## Geology (GEOL)

Fall         Hours         Spring         Hours           ENGL 1100 English Composition II         3         3 ENGL 1120 English Composition II         3           GEOL 1100 Dynamic Earth         4 GEOL 1110 Earth and Life Through Time         4           Core Science¹         4 Core Science¹         4           Core History I         3 Core History II         3           The Hours Spring Hours           GEOL 3550 Field Geology:           Methods and Application         3 Core Science¹         4           GEOL 3550 Field Geology:         3 GEOL 2050 Igneous and Metamorphic Petrology         4           Methods and Application         4 Free Elective         3           GEOL 2020 Professional Development         4 Free Elective         3           GEOL 2020 Professional Development         1 Math Requisite²         3-4           Junior           Fall         Hours         Spring         Hours           GEOL 2000 Professional Development           Development         1         Technical Elective         3 GEOL 300 Secured Field Geology         4           GEOL 2000 Introduction to Paleohiology         4 Technical Elective         3 GEOL 300 Secured Field Geology         3 GEOL 300 Secured Field Geology         3 GEOL Ele	Freshman					
GEOL 1100 Dynamic Earth	Fall	Hours	Spring	Hours		
Core Science	ENGL 1100 English Composition I	3	ENGL 1120 English Composition II	3		
	GEOL 1100 Dynamic Earth	4		4		
14	Core Science <sup>1</sup>	4	Core Science <sup>1</sup>	4		
Sophomore   Fall	Core History I	3	Core History II	3		
Fall         Hours         Spring         Hours           GEOL 3550 Field Geology: Methods and Application         3 Core Science¹         4           GEOL 2010 Mineralogy and Optical Crystallography         5 GEOL 2050 Igneous and Metamorphic Petrology         4 Free Elective         3           GEOL 2000 Professional Development         1 Math Requisite²         3-4           Core Social Science         3         14-15           Junior           Fall         Hours         Spring         Hours         Summer         Hours           Core Science¹         4 Technical Elective         3 GEOL 3650 Advanced Field         3 GEOL 3650 Advanced Field         3 GEOL 3200 Introduction to Paleobiology         3 GEOL 3400 Structural Geology         4 Geology<		14		14		
GEOL 3550 Field Geology: Methods and Application         3 Core Science¹         4           GEOL 2010 Mineralogy and Optical Crystallography         5 GEOL 2050 Igneous and Metamorphic Petrology         4           MATH 1610 Calculus I         4 Free Elective         3           GEOL 2000 Professional Development         1 Math Requisite²         3-4           Core Social Science         3         16         14-15           Junior         Fall         Hours         Spring         Hours         Summer         Hours           Core Science¹         4 Technical Elective         3 GEOL 3650 Advanced Field         3 Geology         4 Hours           GEOL 3200 Introduction to Paleobiology         4 Technical Elective         3 GEOL 3650 Advanced Field         3 GEOL Science³         3 GEOL Elective⁴         3 GEOL Elective⁴         3 GEOL Science³         3 GEOL Science³         3 GEOL Science³         3 GEOL Elective⁴         6 GEOL A110 Stratigraphy         3 GEOL Elective⁴         6 GEOL	Sophomore					
Methods and Application           GEOL 2010 Mineralogy and Optical Crystallography         5 GEOL 2050 Igneous and Metamorphic Petrology         4           MATH 1610 Calculus I         4 Free Elective         3           GEOL 2000 Professional Development         1 Math Requisite <sup>2</sup> 3-4           Core Social Science         3           16	Fall	Hours	Spring	Hours		
Optical Crystallography         Metamorphic Petrology           MATH 1610 Calculus I         4 Free Elective         3           GEOL 2000 Professional Development         1 Math Requisite²         3-4           Core Social Science         3         14-15           Junior           Fall         Hours         Spring         Hours         Summer         Hours           Core Science¹         4 Technical Elective         3 GEOL 3650 Advanced Field Geology         3           GEOL 3200 Introduction to Paleobiology         3 GEOL 3400 Structural Geology         4 Free Elective⁴         3 GEOL 4110 Stratigraphy         3 GEOL 4110 Stratigraphy         3 GEOL 4110 Stratigraphy         3 GEOL 4110 Stratigraphy         3 GEOL Elective⁴         6 GEOL Elective⁴		3	Core Science <sup>1</sup>	4		
Math Requisite   Second Science   Seco		5	_	4		
Development           Core Social Science         3           16	MATH 1610 Calculus I	4	Free Elective	3		
