

Program Change Request

Date Submitted: 10/05/18 4:13 pm

Viewing: **BS/MOS-ENGS/OCST-GOC : Environmental Geosciences - 5-Year Bachelor of Science/Master of Ocean Science and Technology**

Last approved: 04/30/18 1:32 pm

Last edit: 11/08/18 8:31 pm

Changes proposed by: allisonharms

[Environmental Geoscience - 5-Year Bachelor of Science/Master of Ocean Science and Technology](#)

Catalog Pages Using
this Program

In Workflow

1. CLGE Department Head UG
2. CLGE Department Head GR
3. Curricular Services Review
4. GE Committee Preparer UG
5. GE Committee Preparer GR
6. GE Committee Chair UG
7. GE Committee Chair GR
8. GE College Dean UG
9. GE College Dean GR
10. UCC & GC Preparers
-UCC Preparer
-GC Preparer
11. UCC & GC Chairs
-UCC Chair
-GC Chair
12. Faculty Senate Preparer
13. Faculty Senate
14. Provost II
15. President
16. Curricular Services

Contact(s)

Name	E-mail	Phone
Allison Harms	allisonharms@tamu.edu	979-845-2559

Academic level	Undergraduate-Graduate
Effective Term	2019-2020
Department	College of Geosciences
Department 2	Oceanography
College	Geosciences
College 2	Geosciences
Program type	Combination
Degree designation	BS/MOS - Bachelor of Science/Master of Ocean Science & Tech
With a major in	Environmental Geosciences/Ocean Science & Technology (ENGS/OCST)
Associated Program	Not Applicable
With a concentration in	Geoscience MS 3+2 Program (GOC)
Catalog Program Title	Environmental Geosciences - 5-Year Bachelor of Science/Master of Ocean Science and Technology
CIP and Fund code	3010400

Rationale for Proposal

Edits made to update CHEM 101/111 and CHEM 102/112 to CHEM 119 and CHEM 120 and PHYS 206/226 and 207/227. Changes to wording regarding ICD/CD requirements. 04-30-2018—edits made to program to remove OCNG 401 which has been inactivated effective Fall 2018.—sw

Program hours **156 ~~150~~**

Is this program eligible
for financial aid?

Will program hours
change No

Approval Path

1. 09/03/18 9:28 am
Christian Brannstrom (cbrannst): Approved for CLGE Department Head UG
2. 09/03/18 10:15 am
Eric Riggs (emriggs): Approved for CLGE Department Head GR
3. 09/05/18 6:01 pm
Angel Mario Carrizales (carri1214): Rollback to Initiator
4. 09/06/18 12:23 pm
Christian Brannstrom (cbrannst): Approved for CLGE Department Head UG
5. 09/07/18 2:05 pm
Eric Riggs (emriggs): Approved for CLGE Department Head GR
6. 09/14/18 4:51 pm
Angel Mario Carrizales (carri1214): Rollback to Initiator
7. 10/08/18 8:10 am
Christian Brannstrom (cbrannst): Approved

(increase/decrease)
due to the proposed
curriculum changes?

for CLGE Department
Head UG

- 8. 10/08/18 8:23 am
Christian Brannstrom
(cbrannst): Approved
for CLGE Department
Head GR
- 9. 10/11/18 4:44 pm
Angel Mario Carrizales
(carri1214): Approved
for Curricular Services
Review
- 10. 10/11/18 4:59 pm
Roxanna Russell
(rrussell): Approved for
GE Committee Preparer
UG
- 11. 10/11/18 5:00 pm
Roxanna Russell
(rrussell): Approved for
GE Committee Preparer
GR
- 12. 10/12/18 10:03 am
Christian Brannstrom
(cbrannst): Approved
for GE Committee Chair
UG
- 13. 10/15/18 8:22 am
Christian Brannstrom
(cbrannst): Approved
for GE Committee Chair
GR
- 14. 10/18/18 3:29 pm
Christian Brannstrom
(cbrannst): Approved
for GE College Dean UG
- 15. 10/18/18 3:54 pm
Christian Brannstrom
(cbrannst): Approved
for GE College Dean GR
- 16. 10/22/18 3:54 pm
Sandra Williams
(sandra-williams):
Approved for UCC & GC
Preparers
- 17. 11/05/18 2:56 pm
Sandra Williams
(sandra-williams):
Approved for UCC & GC
Chairs

