

Name _____
 MSU ID# _____

Advisor _____

GEOHYDROLOGY OPTION
 CURRICULUM CHECKING SHEET
 (2010-2012 Catalog)

Courses REQUIRED by the Department

PREREQUISITES

**SEM.
CREDITSTAKEN GRADE**

FRESHMAN YEAR

Rubric	#	Core Course Title	PREREQUISITES	SEM.	CREDIT	STAKEN	GRADE
CHMY	141	College Chemistry I	Level 3 College Algebra		4		
CHMY	143	College Chemistry II	CHMY 141 OR CHMY 151		4		
GEO	101	IN Intro to Physical Geology & lab			4		
GPHY	111	CS Intro to Physical Geography & lab			4		
M	171	Q Calculus I	M 151 or MATH PLACEMENT TEST W/IN 12 MNTHS		3	Spr	
M	172	Q Calculus II	M 171		4		
		University core or elective			6		
		<i>TOTAL</i>			30		

SOPHOMORE YEAR

GEO	205	Mineralogy	GEO 101; CHMY 143		4	Spr	
GEO	211	Earth History and Evolution w/o lab	GEO 101		3	Spr	
ENSC	245	IN Soils	M 097 OR EQUIVALENT		3		
M	273	Multivariable Calculus	M 172		4		
M	274	Intro to Differential Equation	M 225		4		
PHSX	220	Physics I (w/calculus)	M 171		4		
PHSX	222	Physics II (w/calculus)	PHSX 220 or PHSX 240; M 172		4		
		University core or elective			4		
		<i>TOTAL</i>			30		

JUNIOR YEAR

ERTH	307	Principles of Geomorphology	GEO 101; GPHY 111		4	Fall	
ERTH	303	Weather and Climate	GPHY 111		3	Fall	
GEO	306	Igneous Petrology	GEO 205		3		
GEO	307	Sedimentary Petrology	GEO 205		3	Fall	
GEO	309	Sedimentation and Stratigraphy	GEO 211; GEO 307; M 182		4	Spr	
GEO	315	Structural Geology	GEO 306 or GEO 307; M171		4	Spr	
STAT	332	Stat-Scientist & Enar	M 182		3		
		University core or electives			6		
		<i>TOTAL</i>			30		

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SUMMER OF JUNIOR OR SENIOR YEAR

GEO	429	Field Geology	ERTH 307; GEO 211; GEO 307; GEO 309; GEO 315		6	Su	
		<i>TOTAL</i>	MUST RECEIVE A MINIMUM GRADE OF "C" IN THESE AREAS		6		

SENIOR YEAR

BIOB	170	IN Biology of Organisms	JR STANDING		4		
ERTH	432	Surface Water Resource	GPHY 111; STAT 216 or STAT 332; PHSX 205 or PHSX 220;		3	Fall	
GEO	420	Hydrogeology	JR STANDING		3	Fall	
			M 170 or M 182; CHMY 143; PHSX 205 or PHSX 220; GEO 101; GPHY 111				
		Select <u>TWO</u> of the four courses below					
ERTH	450	Snow Dynamics and Accumulation	JR OR SR STANDING		3	Spr	
		ALBILITY TO SKI AT INTERMEDIATE LEVEL IN ALPINE TERRAIN; STAT 216 or STAT 332;					
			PHSX 205 OR PHSX 220 AND GPHY 111				
ENSC	370	Water Quality	CHMY 141 or CHMY 151		3		
GPHY	357	Fund/Applications in Mapping					

ENSC	444	Watershed Hydrology	GPHY 111; ENSC 110; ENSC 245 IN (OR EQUIVALENT U	3		
ENSC	445	Watershed Analysis	ENSC 444 and STAT 216 or PSPP 318	3		
ENSC	453	Soil and Environmental Physics	ENSC 245 IN; M 170; COMPUTER LITERACY	3		
GPHY	284	Introduction to GIS Science and Cartography				
		University core or electives		8		
		<i>TOTAL</i>		24		
		<i>GRAND TOTAL</i>		<i>120</i>		

NOTE: A minimum of 120 credits is required for graduation; 42 of these credits must be in courses numbered 300 or above.

NOTE: Normal text shows courses offered every year, **BOLD** courses are planned to be offered in the first year of the cycle (e.g., 2008-9) and *ITALICIZED* courses are planned to be offered in the second year (e.g., 2009-10). All offerings are dependent upon available staffing.