

# BACHELOR OF ARTS IN GEOLOGY

The Bachelor of Arts in Geology prepares students for entry-level employment within the wide-ranging fields of geology. The dominant fields of geological employment include:

- Environmental geology
- Construction
- Petroleum geology
- Water resources
- Mining
- Hydrogeology
- Government regulations and compliance
- Pipeline construction

The Bachelor of Arts in Geology degree program can be completed in eight semesters if students average sixteen hours of coursework per semester.

For more information, visit the Department of Physics, Astronomy, Geology, and Environmental Sciences.

The Bachelor of Arts degree requires the successful completion of a minimum of 72 s.h. of core and elective courses.

COURSE	TITLE	S.H.
<b>FIRST YEAR REQUIREMENT - STUDENT SUCCESS</b>		
YSU 1500	Success Seminar	1-2
or YSU 1500S	Youngstown State University Success Seminar	
or HONR 1500	Intro to Honors	
<b>General Education Requirements</b>		
ENGL 1550	Writing 1	3-4
or ENGL 1549	Writing 1 with Support	
ENGL 1551	Writing 2	3
Mathematics Requirement (included in the major)		
Arts and Humanities (6 s.h.)		
Natural Sciences (2 courses, 1 with lab-included in the major)		
Social Science (6 s.h.)		
<b>General Education Electives</b>		
General Education Electives		
CMST 1545	Communication Foundations (required)	3
<b>Foreign Language Requirement</b>		
FNLG 1501	Conversational Foreign Language 1	3
FNLG 1502	Conversational Foreign Language 2	3
<b>Major Requirements</b>		
GEOL 1505 & 1505L	Physical Geology and Physical Geology Laboratory	4
ENST 2600 & 2600L	Foundations of Environmental Science and Foundations of Environmental Science Laboratory	4
GEOL 2605	Historical Geology	4
GEOL 3700	Mineralogy	3
GEOL 3701	Geomorphology	3
GEOL 3705	Structures and Landscapes	4
GEOL 3717	Petrology	3
GEOL 3750	Geoscience Seminar	1
GEOL 5802	Sedimentology and Stratigraphy (Capstone course)	3
MATH 1570	Applied Calculus 1	4
<b>Electives</b>		

Electives (any)		10
<b>Science Electives I:</b>		
Select a minimum of 21 s.h. from the following:		21
ASTR 2609	Moon and Planets	
BIOL 2601	General Biology 1: Molecules and Cells	
BIOL 2601L	General Biology I: Molecules and Cells Laboratory	
BIOL 2602	General Biology 2: Organisms and Ecology	
BIOL 2602L	General Biology: Organisms and Ecology Laboratory	
CHEM 1515	General Chemistry 1	
CHEM 1515L	General Chemistry 1 Laboratory	
CHEM 1516	General Chemistry 2	
CHEM 1516L	General Chemistry 2 Laboratory	
GEOG 2630	Weather	
MATH 2670	Applied Calculus 2	
PHYS 1501 & 1501L	Fundamentals of Physics 1 and Fundamentals of Physics Laboratory 1	
GEOL 2602	Introduction to Oceanography	
PHYS 1502 & 1502L	Fundamentals of Physics 2 and Fundamentals of Physics Laboratory 2	
STAT 3717	Statistical Methods	
<b>Science Electives II:</b>		
Select a minimum of 20 s.h. from the following:		20
GEOL 3702	Glacial Geology	
GEOL 3706	Geology of Economic Mineral Deposits	
GEOL 3709	Subsurface Investigations	
GEOL 3714	Principles of Paleontology	
GEOL 3720	Field Investigations in Geology	
ENST 3751 & 3751L	Water Quality Analysis and Water Quality Analysis Lab	
ENST 3752	Soil Quality and Analysis	
ENST 3781	Environmental Sampling Methods	
GEOL 4804	Ground Water	
GEOL 4824	Tectonics	
GEOL 4825	Geophysical Well Log Analysis	
GEOL 4899	Special Topics	
GEOL 48XX	Geology Field Camp (4 s.h. minimum)	
GEOL 5805	Special Problems in Geology	
ENST 5810	Environmental Safety	
GEOL 5810	Groundwater Resource Evaluation	
GEOL 5815	Geology and the Environment 2	
GEOL 5817	Environmental Geochemistry	
ENST 5860	Environmental Regulations	
Electives to meet 120 Hours		2
<b>Total Semester Hours</b>		<b>120-122</b>
<b>Year 1</b>		
<b>Fall</b>		
YSU 1500	Success Seminar	1-2
or YSU 1500S	or Youngstown State University Success Seminar	
or HONR 1500	or Intro to Honors	
GEOL 1505 & 1505L	Physical Geology and Physical Geology Laboratory	4
ENGL 1550	Writing 1	3-4
or ENGL 1549	or Writing 1 with Support	
CHEM 1515 & 1515L	General Chemistry 1 and General Chemistry 1 Laboratory	4
GER Arts and Humanities Elective		3

