

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:** GEOLAS
- **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 [Special Course Fees](#) web page.

Degree Requirements

Course	Course Title	Min Credits
General Education Requirements		
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 Communication course		2
MATH 147	College Algebra and Trigonometry (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 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 ¹	
GEM 5 - Humanistic & Artistic Ways of Knowing course		3
GEM 5 - Humanistic & Artistic Ways of Knowing course ²		3
SCIE 102	Ethics in Science (GEM 6) ³	3
GEM 6 - Social & Behavioral 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	

Select credits from the Major Electives course list below to bring the total credits earned to 60

Minimum Credit Hours Required **60**

- 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 or MATH 170	College Algebra and Trigonometry (GEM 3) or Calculus I	5
Total Semester Credit Hours		15
Spring		
CHEM 111	General Chemistry I ²	3
CHEM 111L	General Chemistry I Lab ²	1

ENGL 102	Writing and Rhetoric II (GEM 1)	3
GEOL 101	Physical Geology (GEM 4)	3
GEOL 101L	Physical Geology Lab (GEM 4)	1
GIS 126	Fundamentals of GIS	3

Total Semester Credit Hours **14**

Second Year

Fall

GEOS 275	Field Geology	4
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Select one of the following lecture/lab combinations: 4-5

PHYS 111 & 111L	General Physics I and General Physics I Lab	
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PHYS 211 & 211L	Physics for Scientists and Engineers I and Physics for Scientists and Engineers I Lab	
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SCIE 102	Ethics in Science (GEM 6) ³	3
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GEM 2 - Oral Communication course		2
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GEM 5 - Humanistic & Artistic Ways of Knowing course		3
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Total Semester Credit Hours **16**

Spring

GEOS 105	Earth's Natural Resources	3
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GEM 5 - Humanistic & Artistic Ways of Knowing course ⁴		3
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GEM 6 - Social & Behavioral Ways of Knowing course ⁴		3
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Major Electives	Select the needed amount of credits from the list below to bring the total earned to 60	5-10
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Total Semester Credit Hours **15**

Minimum Credit Hours Required **60**

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 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 [CWI Prior Learning Assessment](#) 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 processes affect the social nature of their communities.
- Understand and represent quantitative scientific data in various graphical forms.
- Read, analyze, and/or create both topographic and geologic maps.
- Develop and increase the skills of both verbal and written communication within the sciences.
- Demonstrate literacy in digital mapping techniques and software.
- Use and appropriately cite scholarly sources.
- Attain the knowledge and skills that will allow for success in further academic pursuits within the geosciences.