

GEOSCIENCES - ASSOCIATE OF SCIENCE DEGREE (AS)

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

Degree Quick Facts

- **Instructional School:** Math and Science
- **Department:** Physical Sciences
- **Program Code:** GEOLAS
- **Program Type:** Academic Transfer
- **Available Fully Online:** No
- **Eligible for Federal Financial Aid:** Yes

Degree Requirements

Course	Course Title	Min Credits
General Education Requirements		
<i>Complete the following course to fulfill the Connecting with Ideas requirement:</i>		
CWI 101	Connecting With Ideas	3
<i>Complete the following courses to fulfill the GEM 1 requirement:</i>		
ENGL 101	Writing and Rhetoric I	3
ENGL 102	Writing and Rhetoric II	3
<i>Complete the following course to fulfill the GEM 2 requirement:</i>		
GEM 2 - Oral Communication course		2
<i>Complete the following course to fulfill the GEM 3 requirement:</i>		
MATH 147 or MATH 170	College Algebra and Trigonometry Calculus I	5
<i>Complete the following courses to fulfill the GEM 4 requirement:</i>		
GEOL 101	Physical Geology	3
GEOL 101L	Physical Geology Lab	1
Select one of the following options: 4		
Option 1:		
CHEM 101	Introduction to Chemistry ¹	
CHEM 101L	Introduction to Chemistry Lab ¹	
Option 2:		
CHEM 111	General Chemistry I ¹	
CHEM 111L	General Chemistry I Lab ¹	
<i>Complete the following courses to fulfill the GEM 5 requirement:</i>		
GEM 5 - Humanistic & Artistic Ways of Knowing course		3
GEM 5 - Humanistic & Artistic Ways of Knowing course ²		3
<i>Complete the following courses to fulfill the GEM 6 requirement:</i>		
SCIE 102	Ethics in Science ³	3
GEM 6 - Social & Behavioral Ways of Knowing course ²		3
<i>Complete the following course to fulfill the Global Perspectives requirement:</i>		
GEOS 105	Earth's Natural Resources	3
Major Requirements		
CHEM 111	General Chemistry I ⁴	3
CHEM 111L	General Chemistry I Lab ⁴	1
GEOS 275	Field Geology	4
MATH 170	Calculus I ⁵	5

Select one of the following options: 4-5

Option 1:	
PHYS 111	General Physics I
PHYS 111L	General Physics I Lab
Option 2:	
PHYS 211	Physics for Scientists and Engineers I
PHYS 211L	Physics for Scientists and Engineers I Lab

Select 3-15 credits from the Major Electives course list below to bring the total credits earned to 60 3-15

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 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.
- ⁵ If students completed MATH 170 Calculus I to fulfill their GEM 3 requirement, they must take an additional five (5) 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
GIS 126	Fundamentals of GIS	3
GEOS 270	Global Climate Change	3
MATH 175	Calculus II	4
PHYS 112	General Physics II	3
PHYS 112L	General Physics II Lab	1

Plan of Study Guide

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 Student Success Advisor for any questions regarding this course sequence plan.

First Year		Credit Hours
Fall		
Select one of the following options (GEM 4):		4
Option 1:		
CHEM 101	Introduction to Chemistry ¹	

CHEM 101L Introduction to Chemistry Lab ¹		
Option 2:		
CHEM 111 General Chemistry I (GEM 4) ¹		
CHEM 111L General Chemistry I Lab (GEM 4) ¹		
CWI 101	Connecting With Ideas	3
ENGL 101	Writing and Rhetoric I (GEM 1)	3
MATH 147	College Algebra and Trigonometry (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
ENGL 102	Writing and Rhetoric II (GEM 1)	3
GEOL 101	Physical Geology (GEM 4)	3
GEOL 101L	Physical Geology Lab (GEM 4)	1
MATH 170	Calculus I ³	5
Total Semester Credit Hours		16
Second Year		
Fall		
GEOS 275	Field Geology	4
Select one of the following options:		4-5
Option 1:		
PHYS 111 General Physics I		
PHYS 111L General Physics I Lab		
Option 2:		
PHYS 211 Physics for Scientists and Engineers I		
PHYS 211L Physics for Scientists and Engineers I Lab		
SCIE 102	Ethics in Science (GEM 6) ⁴	3
<u>GEM 5 - Humanistic & Artistic Ways of Knowing course</u>		3
Total Semester Credit Hours		14
Spring		
GEOS 105	Earth's Natural Resources	3
<u>GEM 2 - Oral Communication course</u>		2
<u>GEM 5 - Humanistic & Artistic Ways of Knowing course</u> ⁵		3
<u>GEM 6 - Social & Behavioral Ways of Knowing course</u> ⁵		3
Major Electives	Select the needed amount of credits from the list below to bring the total earned to 60	3-15
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 If students completed MATH 170 Calculus I to fulfill their GEM 3 requirement, they must take an additional five (5) credits of coursework from the Major Electives course list below

⁴ This course fulfills the Ethical Reasoning requirement for an associate degree from CWI.

⁵ 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
GIS 126	Fundamentals of GIS	3
GEOS 270	Global Climate Change	3
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 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.