Gen Ed Elective		3
<b>Semester Hours</b>		<b>18-20</b>
<b>Spring</b>		
GEOL 2605	Historical Geology	4
ENGL 1551	Writing 2	3
CHEM 1516 & 1516L	General Chemistry 2 and General Chemistry 2 Laboratory	4
GEOG 2626	World Geography	3
Gen Ed Elective		3
<b>Semester Hours</b>		<b>17</b>
<b>Year 2</b>		
<b>Fall</b>		
MATH 1570	Applied Calculus 1	4
GEOL 3700	Mineralogy	3
ENST 2600 & 2600L	Foundations of Environmental Science and Foundations of Environmental Science Laboratory	4
GEOL 3750	Geoscience Seminar (Optional)	1
<b>Semester Hours</b>		<b>12</b>
<b>Spring</b>		
GEOL 3717	Petrology	3
CMST 1545	Communication Foundations	3
Science Elective II		3-5
Science Elective I		3-5
Science Elective I		3-5
<b>Semester Hours</b>		<b>15</b>
<b>Year 3</b>		
<b>Fall</b>		
GEOL 3701	Geomorphology	3
FNLG 1501	Conversational Foreign Language 1	3
GER Social Science Elective		3
GEOL/ENST 3700+	Science Elective II	3-4
GEOL 3750	Geoscience Seminar (Optional)	1
Science Elective I		3-5
<b>Semester Hours</b>		<b>16</b>
<b>Spring</b>		
FNLG 1502	Conversational Foreign Language 2	3
GEOL 3705	Structures and Landscapes	4
GER Arts and Humanities		3
GEOL/ENST	Science Elective II	3-4
ENST 5810	Environmental Safety	3
<b>Semester Hours</b>		<b>16</b>
<b>Year 4</b>		
<b>Fall</b>		
GEOL 3750	Geoscience Seminar (Optional)	1
GEOL/ENST 3700+	Science Elective II	3-4
GEOL/ENST 3700+	Science Elective II	3-4
Science Elective Course		3
Science Elective Course		2
<b>Semester Hours</b>		<b>12</b>
<b>Spring</b>		
GEOL 5802	Sedimentology and Stratigraphy (Capstone Course)	3
Science Elective I		3-5
GEOL/ENST 3700+	Science Elective II	3-4
PHIL 2631	Environmental Ethics (GER Social and Personal Awareness)	3

Elective Course	2
<b>Semester Hours</b>	<b>14</b>
<b>Total Semester Hours</b>	<b>120-122</b>

Request a Graduation Evaluation after completing 80-85 s.h. from the STEM Advising Center, 2325 Moser Hall, (330) 941-2512.

The Bachelor of Arts degree in Geology prepares students for employment by:

1. Encouraging and preparing undergraduate students for engagement in research activities,
2. Improving the preparation of graduates for the regional growth of geology careers due to the growing natural gas and petrochemical processing industry,
3. The program change places an emphasis on applied learning.