Catalog Program Requirements

History

- 1. Apr 26, 2017 by Brady
Dennis (brady-dennis)
- 2. Apr 30, 2018 by Sandra
Williams (sandra-
williams)

Plan of Study Grid

Fifth Year

Fall

- Advanced-specialized OCNG graduate course
- Advanced-specialized OCNG graduate course
- Advanced-specialized OCNG graduate course

Semester Credit Hours

- 3
- 3
- 3

-	Semester-Credit Hours	0
Spring		
	Advanced-specialized-OCNG-graduate-course	3
	Advanced-specialized-OCNG-graduate-course	3
	OCNG-661-Advanced-Oceanographic-Data-Analysis-and-Communication3	3
-	Semester-Credit Hours	0
-	Total Semester-Credit Hours	0

Plan of Study Grid

First Year

Fall		Semester Credit Hours
BIOL 111	Introductory Biology I	4
ENGL 104	Composition and Rhetoric	3
GEOS 101	Introduction to the Geosciences 1	1
GEOS 105	Introduction to Environmental Geoscience	3
MATH 151	Engineering Mathematics I	4
	Semester Credit Hours	15
Spring		
BIOL 112	Introductory Biology II	4
MATH 152	Engineering Mathematics II	4
POLS 206	American National Government	3
American history		3
Language, philosophy and culture 2		3
	Semester Credit Hours	17

Second Year

Fall		
CHEM 119	Fundamentals of Chemistry I	4
GEOG 201	Introduction to Human Geography	3
Select one of the following:		
ATMO 201	Weather and Climate	4
	& ATMO 202 and Weather and Climate Laboratory	
GEOG 203	Planet Earth	
	& GEOG 213 and Planet Earth Lab	
GEOL 101	Principles of Geology	
	& GEOL 102 and Principles of Geology Laboratory	
OCNG 251	Oceanography	
	& OCNG 252 and Oceanography Laboratory	
CHEM 101	Course CHEM 101 Not Found	4
	& CHEM 111 and Fundamentals of Chemistry Laboratory I	
American history		3
Environmental Policy Elective 3		3
	Semester Credit Hours	17

Spring

CHEM 120	Fundamentals of Chemistry II	4
POLS 207	State and Local Government	3
Select one of the following:		
ATMO 201	Weather and Climate	4
	& ATMO 202 and Weather and Climate Laboratory	
GEOG 203	Planet Earth	
	& GEOG 213 and Planet Earth Lab	
GEOL 101	Principles of Geology	
	& GEOL 102 and Principles of Geology Laboratory	
OCNG 251	Oceanography	
	& OCNG 252 and Oceanography Laboratory	
CHEM 102	Course CHEM 102 Not Found	4
	& CHEM 112 and Fundamentals of Chemistry Laboratory II	
Communication		3
Coastal and Marine Environments theme elective 3, 4		3
	Semester Credit Hours	17

Third Year

Fall		
GEOG 330	Resources and the Environment	3
PHYS 206	Newtonian Mechanics for Engineering and Science	4
	& PHYS 226 and Physics of Motion Laboratory for the Sciences	
STAT 211	Principles of Statistics I	3
PHYS 218	Mechanics	4

