



Student: _____

Expected Graduation Date: _____

Course	Course Title	Credits	Semester Taken
MAJOR REQUIREMENTS		61-69	
Area A: Core Requirements		12	
Take all five courses.			
EC 2001	Principles of Economics	3	
FW 2030	Natural Resources Conservation	2	
SS 1001	Orientation to SS	1	
SS 2300	Environment and Society	3	
SS 3313/ FW 3313	Sustainability Science	3	

Area B: Methods & Statistics		8-10	
FW 3540	An Introduction to GIS for Natural Resource Management	4	
SS 2001	Introduction to SS Research	3	
SS 2050	Fundamentals of GIS & Technologies	3	
SS 4009	Intro to Survey Methodology	3	
SS 4010	Statistics for the SS	3	
SS 4050	Adv. GIS Methods & Projects	3	
SS 4211	Ethnographic Methods	3	
SS 4630	Advanced Research in SS	2	
SS 4700	Communities and Research	3	

Area C: Environmental Sciences Choose three courses, at least one from each list.		7-12	
List 1: Ecology			
BL 3490	Principles of Ecology +Evolution	4	
BL 4090	Tropical Island Biology	2	
BL 4440	Fish Biology	4	
BL 4447	Stream Ecology	4	
BL 4450	Limnology	3	
BL 4461	Ecosystem Ecology	3	
BL 4465	Biological Oceanography	3	
FW 2010	Vegetation of North America	4	
FW 2060	Fundamentals of Environmental Sustainability	3	
FW 3020	Forest Ecology	3	
FW 3410	Conservation Biology	3	
FW 3610	Ornithology	4	
FW 3640	Aquatic Ecosystems	2	
FW 4128	Conservation Genetics	3	
FW 4220	Wetlands	4	
FW 4240	Mammalogy	4	
FW 4260	Population Ecology	3	
FW 4380	Landscape Ecology & Planning	3	
FW 4400	Urban Forestry		
List 2: Earth and Physical Science			
FW 3180	Geomorphology, Landscapes & Ecosystems	2	
FW 3330	Soil Science	4	
FW 4370	Forest & Landscape Hydrology	3	
FW 4710	Environmental Biogeochemistry	3	
GE 2000	Understanding the Earth	3	
GE 2100	Environmental Geology	3	
GE 2500	Intro to Oceanography	3	

Course	Course Title	Credits	Semester Taken
Area C - List 2 (continued)			
GE 2640	Atmospheric Observation & Meteorology	3	
GE 3320	Earth History	3	
GE 3850	Geohydrology	3	

Area D: Environmental Economics		3	
Choose one course.			
EC 4620	Energy Economics	3	
EC 4630	Mineral Industry Economics	3	
EC 4640	Natural Resource Economics	3	
EC 4650	Environmental Economics	3	

Area E: Environment and Sustainability		27	
Choose nine courses. Choose one course from five of the six lists, and choose two additional courses from within one list. The remaining two courses may come from any list.			
List 1: Policy			
FW 3110	Natural Resource Policy	3	
SS 2635	Comparative Politics	3	
SS 3600	American Foreign Policy	3	
SS 3612	International Relations	3	
SS 3621	Introduction to Public Policy and Public Management	3	
SS 3630	Environmental Policy and Politics	3	
SS 3800	Energy Policy and Technology	3	
SS 4325	Water Policy, History, and Governance	3	
SS 5635	International Environmental Policy	3	
UN 4400	Climate Science and Policy	3	
List 2: Engineering Sustainability			
CEE4506	Application of Sustainability Principles to Engineering Practice	3	
CEE3501	Environmental Engineering OR	3	
CEE3503	Fundamentals Environmental Engineering		
CMG4800	Sustainable Construction	3	
ENG 4510	Sustainable Futures I	3	
MEEM4685	Env Resp Design & Manufacturing	3	
List 3: Sustainability and Communities			
SS 3110	Food Systems & Sustainability	3	
SS 3300	Environmental Problems	3	
SS 3315	Population and Environment	3	
SS 4120	Anthropology of International Development	3	
FW 4380	Landscape Ecology and Planning	3	
SS 4390	Seminar in Sustainability	3-9	
SS 4530	Deindustrialization + the Urban Env.	3	
List 4: Environment and Society			
HU 3508	Literature and the Environment	3-6	
SS 3520	U.S. Environmental History	3	
SS 3280	Anthropology of Energy	3	
SS 3755	Sustainability and the Private Sector	3	
SS 3760	Human Dimension of Natural Res..	3	
SS 3801	Science, Technology, & Society	3	

