

Program Change Request

Date Submitted: 09/30/18 3:10 pm

Viewing: **BS-GEOP : Geophysics - BS**

Last approved: 01/13/17 11:09 am

Last edit: 11/08/18 8:24 pm

Changes proposed by: david-w-sparks

Catalog Pages Using
this Program

[Geophysics - BS](#)

In Workflow

1. **GEPL Department Head**
2. **Curricular Services Review**
3. **GE Committee Preparer UG**
4. **GE Committee Chair UG**
5. **GE College Dean UG**
6. **UCC Preparer**
7. **UCC Chair**
8. **Faculty Senate Preparer**
9. Faculty Senate
10. Provost II
11. President
12. Curricular Services

Approval Path

1. 10/01/18 7:58 am
Michael Pope
(mcpope): Approved for
GEPL Department Head
2. 10/04/18 5:13 pm
Angel Mario Carrizales
(carri1214): Approved
for Curricular Services
Review
3. 10/05/18 9:38 am
Roxanna Russell
(russell): Approved for
GE Committee Preparer
UG
4. 10/08/18 8:18 am
Christian Brannstrom
(cbrannst): Approved
for GE Committee Chair
UG
5. 10/11/18 3:04 pm
Christian Brannstrom
(cbrannst): Approved
for GE College Dean UG
6. 10/12/18 9:05 am
Sandra Williams
(sandra-williams):
Approved for UCC
Preparer
7. 11/05/18 3:12 pm
Sandra Williams
(sandra-williams):
Approved for UCC Chair

History

1. Jan 13, 2017 by David Sparks (david-w-sparks)

Contact(s)

Name	E-mail	Phone
David Sparks	sparks@geo.tamu.edu	979-458-1051

Academic level	Undergraduate
Effective Term	2019-2020
Department	Geology & Geophysics
College	Geosciences
Program type	Degree
Degree designation	BS - Bachelor of Science
With a major in	Geophysics (GEOP)
Associated Program	Not Applicable
Catalog Program Title	Geophysics - BS
CIP and Fund code	4006030002

Rationale for Proposal

Updated to include new course offerings in Chemistry and Physics. ~~Surveys of current and former students, employers and graduate programs indicated areas where we needed to modify or enhance our degree. The goals of the changes are to strengthen and broaden students hands on experience with modern geophysical data collection and manipulation; increase the quality and quantity of instruction in written and oral scientific communication; give each student an opportunity to be involved in a group research capstone experience; streamline courses and eliminate redundancies.~~

Program hours	120
Is this program eligible for financial aid?	Yes
Will program hours change (increase/decrease) due to the proposed curriculum changes?	No
Program delivery mode	On-campus

Catalog Program Requirements

Plan of Study Grid

		Semester Credit Hours
First Year		
Fall		
GEOL 150	Introduction to the Solid Earth	4
GEOL 180	Introduction to Geology and Geophysics	1
CHEM 107	General Chemistry for Engineering Students	4
& CHEM 117	& General Chemistry for Engineering Students Laboratory	
ENGL 104	Composition and Rhetoric	3
MATH 151	Engineering Mathematics I	4
	Semester Credit Hours	16
Spring		
GEOL 152	History of the Earth	4
MATH 152	Engineering Mathematics II	4
	Select one of the following:	3
	American history	
	Government/Political science	
Communication elective		3
	Semester Credit Hours	14
Second Year		
Fall		
GEOL 203	Mineralogy	4
GEOL 210	Geological Communication	3
MATH 251	Engineering Mathematics III	3
PHYS 218	Mechanics	4
PHYS 206	Newtonian Mechanics for Engineering and Science	3
PHYS 226	Physics of Motion Laboratory for the Sciences	1
	Semester Credit Hours	14
Spring		
GEOL 304	Igneous and Metamorphic Petrology	4
GEOL 250	Geological Field Methods	4
MATH 308	Differential Equations	3
PHYS 208	Electricity and Optics	4
PHYS 207	Electricity and Magnetism for Engineering and Science	3
PHYS 227	Electricity and Magnetism Laboratory for the Sciences	1
	Semester Credit Hours	15
Third Year		
Fall		
GEOP 341	Fundamentals of Geophysics	3
GEOL 306	Sedimentology and Stratigraphy	4
MATH 311	Topics in Applied Mathematics I	3
PHYS 221	Optics and Thermal Physics	3
	Select one of the following:	3
	American history	
	Government/Political science	
	Semester Credit Hours	16
Spring		
GEOL 312	Structural Geology and Tectonics	4
GEOP 313	Geophysical Field Methods	4
GEOP 361	Geophysical Signal Processing	3
	Select one of the following:	3
	American history	
	Government/Political science	
Technical elective 1		3
	Semester Credit Hours	17
Fourth Year		
Fall		
GEOP 421	Seismology	4
GEOP 413	Near-surface Geophysics	3
GEOL 450	Geology Senior Project	3
Language, philosophy and culture elective 2		3
	Semester Credit Hours	13
Spring		
	Select one of the following:	3
	American history	
	Government/Political science	

Creative arts elective	3
Creative arts elective 2	3
Social and behavioral science elective 2	3
Geophysics elective 3	3
Technical electives 1	3
Semester Credit Hours	15
Total Semester Credit Hours	120

1Any science, math or engineering course that augments the degree with the approval of the advisor.

