

TEXAS A&M UNIVERSITY-CORPUS CHRISTI

Curriculum Sheet for 2019-2020 Catalog

Degree: **Bachelor of Science**
 Major: **Geology**
 Concentration: **Environmental Geology**

UNIVERSITY CORE CURRICULUM

| | | <u>HOURS</u> | <u>PREREQUISITES</u> |
|-------|-------------|----------------------------------|----------------------|
| _____ | COMM 1311 | Foundations of Communications | <u>3</u> |
| _____ | 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> |
| _____ | 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> |

SUPPORTING COURSES - 23 hours

| | | | | |
|-------|-------------------|--|----------|---|
| _____ | CHEM 1411 | General Chemistry I | <u>4</u> | MATH 1314 placement or above |
| _____ | CHEM 1412 | General Chemistry II | <u>4</u> | CHEM 1411 |
| _____ | PHYS 1401 or 2425 | General Physics I or Univ. Physics I | <u>4</u> | MATH 1314 or placement above; MATH 2413 |
| _____ | PHYS 1402 or 2426 | General Physics II or Univ. Physics II | <u>4</u> | PHYS 1401; PHYS 2425 and MATH 2414 |
| _____ | MATH 2413 | Calculus I | <u>4</u> | MATH 1316 or 2312 or placement above |
| _____ | MATH 3342 | Applied Probability & Statistics | <u>3</u> | MATH 2413 |

GEOLOGY CORE - 41 hours

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|--------------------|---------------------------|--|----------|---|
| _____ | GEOL 1403 | Physical Geology (FL, SP, SUM) | <u>4</u> | |
| _____ | GEOL 1404 | Historical Geology (SP) | <u>4</u> | GEOL 1403 |
| <u>Choose one:</u> | GEOL 2102 or GEOL 2103 | Undergrad Seminar in Geology: Career in Geosciences (SP) or Research in Geosciences (FL) | <u>1</u> | |
| _____ | GEOL 3326 | Intro to Geological Field Methods (SP) | <u>3</u> | GEOL 1403, GEOL 1404, and GEOL 3411 (may be taken concurrently) |
| _____ | GEOL 3411 | Mineralogy (FL) | <u>4</u> | GEOL 1403, CHEM 1411, and CHEM 1412 (may be taken concurrently) |
| _____ | GEOL 3414 | Igneous & Metamorphic Petrology (SP) | <u>4</u> | GEOL 1403, CHEM 1411, CHEM 1412, and GEOL 3411 |
| _____ | GEOL 4322 | Geophysics | <u>3</u> | GEOL 4421, MATH 2413, and PHYS 1402 or 2426 |
| _____ | GEOL 4411 | Sedimentation & Stratigraphy (SP) | <u>4</u> | GEOL 1403, GEOL 1404, and GEOL 3411 |
| _____ | GEOL 4421 | Structural Geology (SP) | <u>4</u> | GEOL 3411, MATH 2413, and PHYS 1401 or PHYS 2425 |
| <u>Choose one:</u> | GEOL 4444 or GEOL 4416 | Hydrogeology or Geochemistry | <u>4</u> | GEOL 1403, MATH 2413, and PHYS 1401 or PHYS 2425 |
| _____ | GEOL 4650 | Field Geology (SUM) | <u>6</u> | GEOL 3326, GEOL 3414, GEOL 4411, and GEOL 4421; Jr/Sr |

Environmental Geology Track - 29 hours

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|--------------------|-------|---------------------------|---|---------------|--|
| <u>Required</u> | _____ | GEOL 2222 | Karst Geology and Paleoclimatology | <u>2</u> | |
| | _____ | ESCI 3202 | Professional Skills (FL, SP) | <u>2</u> | |
| | _____ | ESCI 3351 | Oceanography (FL, SP) | <u>3</u> | GEOL 1403 or CHEM 1412 or ESCI 1401 |
| | _____ | ESCI 4301 | Environmental Regulations (FL, SP) | <u>3</u> | POLS 2305 and POLS 2306 |
| | _____ | ESCI 4330 | Oil Spill Prevention and Response | <u>3</u> | |
| | _____ | ESCI 4335 | Climate and Climate Variability (SP) | <u>3</u> | ESCI 3351 or ESCI 3403 |
| | _____ | ESCI 4370 | Hazardous Waste Ops and ER | <u>3</u> | |
| | _____ | GEOL 4321 | Intro to Soil and Groundwater Restoration | <u>3</u> | GEOL 1403, CHEM 1411, CHEM 1412, and GEOL 3443 |
| | _____ | GEOL 4416 | Geochemistry | <u>4</u> | CHEM 1411, CHEM 1412, MATH 2413, and GEOL 3411 |
| | _____ | GEOL 4430 | Internship in Geology | <u>Varies</u> | Junior or Senior standing |
| | _____ | GEOL 4490 | Selected Topics | <u>Varies</u> | Varies |
| | _____ | GEOL 4496 | Directed Independent Study | <u>Varies</u> | Approval from Faculty, Chair, and Dean |
| <u>Choose one:</u> | _____ | ATSC 4305 or GISC 4431 | Remote Sensing | <u>3</u> | PHYS 2426 PHYS 2425, MATH 3342, GISC 3300 and MEEN 3310 |
| | _____ | GISC 1470 | Geospatial Systems I (FL, SP) | <u>4</u> | |
| | _____ | GISC 2438 | Geospatial Software Systems I | <u>3</u> | GISC 1470 and COSC 1435 |
| | _____ | GISC 3300 | Geospatial Mathematical Tech. | <u>3</u> | MATH 2413 and MATH 3342 |

~Additional hours not listed may be approved by Faculty Mentor.

UNIVERSITY REQUIREMENTS

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