Coastal and Marine Environments theme elective 3, 4	6
Semester Credit Hours	16
Spring	
GEOL 420 Environmental Geology	3
PHYS 208 Electricity and Optics	4
GEOS 470 Data Analysis Methods in Geosciences	3
PHYS 207 Electricity and Magnetism for Engineering and Science	4
& PHYS 227 and Electricity and Magnetism Laboratory for the Sciences	
Creative Arts 2	3
Environmental Policy elective 3	3
Semester Credit Hours	16
Fourth Year	
Fall	
GEOG 390 Principles of Geographic Information Systems 7	4
GEOS 405 Environmental Geosciences	3
OCNG 604 Ocean Observing Systems 4, 6	3
OCNG 608 Physical Oceanography 4, 5, 6	3
OCNG 603 Communicating Ocean Science	3
Semester Credit Hours	16
Spring	
OCNG 657 Data Methods and Graphical Representation in Oceanography 53	53
Fundamentals of Ocean Science Course	6
Select two of the following: 5	
OCNG 620 Biological Oceanography	
OCNG 630 Geological Oceanography	
OCNG 640 Chemical Oceanography	
Coastal and Marine Environments theme elective 3, 4	3
Technical elective 3	6
Semester Credit Hours	18
Fifth Year	
Fall	
Advanced specialized OCNG graduate course	3
Advanced specialized OCNG graduate course	3
Advanced specialized OCNG graduate course	3
Semester Credit Hours	9
Spring	
OCNG 661 Advanced Oceanographic Data Analysis and Communication	3
Advanced specialized OCNG graduate course	3
Advanced specialized OCNG graduate course	3
Semester Credit Hours	9
Total Semester Credit Hours	150

1 Freshmen entering the program take a first year seminar, [GEOS 101](#). The choice is not restricted. Students transferring or changing majors into the program, who have not taken [GEOS 101](#), are required to take [GEOS 481](#) in their junior or senior year.

2 The graduation requirements include three hours of international and cultural diversity courses and three hours of cultural discourse courses.

3 Select in consultation with advisor.

4 If students use nine credits of allowed OCNG courses (e.g., [OCNG 350](#), [OCNG 451](#), [OCNG 485](#)) as Coastal and Marine Environments theme electives, they will receive an OCNG minor with their BS in ENGS degree. If one of the Introductory Geoscience course and associated labs listed in Year Two is [OCNG 251](#) with [OCNG 252](#), then only two (six credits) of the theme electives needs to be from OCNG to still get the minor.

5 Students will not be permitted to receive credit for both the 400- and 600-level versions of certain courses because the content and learning outcomes are too similar (e.g. [OCNG 440/OCNG 640](#); [GEOS 470/OCNG 655](#)).

6 These two graduate courses will be taken for dual undergraduate/graduate credit and may contribute to a minor or technical elective.

7 Fulfills a technical elective.

Two courses in the degree plan must be writing intensive courses designated by the Environmental Programs in the schedule of classes. Also, international and cultural diversity electives (**3 (6-hours) and cultural discourse (3 hours)**) must be incorporated into the degree.

Any of the required courses may be taken during the summer sessions to diminish the heavy semester loads during Years 2 and 3.

The program includes a total of 156 hours with 6 hours being applied toward both the Bachelor of Science in Environmental Geosciences and the Master of Ocean Science and Technology.

Additional information [04-30-2018— edits made to program to remove OCNG 401 which has been inactivated effective Fall 2018.—sw](#)

Required Proposal [Deg Eval - 3+2 ENGSMOST.pdf](#)

Forms

Reviewer Comments

Angel Mario Carrizales (carri1214) (09/05/18 6:01 pm): Rollback: Please attach an edited degree evaluation that matches the proposed catalog edits.

Angel Mario Carrizales (carri1214) (09/14/18 4:51 pm): Rollback: Please address the following, 1) The International and Cultural Diversity requirement (ICD) is listed (After footnote table) but does not include the new Cultural Discourse (CD) graduation requirement 2) GEOL 101 was formerly a 4hr course that was changed to a 3 hr course, Please include GEOL 102 the lab associated with GEOL 101 in both the degree evaluation and the plan of study grid.

Angel Mario Carrizales (carri1214) (10/11/18 4:43 pm): Text was added by Curricular Services to clarify the total number of hours required for each degree in the combination program.

Angel Mario Carrizales (carri1214) (10/11/18 4:43 pm): Initial concerns addressed.

Sandra Williams (sandra-williams) (11/05/18 2:56 pm): UCC approved November 2018.

Key: 588