

# Curriculum Map – Earth Systems Science Area – Geospatial Science Track 2021-22

NOTE: This curriculum map assumes that students have not transferred in any previously completed college level courses.

**All baccalaureate degree seeking students must complete a minimum of 33 hours of general education courses which includes:**

FYS 101 – First Year Seminar	ENG 100 – Writing I
MATH 123, 131, 135, 152, 174 or 175*	ENG 200 – Writing II
COMS 108 – Fund. Of Speech Communication	Knowledge – Natural Science (NSC; select 2)
Knowledge – Arts & Humanities (HUM)	Global Cultures – Arts & Humanities (HUM)
Knowledge – Social & Behavioral Sciences (SBS)	Ethics & Civil Engagement – Social & Behavioral Sciences (SBS)

The approved NSC, HUM, and SBS course list is located in the current MSU Undergraduate Catalog.

\*If applicable, specific mathematics course required for degree shown below.

FIRST YEAR COURSE SCHEDULE								
✓	Fall Semester	Code	Credits	✓	Spring Semester	Code	Credits	
	FYS 101 First Year Seminar	G	3		ESS 201 Historical Geology	R	3	
	SSE 120 Satell. & Space Sys I	R	3		SSE 122 Satellites & Space Sys II	R	3	
	ESS 108 Phys. Geol. (Level 2 NSC)	R,G	4		CHEM 111 Princ. of Chemistry I (Level 2 NSC)	R,G	4	
	*MATH 152 College Algebra	G	3		ENG 200 Writing II	G	3	
	ENG 100 Writing I	G	3		CIS 101 Computers for Learning	R	3	
<b>Total Credit Hours</b>				<b>16</b>	<b>Total Credit Hours</b>			
					<b>16</b>			

SECOND YEAR COURSE SCHEDULE								
✓	Fall Semester	Code	Credits	✓	Spring Semester	Code	Credits	
	ESS 330 Geospatial Sci. I	R,U	3		ESS 331 Geospatial Sci II	R,U	3	
	ESS 276 Field Methods	R	3		PHYS 201 Elem Physics I	R	4	
	MATH 174 Pre-Calculus	R	3		BIOL 155 Environmental Biology	R	3	
	COMS 108 Speech Comm.	G	3		Level 2 SBS	G	3	
	ESS Elective	U	3		Level 2 HUM	G	3	
<b>Total Credit Hours</b>				<b>15</b>	<b>Total Credit Hours</b>			
					<b>16</b>			

THIRD YEAR COURSE SCHEDULE								
✓	Fall Semester	Code	Credits	✓	Spring Semester	Code	Credits	
	ESS 350 Geomorphology	R,U	3		ESS 455 Geospat Sci Application	R,U	3	
	ESS 401 Remote Sensing	R,U	3		Level 3 SBS	G	3	
	PHYS 202 Elem Phys II	R	4		ESS Elective	U	3	
	Level 3 HUM	G	3		Unrestricted elective	E	3	
	Unrestricted elective		3		Unrestricted elective	E	3	
<b>Total Credit Hours</b>				<b>16</b>	<b>Total Credit Hours</b>			
					<b>15</b>			

FOURTH YEAR COURSE SCHEDULE								
✓	Fall Semester	Code	Credits	✓	Spring Semester	Code	Credits	
	ESS 440 Biogeochem Cyc	R,U	3		ESS 325 Earth Structures & Tectonics	R,U	4	
	SSE 460 Spacecraft Sensors	R,U	3		ESS 499C Senior Thesis or Geology Fieldcamp	U	3-6	
	SSE 476 Special Projects	R,U	3		ESS Elective	U	3	
	Unrestricted elective	E	6		Unrestricted elective (if needed)	E	3	
<b>Total Credit Hours</b>				<b>15</b>	<b>Total Credit Hours</b>			
					<b>13-16</b>			

(E) Elective, (G) General Education Course, (S) Supplemental  
 (P) Pre-requisite, (R) Required Course, (U) Upper Division Course 300-400 level (you must have 42 hours)  
 Minimum of 120 hours required  
 Revised: 05-03-2021