2The Graduation requirements include a requirement for three hours of international and cultural diversity courses and three hours of cultural discourse courses. A course satisfying a Core category, a college/department requirement, or a free elective can be used to satisfy this requirement. See academic advisor.

3Any approved 400-level geophysics course not already required.

Additional information

Required Proposal [BSGEOP_DegreeEvaluation_updated.pdf](#)
 Forms [PresidentApprovalFacultySenateItems111416.pdf](#)
[BSGeophysics.pdf](#)

Reviewer Comments **Sandra Williams (sandra-williams) (11/05/18 3:12 pm):** UCC approved November 2018.

Key: 412

[Print](#)

Detail Requirements

David Sparks
Sep 30, 2018 10:18 am

Viewing: Degree Evaluation (DEGEVAL, , Email)
Change Student
Return to Graduate Committee Student Section

Information for Degree Evaluation

This is NOT an official evaluation.

Print Instructions

Program Evaluation

Limitation Correspondence: No more than 12 hours of correspondence earned through an accredited institution may be used for an undergraduate degree.

Limitation Combination: Maximum combination of 18 hours of 481, 482, 485 and/or 491 courses may be used for an undergraduate degree.

Limitation No more than 50% of courses required for the degree plan can be taken as Distance Education Courses for non-distance degree programs.

Limitation Only one of the following will satisfy the requirements for a degree: GENE 301, GENE 302, GENE 315, and GENE 320.

Limitation Only one of the following will satisfy the requirements for a degree: MATH 131, MATH 142, MATH 147, MATH 151, and MATH 171.

Limitation Only one of the following will satisfy the requirements for a degree: MATH 140, MATH 141, and MATH 166.

Limitation Only one of the following will satisfy the requirements for a degree: MATH 148, MATH 152, and MATH 172.

Limitation Only one of the following will satisfy the requirements for a degree: MATH 221, MATH 251, and MATH 253.

Limitation Only one of the following will satisfy the requirements for a degree: MATH 304, MATH 309, MATH 311, and MATH 323.

Limitation Only one of the following will satisfy the requirements for a degree: STAT 301, STAT 302, and STAT 303.

Program :	BS GEOP	Catalog Term :	Fall 2018 - College Station
Campus :	College Station	Evaluation Term :	Fall 2018 - College Station
College :	Geosciences	Expected Graduation Date :	
Degree :	Bachelor of Science	Request Number :	3
Level :	Undergraduate	Results as of :	Sep 30, 2018
Majors :	Geophysics	Minors :	
Departments :	Geology & Geophysics	Concentrations :	

	Met Credits		Courses	
	Required	Used	Required	Used
Total Required :	No	120.000	0.000	0
Program GPA :	Yes	.00	.00	
Overall GPA :	No	2.00	.00	
Other Course Information				
Transfer :		0.000		0

This is NOT an official evaluation.

Area Major Coursework (55.000 credits) - Not Met :

Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course Title	Attribute	Credits	Grade	Source
No		A.	GEOL 180	1hr											
No	AND	B.	GEOL 150	4hrs											
No	AND	C.	GEOL 152	4hrs											
No	AND	D.	GEOL 203	4hrs											
No	AND	E.	GEOL 304	4hrs											
No	AND	F.	GEOL 250	4hrs											
No	AND	G.	GEOL 210	3hrs											
No	AND	H.	GEOL 312	4hrs											
No	AND	I.	GEOP 341	3hrs											
No	AND	J.	GEOP 413	3hrs											
No	AND	K.	GEOP 421	4hrs											

No AND L. GEOP 361 3hrs
 No AND M. GEOL 306 4hrs
 No AND N. GEOP 313 4hrs
 No AND O. GEOL 450 3hrs
 No AND P. GEOP Elective 3hrs
 Select from GEOP 400-499.

Total Credits and GPA 0.000 .00

unofficial evaluation

Area Supporting Coursework (6.000 credits) - Not Met

Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course	Title	Attribute	Credits	Grade	Source
No		A.	Technical Electives 6hrs													
			Any science, math or engineering course that augments the degree with approval of the advisor.													

