## **CLIMATE CHANGE AND SOLUTIONS (B.S.)**

Required coursework includes the university requirements (see regulation  ${\sf J}$ ) and:

Code	Title	Hours		
ENGL 317	Technical Writing II	3		
or ENGL 318	Science Writing			
ENGL 322	Climate Change Fiction	3		
GEOG 100	Introduction to Planet Earth	4		
& 100L	and Introduction to Planet Earth Lab			
or GEOL 101	Physical Geology			
& 101L	and Physical Geology Lab			
or GEOL 111 & 111L	Physical Geology for Science Majors and Physical Geology for Science Majors Lab			
or GEOL 102 & 102L	Historical Geology and Historical Geology Lab			
GEOG 165	Human Geography	3		
GEOG 200	World Cultures and Globalization	3		
GEOG 301	Meteorology	3		
GEOG 313	Global Climate Change	3		
GEOG 385	Foundations of GIS	3		
GEOG 401	Climatology	3		
GEOG 411	Natural Hazards and Society	3		
GEOG 430	Climate Change Ecology	3		
GEOG 435	Climate Change Mitigation	3		
GEOG 488	Geography of Energy Systems	3		
GEOG 493	Senior Capstone in Geography	3		
GEOL 212	Dinosaurs and Prehistoric Life	4		
MATH 143	College Algebra	3		
SOC 101	Introduction to Sociology	3		
SOC 466	Climate Change and Society	3		
SOIL 436	Principles of Sustainability	3		
STAT 251	Statistical Methods	3		
Select one of the following courses: 3				
IS 322	International Environmental Governance			
NRS/POLS 462	Natural Resource Policy			
POLS 364	Politics of the Environment			
Select at least 18 credits from Elective Bin 1 and at least 9 credits 27 from Elective Bin 2.				
Elective Bin 1 (Bio	physical Science)			
BE 453	Northwest Climate and Water Resources Change	9		
GEOG 317	Tree Rings and Environmental Change			
GEOL 309	Ground Water Hydrology			
GEOL 435	Glaciology and the Dynamic Frozen Earth			
GEOL 462	Petroleum Systems and Stratigraphic Concepts			
GEOL 467	Volcanology (* Only will count for one track)			
GEOL 471	Ore Deposits and Exploration			
Elective Bin 2 (Hui	man Dimensions)			
ENVS 415	Environmental Lifecycle Assessment			

Total Hours			
	SOIL 427	Sustainable Food Systems	
	SOIL 210	Introduction to Food Systems	
	SOC 465	Environmental Justice	
	POLS 364	Politics of the Environment	
	NRS/POLS 462	Natural Resource Policy	
	IS 322	International Environmental Governance	
	GEOL 467	Volcanology	
	GEOG 420	Land, Resources, and Environment	
	GEOG 350	Sustainability of Global Development	
	ENVS 485	Energy Efficiency and Conservation	
	ENVS 484	History of Energy	
	ENVS/AGEC 477	Law, Ethics, and the Environment	

Note that GEOL 467 Volcanology only counts for one bin. If NRS/POLS 462, IS 322, or POLS 364 are taken as part of the core curriculum they do not count for credit in Elective Bin 2

Courses to total 120 credits for this degree.

Fall Term 1		Hours		
ENGL 101	Writing and Rhetoric I	3		
GEOG 100 & 100L or GEOL 101 and GEOL 101L or GEOL 111 and GEOL 111L or GEOL 102 and GEOL 102L	Introduction to Planet Earth or Physical Geology and Physical Geology Lab or Physical Geology for Science Majors and Physical Geology for Science Majors Lab or Historical Geology and Historical Geology Lab	4		
Oral Communication Cou	rse	3		
Elective Course		2		
MATH 143 or MATH 160 or MATH 170 or MATH 175	College Algebra or Survey of Calculus or Calculus I or Calculus II	3		
	Hours	15		
Spring Term 1				
ENGL 102	Writing and Rhetoric II	3		
GEOG 165	Human Geography	3		
SOC 101	Introduction to Sociology	3		
STAT 251	Statistical Methods	3		
Humanistic and Artistic Ways of Knowing Course (ENGL 322 rec)				
Fall Term 2	Hours	15		
GEOL 212	Dinosaurs and Prehistoric Life	4		
GEOG 313	Global Climate Change	3		
eNGL 317 or ENGL 318	Technical Writing II or Science Writing	3		
Scientific Ways of Knowir	ng Course (if needed)	4		
Elective		1		
	Hours	15		
Spring Term 2				
GEOG 385	Foundations of GIS	3		
GEOG 200	World Cultures and Globalization	3		
Elective Bin 1 Course		3		
Policy Course Elective		3		
Elective Course		3		
	Hours	15		

## Fall Term 3 GEOG 411 Natural Hazards and Society 3 Elective Bin 1 Course 3 Humanistic and Artistic Ways of Knowing Course 3 GEOG 301 Meteorology 3 GEOG 488 Geography of Energy Systems 3 15 Hours Spring Term 3 **GEOG 401** Climatology 3 American Diversity Course 3 Elective Bin 1 Course 3 **GEOG 430** Climate Change Ecology 3 SOC 466 Climate Change and Society 3 15 Hours Fall Term 4 **GEOG 435** Climate Change Mitigation 3 GEOG 493 Senior Capstone in Geography 3 Elective Bin 1 Course 3 Elective Bin 2 Course 3 **Elective Course** 3 15 Hours Spring Term 4 SOIL 436 Principles of Sustainability 3 Elective Bin 1 Course 3 Elective Bin 1 Course 3 Elective Bin 2 Course 3 Elective Bin 2 Course 3 15 Hours **Total Hours** 120

- Explain the physical, chemical, and biological processes that govern the Earth's climate system and how people influence the climate system.
- Understand and explain climate change impacts on both human and natural systems, and be able to identify regions, ecosystems, and groups most vulnerable to climate change
- 3. Demonstrate knowledge about the strategies for mitigating climate change and options for adapting to its impact.
- 4. Communicate climate science and solutions in an effective manner to a variety of audiences, including stakeholders and the general public.