MINNESOTA STATE UNIVERSITY MANKATO

Undergraduate Degree Map for Completion in Four Years

College:	College of Social & Behavioral Sciences
Department:	Geography
Name of Program:	EARTH SCIENCE
Degree Designation:	BA
Emphasis/Concentration:	
Option:	
Version:	1
Version Explanation:	
Type of Program:	Broad Major
Minor Required:	No
Specific Minor (if required):	

Program Description:

The Earth Sciences are focused on understanding the Earth's interrelated physical systems including: the atmosphere, biosphere, geosphere, hydrosphere, and Earth's place in the cosmos. Fundamental to Earth Science are the impacts of people on our planet's natural systems as well as the interaction of physical, chemical, and biological processes at all spatial scales ranging from submicroscopic to planetary, and over time scales from the immediate to billions of years. Thus, courses in Astronomy, Biology, Chemistry, Geography, Geology and Physics are required to fulfill the degree requirements. Majors in Earth Science can gain expertise in addressing critical societal issues related to environmental management, resource management, natural hazard management, resource exploration, atmospheric and climate sciences, water resources, and much, much more.

Admission Requirements:

A minimum of 32 earned semester hours. GPA of 2.0 ('C').

Advising:

You are expected to meet with your advisor on a regular basis to ensure courses are taken in an order that will lead to successful completion of the degree.

A complete listing of program faculty, policies, and course descriptions is available in the undergraduate bulletin.

TERM 1 - FALL

Designator:	Course:	Course Name:	Credits:	Milestones: Overall GPA ≥ 2.0 Course Completion Rate ≥ 67% Completion of ≥ 15 credit hours
Geog	101	Introduction to Physical Geography	3	Satisfies part of Gen Ed 3, Satisfies Gen Ed 10, and required for the major
Astronomy	101	Introduction to Astronomy	3	Required for the major
English	101	Composition	4	Satisfies Gen Ed 1A
Gen Ed 5	n/a	History and Social and Behavioral Sciences	3	Satisfies part of Gen Ed 5
FYEX	100	First Year Experience	1	Optional Gen Ed. Highly recommended
Gen Ed 11	n/a	Performance and Participation	1	Satisfies part of Gen Ed 11

Insert item

Term 1 Notes:

TERM 2 - SPRING

Designator:	Course:	Course Name:	Credits:	Milestones: Overall GPA ≥ 2.0 Course Completion Rate ≥ 67% Completion of ≥ 30 credit hours Advance to Sophomore status
Astronomy	102	Introduction to the Planets	3	Required for the major
Gen Ed 4	n/a	Mathematical/Logical Reasoning	4	Recommend Math 112 - College Algebra or higher
Gen Ed 11	n/a	Performance and Participation	1	Satisfies part of Gen Ed 11
Gen Ed 6	N/A	N/A	3	Satisfies part of Gen Ed 6
Biology	100	Our Natural World	4	Satisfies part of Gen Ed 3, and required for the major

Insert item

Term 2 Notes:

Biology 105W can be substituted for Biology 100, and satisfies part of the writing intensive course requirement, and it provides additional opportunities and pre-requisite for upper division biology courses.

TERM 3 - FALL

Designator:	Course:	Course Name:	Credits:	Milestones: Overall GPA ≥ 2.0 Course Completion Rate ≥ 67%
Chemistry	201	General Chemistry I	5	Required in the major
Geology	121	Physical Geology	4	Required in the major
Gen Ed 7	N/A	N/A	3	
Foreign Language	n/a	n/a	4	Required for the BA

Insert item

Term 3 Notes:

Consider a Writing Intensive Gen Ed 7 course, two are required.

TERM 4 - SPRING				
Designator:	***Course:***	***Course Name:***	***Credits:***	***Milestones:*** Overall GPA ≥ 2.0 Course Completion Rate ≥ 67% Completion of ≥ 60 credit hours Advance to Junior status
Geology	122	Earth History	4	Required in the major
Physics	211	Principles of Physics	4	Required in the major
Gen Ed 9	N/A	N/A	3+	
Foreign Language	n/a	n/a	4	Required for the BA

Insert item

Term 4 Notes:

Consider a Writing Intensive Gen Ed 9 course, two are required. Make sure you have planned 44 credits of Gen Ed.