Technical Elective   Hours   Spring   Hours   Summer   Hours   Hours   Summer   Hours   Hours   Summer   Hours   Summer   Hours   Summer   Hours   Summer   Hours   Summer   Hours   Hours   Hours   Hours   Summer   Hours   Hours		1	Math Requisite <sup>2</sup>	3-4		
Name	Core Social Science	3				
Fall Hours Spring Hours Summer Hours Core Science 1 4 Technical Elective 3 GEOL 3650 Advanced Field Geology  GEOL 3200 Introduction to Paleobiology  GEOL Elective 4 6 Core Social Science 3 3 Free Elective 4 6 Core Fine Arts 3 3 Free Elective 4 6 Core Fine Arts 3 3 5 5 5 5 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7		16		14-15		
Core Science 1 4 Technical Elective 3 GEOL 3650 Advanced Field Geology  GEOL 3200 Introduction to Paleobiology  GEOL Elective 4 6 Core Social Science 3 3 Free Elective 5 3 GEOL Elective 4 3 Core Fine Arts 3 3  Senior Fall Hours Spring Hours  GEOL 4010 Sedimentary Petrology  GEOL Elective 4 3 GEOL Elective 4 6 GEOL 5830 Geographic Information Systems  GEOL 4740 Senior Seminar  Core literature 1 3 UNIV 4AAO Achieve the Creed 0	Junior					
GeOL 3200 Introduction to Paleobiology   4	Fall	Hours	Spring	Hours	Summer	Hours
Paleobiology           GEOL Elective <sup>4</sup> 6 Core Social Science <sup>3</sup> 3           Free Elective         3 GEOL Elective <sup>4</sup> 3           Core Fine Arts <sup>3</sup> 3           Senior         Fall         Hours           GEOL 4010 Sedimentary         3 GEOL 4110 Stratigraphy         3           Petrology           GEOL Elective <sup>4</sup> 3 GEOL Elective <sup>4</sup> 6           GEOG 5830 Geographic Information Systems         4 Core Humanities         3           GEOL 4740 Senior Seminar         2 Core Literature II         3           Core literature I         3 UNIV 4AA0 Achieve the Creed         0	Core Science <sup>1</sup>	4	Technical Elective	3		3
Free Elective   3   GEOL Elective   3   Core Fine Arts   3   3		3	GEOL 3400 Structural Geology	4		
Core Fine Arts <sup>3</sup> 3         16       16       3         Senior         Fall       Hours         GEOL 4010 Sedimentary       3 GEOL 4110 Stratigraphy       3         GEOL Elective <sup>4</sup> 6       GEOL Elective <sup>4</sup> 6         GEOG 5830 Geographic Information Systems       4 Core Literature II       3         GEOL 4740 Senior Seminar       2 Core Literature II       3         Core literature I       3 UNIV 4AA0 Achieve the Creed       0	GEOL Elective <sup>4</sup>	6	Core Social Science <sup>3</sup>	3		
Senior Fall Hours Spring Hours GEOL 4010 Sedimentary 3 GEOL 4110 Stratigraphy 3 GEOL Elective 4 6 GEOG 5830 Geographic Information Systems GEOL 4740 Senior Seminar 2 Core Literature II 3 Core literature I 3 UNIV 4AA0 Achieve the Creed 0	Free Elective	3	GEOL Elective <sup>4</sup>	3		
Senior Fall Hours Spring Hours GEOL 4010 Sedimentary Petrology GEOL Elective <sup>4</sup> 3 GEOL Elective <sup>4</sup> 6 GEOG 5830 Geographic 4 Core Humanities 3 Information Systems GEOL 4740 Senior Seminar 2 Core Literature II 3 Core literature I 3 UNIV 4AA0 Achieve the Creed 0			Core Fine Arts <sup>3</sup>	3		
Fall Hours Spring Hours  GEOL 4010 Sedimentary 3 GEOL 4110 Stratigraphy 3  Petrology  GEOL Elective <sup>4</sup> 3 GEOL Elective <sup>4</sup> 6  GEOG 5830 Geographic 4 Core Humanities 3  Information Systems  GEOL 4740 Senior Seminar 2 Core Literature II 3  Core literature I 3 UNIV 4AA0 Achieve the Creed 0		16		16		3
GEOL 4010 Sedimentary Petrology  GEOL Elective <sup>4</sup> 3 GEOL Elective <sup>4</sup> 6 GEOG 5830 Geographic Information Systems  GEOL 4740 Senior Seminar 2 Core Literature II 3 UNIV 4AA0 Achieve the Creed 0	Senior					
Petrology GEOL Elective <sup>4</sup> 3 GEOL Elective <sup>4</sup> 6 GEOG 5830 Geographic Information Systems GEOL 4740 Senior Seminar 2 Core Literature II 3 UNIV 4AA0 Achieve the Creed 0	Fall	Hours	Spring	Hours		
GEOG 5830 Geographic 4 Core Humanities 3 Information Systems  GEOL 4740 Senior Seminar 2 Core Literature II 3 Core literature I 3 UNIV 4AA0 Achieve the Creed 0						
Information Systems  GEOL 4740 Senior Seminar  Core literature I  3  UNIV 4AA0 Achieve the Creed  0	_		GEOL 4110 Stratigraphy	3		
Core literature I 3 UNIV 4AA0 Achieve the Creed 0	Petrology	3				
	Petrology GEOL Elective <sup>4</sup> GEOG 5830 Geographic	3	GEOL Elective <sup>4</sup>	6		
15 15	Petrology GEOL Elective <sup>4</sup> GEOG 5830 Geographic Information Systems	<b>3</b> 4	GEOL Elective <sup>4</sup> Core Humanities	<b>6</b>		
	Petrology GEOL Elective <sup>4</sup> GEOG 5830 Geographic Information Systems GEOL 4740 Senior Seminar	3 4 2	GEOL Elective <sup>4</sup> Core Humanities Core Literature II	<b>6</b> 3		

