u>PREREQUISITES</u>
_____	COMM 1311	Foundations of Communications	<u>3</u> or ENGL 1301
_____	ENGL 1302	Writing and Rhetoric	<u>3</u>
_____	See Catalog	Mathematics	<u>3</u>
_____	See Catalog	Life and Physical Sciences	<u>6</u>
_____	See Catalog	Language, Philosophy, or Culture	<u>3</u>
_____	See Catalog	Creative Arts	<u>3</u>
_____	HIST 1301	US History to 1865	<u>3</u>
_____	HIST 1302	US History since 1865	<u>3</u> or HIST 2301
_____	POLS 2305	US Government and Politics	<u>3</u>
_____	POLS 2306	State and Local Government	<u>3</u>
_____	See Catalog	Social and Behavioral Science	<u>3</u>
_____	See Catalog	Component Area	<u>6</u>
<u>FOUNDATION COURSES - 32 hours</u>			
_____	ESCI 1401 (core)	Intro to Environmental Science FL,SP	<u>4</u>
_____	BIOL 1406 (core)	Biology I FL,SP,SUM	<u>4</u> MATH 1314 or placement above
_____	GEOL 1403 (core)	Physical Geology FL,SP,SUM	<u>4</u>
_____	CHEM 1411	General Chemistry I FL,SP,SUM	<u>4</u> MATH 1314 or placement above
_____	CHEM 1412	General Chemistry II FL,SP,SUM	<u>4</u> CHEM 1411
_____	GISC 1470	Geospatial Systems I FL,SP	<u>4</u>
_____	PHYS 2425	University Physics I FL,SP,SUM	<u>4</u> MATH 2413
_____	MATH 2413 (core)	Calculus I FL,SP,SUM	<u>4</u> MATH 1316 or MATH 2312
<u>MAJOR REQUIREMENTS - 24 hours</u>			
_____	ESCI 3202	Professional Skills FL,SP	<u>2</u>
_____	ESCI 3351	Oceanography FL,SP	<u>3</u> CHEM 1412 or ESCI 1401 or GEOL 1403
_____	ESCI 3403	Meteorology FL,SP	<u>4</u>
_____	ESCI 4335	Climate and Climate Variability SP	<u>3</u> ESCI 3351 or 3403 (PHYS 1401 or 2425 recommended)
_____	ESCI 4498	Internship in Environmental Science	<u>2</u> Senior Standing/ additional credits can apply towards electives
_____	ESCI 4202	Issues in Environmental Science SP	<u>2</u> ESCI 1401 and Junior/Senior Standing
_____	ESCI 3443	Environmental Biology FL,SP	<u>3</u> BIOL 1407;
Choose two:	GEOL 3443	Environmental Geology SP	<u>8</u> GEOL 1403;
_____	CHEM 4443	Environmental Chemistry FL	<u>3</u> CHEM 1412 + 3411;
<u>EARTH SYSTEM SCIENCE CONCENTRATION - 31 hours</u>			
Choose one:	CHEM 3411	Organic Chemistry I FL,SP,SUM	<u>4</u> CHEM 1412;
_____	or CHEM 4423	or Physical Chemistry I FL	<u>4</u> CHEM 1412 + MATH 2414 + PHYS 2426
_____	MATH 2414	Calculus II FL,SP,SUM	<u>4</u> MATH 2413
_____	MATH 3311	Linear Algebra FL,SP,SUM	<u>3</u> MATH 2413
_____	MATH 3342	Applied Probability & Stats FL,SP,SUM	<u>3</u> MATH 2413
<u>13 hours of Designated Electives (must include 11 upper-level hours): Additional hours may be approved by faculty mentor.</u>			
_____	BIOL 3428	Principles of Ecology FL,SP	<u>4</u> BIOL 1407 + CHEM 1411
_____	ESCI 4360	Physical Oceanography FL	<u>3</u> + MATH 2413 (may take concurrently)
_____	GEOL 3442	Geomorphology FL	<u>4</u> PHYS 1401 or 2425
_____	GEOL 4316	Marine Geoscience	<u>3</u> GEOL 1403
_____	GEOL 4411	Sedimentation & Stratigraphy SP	<u>4</u> GEOL 1403 + 1404 + CHEM 1411 + 1412
_____	GEOL 4444	Hydrogeology FL	<u>4</u> GEOL 1403 + 1404 + 3411 + 3442
_____	GISC 3421	Visualization for GIS SP	<u>4</u> GEOL 1403 + MATH 2413
_____	MATH 2305	Discrete Mathematics I FL,SP,SUM	<u>3</u> + [PHYS 1401 or 2425]
_____	MATH 2415	Calculus III FL,SP,SUM	<u>4</u> GISC 2301
_____	MATH 3315	Differential Equations FL,SP,SUM	<u>3</u> MATH 2312 or [MATH 1314 + 1316]

~Additional hours may be required to meet the minimum 120 hours for your degree~

UNIVERSITY REQUIREMENTS:

Minimum Total Hours for Degree:	120	College Minimum Major GPA:	2.25
Upper Division Minimum Total Hours:	45	Cumulative TAMUCC Minimum GPA:	2.00
Upper Division Minimum Residency Hours:	36	Foreign Language Requirement (see catalog)	
Upper Division Minimum Major Residency Hours:	12	First Year Seminar Requirement (UNIV 1101 & 1102)	2