TERM 5 - FALL				
Designator:	***Course:***	***Course Name:***	***Credits:***	***Milestones:*** Overall GPA ≥ 2.0 Course Completion Rate ≥ 67% Apply for Graduation
Gen Ed 8	n/a	n/a	3	
Geography	315	Geomorphology	3	Required for the major
Geology	201	Elements of Mineralogy	4	Required for the major
Gen Ed 1 pt.	n/a	n/a	3	
Geography	217	Weather	4	Required for the major

Insert item

Term 5 Notes:

Consider a Writing Intensive Gen Ed 8 course, two are required. Make sure you have planned 44 credits of Gen Ed.

TERM 6 - SPRING				
Designator:	***Course:***	***Course Name:***	***Credits:***	***Milestones:*** Overall GPA ≥ 2.0 Course Completion Rate ≥ 67% Completion of ≥ 90 credit hours Advance to Senior status
n/a	n/a	Earth Science Elective	3+	Required for the major
Gen Ed 5	n/a	History and Social and Behavioral Sciences	3+	
Gen Ed 6	n/a	Humanities and the Arts	3+	
n/a	n/a	Additional 300/400 course	3+	
n/a	n/a	Additional 300/400 course	3+	

Insert item

Term 6 Notes:

Strongly consider beginning work on Certificate in Geographic Information Science (GISc), i.e., take GEOG 373 - 4cr, or perhaps a second major, although one is not required. Completed the Writing Intensive requirement? Completed two "Purple" Diverse Cultures courses? Many Gen Ed 5 & 6 courses satisfy these requirements. Make sure you have planned 44 credits of Gen Ed.

TERM 7 - FALL				
Designator:	***Course:***	***Course Name:***	***Credits:***	***Milestones:*** Overall GPA ≥ 2.0 Course Completion Rate ≥ 67%
Geography	410	Climatic Environments	3	Required for the major
n/a	n/a	Additional 300/400 courses	9	
n/a	n/a	Earth Science Elective	3+	Required for the major

Insert item

Term 7 Notes:

Strongly consider continuing work on Certificate in Geographic Information Science (GISc), and/or taking additional Earth Science courses to build greater knowledge and skills.

TERM 8 - SPRING				
Designator:	***Course:***	***Course Name:***	***Credits:***	***Milestones:*** Overall GPA ≥ 2.0 Course Completion Rate ≥ 67%
n/a	n/a	Additional 300/400 courses	15	

Insert item

Term 8 Notes:

Strongly consider continuing work on Certificate in Geographic Information Science (GISc), and/or taking additional Earth Science courses to build greater knowledge and skills.

PROGRAM NOTES

The Certificate in Geographic Information Science provides skills in geospatial technologies that are critical in the workforce today. We cannot encourage you enough to complete this certificate. In Earth Science, more math is better. Strongly consider math through Calculus I and II and Ordinary Differential Equations and one year of Physics, rather than the one semester required. To become proficient in a foreign language, more than two semesters coursework is recommended as is a study abroad experience.

DEGREE MAP CHECKLIST: GRADUATION REQUIREMENTS	
☑	1. Minimum of 15 credits per semester
☑	2. General Education = 44 credits
☑	3. Diverse Cultures = 2 course (6 credits minimum) from two disciplines
☑	4. Writing Intensive = 2 courses (6 credits minimum)
☑	5. Major = 49 credits
☑	6. Upper-Division Requirements = 40 credits minimum
☐	7. Professional Education (if required) = 30 credits

☑	8. Language Requirements (if BA) = 8 credits minimum
☐	9. Minor = 0 credits
☑	10. Total credits required for degree 120

DEGREE MAP COMPLETE	
☑	Map is complete and ready for review 1. Faculty please send an email to your Department Chair when map is ready to review. 2. Department Chair please send an email to your Dean when map is ready to review. 3. Dean please send an email to the Assistant Vice President for Undergraduate Studies when map is ready to review.

DEAN APPROVAL	
☑	Map reviewed and approved by Dean

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