Total Hours: 123-124

Courses in BOLD will be used to calculate GPA in major.

Options for courses labeled CORE are in the Auburn University Bulletin (https://bulletin.auburn.edu/) under Core Curriculum.

Take CHEM 1030/CHEM 1031, BIOL 1020/BIOL 1021, PHYS 1500, and 4th course can be either CHEM 1040/CHEM 1041, BIOL 1030/BIOL 1031, or PHYS 1510.

Math Requisite can be either MATH 1620 Calculus II (4), STAT 2510 (3), or STAT 3010 (3).

<sup>3</sup> GEOG 1010 Global Geography is suggested for majors (as one of their Core Social Science requirements).

**Geology Electives:** 18 hours required. Geology electives may be selected from the following courses with NO MORE THAN 3 hours coming from the unspecified group (GEOL 4930 and GEOL 4980).

## **GEOL Electives:**

GEOL 3060 Lunar and Planetary Geology (3)

GEOL 4210 Economic Geology (3)

GEOL 4260 Introduction to Geochemistry (3)

GEOL 5060 Introduction to Micropaleontology (3)

GEOL 5100 Hydrogeology (3)

GEOL 5220 Geomorphology (3) (also cross-listed as GEOG 5220 Geomorphology)

GEOL 5300 Basin Analysis (3)

GEOL 5440 Electron Microprobe Analysis (3)

GEOL 5500 Petroleum Geology (3)

GEOL 5600 Applied Geophysics (4)

GEOL 5700 Geohealth (3)

GEOL 5840 Climate Change and Society (3)

No more than 3 hours total can count towards your 18 hours of GEOL electives from the following:

GEOL 4930 Directed Studies in Undergraduate Research (1-3) (no more than 3 hours)

GEOL 4980 Undergraduate Research Methods (1-3) (no more than 3 hours)

**Technical Electives**: The following courses are approved. Other courses may be permitted with prior approval of the GEOL advisor. Students must meet with their Geology advisor and have technical electives approved in advance. An approval form must be on file in the Dean's office in order to be cleared for graduation.

CSES 5000, CSES 5080, CSES 5150, CSES 5300

ANTH any 2000+ course

BIOL 1030/BIOL 1031, BIOL 2425, BIOL 3030, BIOL 3060, BIOL 3075, BIOL 3200, BIOL 4010, BIOL 4020

CIVL 2010, CIVL 3310, CIVL 4210, CIVL 4310, CIVL 5330, CIVL 5340

CHEM 1040/CHEM 1041, CHEM 1110/CHEM 1120, CHEM 1117/CHEM 1127, CHEM 2070, CHEM 3050, any 3000-5000 course

COMP 2210, any 2000-3000 course

GEOG any 3000-5000 course

MATH any 2000-5000 course

MECH any 3000-5000 course

PHYS 1510 or any 2000-5000 course

STAT any 2000-5000 course