GEOSCIENCES - ASSOCIATE OF SCIENCE DEGREE (AS)

Explore More About This Program: https://cwi.edu/program/geosciences

Degree Quick Facts

- Instructional School: Science, Technology, and Math
- Department: Physical Sciences
- · Program Code: GEOL.AS
- Program Type: Academic Transfer
- · Available Fully Online: No
- Eligible for Federal Financial Aid: Yes

NOTE: Courses required for this program *may* have an additional fee; more information can be found on the <u>Special Course Fees</u> web page.

Degree Requirements

| Course | Course Title | Min Credits |
|---|--|----------------|
| General Education Requ | irements | |
| CWI 101 | Connecting With Ideas | 3 |
| GEOS 105 | Earth's Natural Resources (Global Perspectives) | 3 |
| ENGL 101 | Writing and Rhetoric I (GEM 1) | 3 |
| ENGL 102 | Writing and Rhetoric II (GEM 1) | 3 |
| GEM 2 - Oral Communic | ation course | 3 |
| MATH 147 | Precalculus (GEM 3) | 5 |
| or MATH 170 | Calculus I | |
| GEOL 101 | Physical Geology (GEM 4) | 3 |
| GEOL 101L | Physical Geology Lab (GEM 4) | 1 |
| Select one of the follow | ing lecture/lab combinations (GEM 4): | 4 |
| CHEM 101 & 101L | Introduction to Chemistry and Introduction to Chemistry Lab ¹ | |
| CHEM 111 & 111L | General Chemistry I and General Chemistry I Lab ¹ | |
| GEM 5 - Humanistic & A | rtistic Ways of Knowing course | 3 |
| GEM 5 - Humanistic & Artistic Ways of Knowing course ² | | 3 |
| SCIE 102 | Ethics in Science (GEM 6) 3 | 3 |
| <u>GEM 6 - Social & Behavi</u> | oral Ways of Knowing course ² | 3 |
| Major Requirements | | |
| CHEM 111 | General Chemistry I ⁴ | 3 |
| CHEM 111L | General Chemistry I Lab ⁴ | 1 |
| GEOS 275 | Field Geology | 4 |
| GIS 126 | Fundamentals of GIS | 3 |
| Select one of the following lecture/lab combinations: | | 4-5 |
| PHYS 111 & 111L | General Physics I and General Physics I Lab | |
| PHYS 211 & 211L | Physics for Scientists and Engineers I and Physics for Scientists and Engineers I Lab | |

| Minimum Credit Hours Required | 60 |
|--|-----|
| bring the total credits earned to 60 | |
| Select credits from the Major Electives course list below to | 4-9 |

- ¹ Students who have prior experience with chemistry are strongly encouraged to take the Chemistry Placement exam at the CWI Assessment Center. Passing the Chemistry Placement exam will allow students to register directly into CHEM 111 General Chemistry I and will enable them to complete additional credits from the Major Electives list.
- ² Course must come from a different discipline.
- ³ This course fulfills the Ethical Reasoning requirement for an associate degree from CWI.
- ⁴ If students completed CHEM 111 General Chemistry I to fulfill their GEM 4 requirement, they must take an additional four (4) credits of coursework from the Major Electives course list below.

Geosciences: Major Electives

| Course | Course Title | Min Credits |
|-----------|-------------------------------|----------------|
| CHEM 112 | General Chemistry II | 3 |
| CHEM 112L | General Chemistry II Lab | 2 |
| GEOL 102 | Historical Geology | 3 |
| GEOL 102L | Historical Geology Lab | 1 |
| GEOS 170 | Earth's Weather and Climate | 3 |
| GEOS 208 | Hydrology and Water Resources | 4 |
| GEOS 270 | Global Climate Change | 3 |
| MATH 170 | Calculus I | 5 |
| MATH 175 | Calculus II | 4 |
| PHYS 112 | General Physics II | 3 |
| PHYS 112L | General Physics II Lab | 1 |

Degree Plan

The course sequence listed below is strongly recommended in order to complete your program requirements. Please register for each semester as shown using the Student Planning tool in myCWI. Plans may be modified to fit the needs of part-time students by adding additional semesters. Consult your advisor for any questions regarding this course sequence plan.