Total Credits and GPA 0.000 .00

unofficial evaluation

Area Communication (6.000 credits) - Not Met

Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course	Title	Attribute	Credits	Grade	Source
No		A.	ENGL 104 3hrs													
No	AND	B.	Communication Rqmt 3hrs													
			Select 3 hours from any courses with the Communication attribute [KCOM].													

Total Credits and GPA 0.000 .00

unofficial evaluation

Area Mathematics (17.000 credits) - Not Met

Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course	Title	Attribute	Credits	Grade	Source
No		A.	MATH 151 4hrs													
No	AND	B.	MATH 152 4hrs													
No	AND	C.	MATH 251 3hrs													
No	AND	D.	MATH 308 3hrs													
No	AND	E.	MATH 311 3hrs													

Total Credits and GPA 0.000 .00

unofficial evaluation

Area Life and Physical Sciences (15.000 credits) - Not Met

Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course	Title	Attribute	Credits	Grade	Source
No		A.	PHYS 218 PHYS 206 and PHYS 226													
No	AND	B.	PHYS 221													
No	AND	C.	PHYS-208 PHYS 207 and PHYS 227													
No	AND	D.	CHEM 107 and 117													

Total Credits and GPA 0.000 .00

unofficial evaluation

Area Language, Philosophy & Culture (3.000 credits) - Not Met

:

Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course	Title	Attribute	Credits	Grade	Source
No	A.		Lang, Phil, Culture Rqmt	3hrs												
														Total Credits and <u>GPA</u>	0.000	.00

unofficial evaluation

Area Creative Arts (3.000 credits) - Not Met

:

Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course	Title	Attribute	Credits	Grade	Source
No	A.		Creative Arts Requirement	3hrs												
														Total Credits and <u>GPA</u>	0.000	.00

unofficial evaluation

Area Social and Behavioral Sciences (3.000 credits) - Not Met

:

Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course	Title	Attribute	Credits	Grade	Source
No	A.		Social Science Rqmt	3hrs												
														Total Credits and <u>GPA</u>	0.000	.00

unofficial evaluation

Area : Citizenship (12.000 credits) - Not Met

Description Completion of 4 semesters of Upper-Level ROTC may be substituted for 3 hours of American History and 3 hours of Political Science.

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Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course	Title	Attribute	Credits	Grade	Source
No	A.		American History Rqmt	6hrs												
No	AND	B.	Political Science Rqmt	6hrs												
														Total Credits and <u>GPA</u>	0.000	.00

unofficial evaluation

Area : Work Not Applied - Met

Description See advisor for acceptable substitutions.

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Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course	Title	Attribute	Credits	Grade	Source
No	A.		Courses not applied													
														Total Credits and <u>GPA</u>	0.000	.00

unofficial evaluation

Area University Writing Requirement - Not Met

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Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course	Title	Attribute	Credits	Grade	Source
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No A. Writing Requirement
 Two courses required.
 Only sections of GEOL 210, 450 with the Writing attribute
 [UWRT] or with the Communication [UCRT] attribute may be used
 to satisfy this requirement.

Total Credits and GPA 0.000 .00

unofficial evaluation

Area Int'l & Cult Diversity - Not Met
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Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course	Title	Attribute	Credits	Grade	Source
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No A. Int'l & Cultural Diversity 6hr
 Select from courses with the International and Cultural Diversity
 attribute [UICD] (except sections of BUSN 289 with the UWRT
 attribute).

Total Credits and GPA 0.000 .00

unofficial evaluation

Area Foreign Language - Not Met
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Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course	Title	Attribute	Credits	Grade	Source
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No A. Foreign Language Rqmt
 Complete one of the following:
 1. Two years of the same foreign language in High School.
 2. A two semester sequence of the same foreign language for
 University credit.

Total Credits and GPA 0.000 .00

unofficial evaluation

Area : Residence Requirement - Not Met

Description A minimum of 36 hours of 300-400 level coursework must be completed at Texas A&M University. 12 hours must be in the major field.

Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course	Title	Attribute	Credits	Grade	Source
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No A. Residence-Major 12hrs
 Select any 300 or 400 courses.

No AND B. Residence 300-499 24hrs
 Select any 300 or 400 level courses.

Total Credits and GPA 0.000 .00

unofficial evaluation

Area GPR-Major - Not Met
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Met	Condition	Rule	Subject	Attribute	Low	High	Required Credits	Required Courses	Term	Subject	Course	Title	Attribute	Credits	Grade	Source
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No A. Major GPR 75+hrs
 Includes CHEM 100-499; GEOL 100-499; GEOP 100-499; MATH
 151-152, 171-172, 221, 251, 253, 308, 311, 412; PHYS 208, 218,
 221, 302, 304.

Total Credits and GPA 0.000 .00

unofficial evaluation

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