Course	Course Title	Credits	Semester Taken
Area E – List 4 (continued)			
SS 3815	Energy and Society	3	
SS 4001	History of Social Thought	3	
SS 4120	Anthropology of International Development	3	
SS 4200	Environmental Anthropology	3	
SS 4400	Environmental Sociology	3	
SS 4540	Global Environmental History	3	
List 5: Environmental Health and Justice			
BL 4070	Environmental Toxicology	3	
BL 4120	Environmental Remediation	3	
FW 3075	Introduction to Biotechnology	3	
HU 4625	Risk Communication	3	
SS 3105	Native American & Indigenous Communities	3	
SS 3750	Social Inequality	3	
SS 3805	Environmental Justice	3	
SS 3811	Energy Security and Justice	3	
List 6: Decision Making and Persuasion			
PSY2800	Critical Thinking for Social & Behavioral Sciences	3	
PSY3200	Motivation and Emotion	3	
PSY3720	Social Psychology	3	
PSY4010	Cognitive Psychology	3	
PSY4750	Judgement & Decision Making	3	
SS 3805	Environmental Justice	3	
SS 3811	Energy Security & Justice	3	
EC 3400	Economic Decision Analysis	3	
MGT2000	Team Dynamics & Decision Making	3	
SS4001	History of Social Thought	3	

Area F: Culminating Experience Capstone, Internship, Thesis, or Research Experience focused on sustainability issues	4-5		
In consultation with an advisor who can assure the project focuses on sustainability, take one course listed here and participate in SS 4910.			
SS 4910	Professional Development for the Social Sciences	1	
SS 3090	UPERSS Project	0-3	
SS 3960	Cultural Immersion	3-9	
SS 4000	Independent Study	3-9	
SS 4501	Senior Thesis	3	
SS 4920	Internship Experience	3-9	
SS 4921	Washington Internship - Professional Practicum	3-9	
OR , students may participate in the Enterprise Program to serve as the culminating experience for the major, with approval from Enterprise faculty member and academic advisor and students must complete SS 4910. (3-4 credits plus SS 4910)			
SS 4910	Professional Development for the Social Sciences	1	
ENT3950	Enterprise Project Work III	1	
ENT3960	Enterprise Project Work IV	1	
ENT4900	Senior Enterprise Project Work V Non-Capstone	2	
ENT4910	Senior Enterprise Project Work VI Non-Capstone	2	
ENT4950	Enterprise Project Work V Capstone	2	
ENT4960	Enterprise Project Work VI Capstone	2	

Free Electives	16-24	

Course	Course Title	Credits	Semester Taken
General Education Requirements		24	
Courses used to complete General Education may not be used to complete other degree requirements.			

Core	12	
UN 1015	Composition	3
UN 1025	Global Issues*	3
	Critical & Creative Thinking – Goal 4	3
	Social Responsibility & Ethical Reasoning – Goal 8	3

*A 3000-level or higher modern language course may be used in place of UN 1025. The language course does not count toward the six credit upper level requirement.

HASS Courses	12	
	Communication/Composition	3
	Humanities & Fine Arts	3
	Social & Behavioral Sciences	3
	Any list above or Restricted list	3

- Each course can satisfy only one requirement
- No more than 3 credits from the Restricted List
- Six credits must be at the 3000-4000 level

Co-Curricular credits	3	
Required for graduation, but not included in the GPA or in the overall credits required for the degree		

STEM Requirements	11	
Mathematics: Four credits minimum. Courses must be selected from STEM Math course list.	4	

Lab/Science:	7	
Seven credits minimum in two different disciplines. Must be selected from STEM Lab/Science list and one must include or be taken with the accompanying laboratory . If courses taken in Area C are also on the STEM Lab/Science course list (e.g. GE2000, BL4090, FW2010, FW2060, FW3610, FW4128, FW4260, FW4240, FW3330), with advisor approval, the credits required in this area may be reduced and free electives will be increased		

Total Credits Required: 120

*This is not the official audit. The official audit can be found at <http://www.mtu.edu/registrar/students/major-degree/audit/sciarts/>