First Year

| Fall | Credit Hours | |
|--------------------|---|----|
| CWI 101 | Connecting With Ideas | 3 |
| Select one of the | following lecture/lab combinations (GEM 4): | 4 |
| CHEM 101 & 101L | Introduction to Chemistry and Introduction to Chemistry Lab ¹ | |
| CHEM 111 & 111L | General Chemistry I and General Chemistry I Lab (GEM 4) ¹ | |
| ENGL 101 | Writing and Rhetoric I (GEM 1) | 3 |
| MATH 147 | Precalculus (GEM 3) | 5 |
| or | or Calculus I | |
| MATH 170 | | |
| | Total Semester Credit Hours | 15 |
| Spring | | |
| CHEM 111 | General Chemistry I ² | 3 |
| CHEM 111L | General Chemistry I Lab ² | 1 |
| | | |

| | | Minimum Credit Hours Required | 60 |
|---|-----------------|---|-----|
| | | Total Semester Credit Hours | 14 |
| Major E | lectives | Select the needed amount of credits from the list below to bring the total earned to 60 | 4-9 |
| GEM 6 - Social & Behavioral Ways of Knowing course ⁴ | | 3 | |
| GEM 5 - Humanistic & Artistic Ways of Knowing course ⁴ | | 3 | |
| GEOS 1 | 05 | Earth's Natural Resources | 3 |
| Spring | | Total Semester Credit Hours | 17 |
| GEM 5 | - Humanis | tic & Artistic Ways of Knowing course | 3 |
| <u>GEM 2 - Oral Communication course</u> | | 3 | |
| SCIE 10 | - | Ethics in Science (GEM 6) 3 | 3 |
| | HYS 211 211L | Physics for Scientists and Engineers I and Physics for Scientists and Engineers I Lab | |
| - | HYS 111 111L | General Physics I and General Physics I Lab | |
| Select one of the following lecture/lab combinations: | | 4-5 | |
| GEOS 2 | 275 | Field Geology | 4 |
| Fall | i i cui | | |
| Second | Vear | Total Semester Credit Hours | 14 |
| GIS 126 | 2 | Fundamentals of GIS Total Semester Credit Hours | 3 |
| GEOL 1 | 0.2 | Physical Geology Lab (GEM 4) | 1 |
| GEOL 1 | | Physical Geology (GEM 4) | 3 |
| | | | |

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- ² If students completed CHEM 111 General Chemistry I to fulfill their GEM 4 requirement, they must take an additional four (4) credits of coursework from the Major Electives course list below.
- ³ This course fulfills the Ethical Reasoning requirement for an associate degree from CWI.
- ⁴ Course must come from a different discipline.

Geosciences: Major Electives

| Course | Course Title | Min Credits |
|-----------|-------------------------------|----------------|
| CHEM 112 | General Chemistry II | 3 |
| CHEM 112L | General Chemistry II Lab | 2 |
| GEOL 102 | Historical Geology | 3 |
| GEOL 102L | Historical Geology Lab | 1 |
| GEOS 170 | Earth's Weather and Climate | 3 |
| GEOS 208 | Hydrology and Water Resources | 4 |
| GEOS 270 | Global Climate Change | 3 |
| MATH 170 | Calculus I | 5 |
| MATH 175 | Calculus II | 4 |
| PHYS 112 | General Physics II | 3 |
| PHYS 112L | General Physics II Lab | 1 |

Additional Advising Notes

Students who plan to transfer should select elective courses based on the needs of their transfer institutions. See 2+2 agreements with the appropriate institution for more information.

- Please be sure to check the courses required for your final degree at the four-year institution you plan to attend after finishing at CWI. It is **absolutely imperative** that you know which classes are required to obtain a bachelor's degree at that institution.
- It is possible to get prior learning assessment (PLA) credit for ENGL 101 if the student successfully passes ENGL 102. Visit the <u>CWI</u> <u>Prior Learning Assessment</u> webpage for more information.
- To ensure efficient degree planning, students who intend to transfer to a four-year institution should review the lower-division degree requirements of the institution they plan to attend.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Obtain the general education needed to appreciate the role of geosciences in social, environmental, and political issues.
- Explain how geologic and/or atmospheric processes affect the social nature of their communities.
- Understand and represent quantitative scientific data in various forms.
- Read, analyze, and/or create topographic and/or geologic maps.
- Demonstrate verbal and written communication skills within the sciences.
- · Use and appropriately cite scholarly sources.