SCHOOL FOR ENVIRONMENT AND SUSTAINABILITY
UNIVERSITY OF MICHIGAN

Ecosystem Science and Management

Requirements		Notes	Course	Credits	Term
Ecosystem Science and Management Core	EAS 507 – Interpreting Research in Ecosystem Science and Management		507	2	W
	3 Ecosystem Science and Management Core Full course list starts on page 2.	9-12 credits			
SEAS Core	EAS 509 (Natural Systems Core) EAS 510 (Social Systems Core) or 3CR from the Social Systems distribution list*				
	IAMS Requirement* Two courses; 3CR minimum Please see the 6th page for approved courses.				
Electives	Electives	Must be a graduate level coursework.			
Analytics	Analytics	EAS 538 (or equivalent) plus one additional analytics course Check analytics list for acceptable			
Capstone or Non-Capstone	Capstone	At most 6 credit hours of EAS 701 (Master's Project) or At most 12 credits of EAS 700 (Master's Thesis) Students must petition to complete a practicum of thesis.			
	Non-Capstone	6CR of coursework with an ESM focus. Students need to petition to complete this option.			
TOTALS	TOTAL "EAS" CREDIT HOURS	Minimum 25 of 42 credit hours			
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*IAMS and Social Science Distribution courses can double-count with Core requirements but we do not double-count the actual credits.

**Any waiver or substitution of degree requirement must be approved by the appropriate faculty and submitted to SSC.

Ecosystem Science and Management courses currently being offered and likely to be offered in the next two years.* Courses in other specializations can also count toward course requirements.

*some of these offerings may change

ESM Course List				
ESM Core Course				
Course	Title	Instructor	Term	Lab Based
EAS 507	Interpreting Research in Ecosystem Science & Mgmt	Newell	Winter	No
Conservation, Restoration, and Management				
Course	Title	Instructor	Term	Lab Based
EAS 447/Environ 447	Forest Ecology & Management	Ibanez	Fall/every other year	Yes
Environ 421	Restoration Ecology	Adlerstein-Gonzalez	Fall	Yes
EAS 517	Conservation Biology	Schueller	Winter	Yes
EAS 523	Ecological Risk Assessment	Burton	Fall	No
EAS 579	The Hydrologic Cycle & Water Res Mgmt	Gronewold	Winter	No
Food Systems				
Course	Title	Instructor	Term	Lab Based
EAS 524	Agroecosystem Mgmt	Blesh	Winter	No
EAS 528	Foundations in Sus Food Systems	Blesh, Hoey, & Jones	Fall	No
EAS 553	Diverse Farming Systems	Perfecto	Fall	No
Global Issues				
Course	Title	Instructor	Term	Lab Based
EAS 519	Climate Change vs Everything Else	Burton	Fall	No
EAS 639.108	Con Bio and Ecosystem Health	Foufopoulos	Winter	No

Informatics				
Course	Title	Instructor	Term	Lab Based
EAS 531	Principles of GIS	Diver/Carter	Fall/Winter	Yes
EAS 541	Remote Sensing	Bergen	Winter	Yes
EAS 516	Field Remote Sensing	Brines	Fall	Yes
Organisms and Systems				
Course	Title	Instructor	Term	Lab Based
EAS 409	Ecology of Fishes	Alofs	Winter	Yes
EAS 430	Soil Ecology	Zak	Fall	Yes
EAS 436	Woody Plants	Ibanez/Dick	Fall	Yes
EAS 476	Ecosystem Ecology	Allgeier	Winter	No
EAS 520	Fluvial Ecosystems	Burton	Fall	No
EAS 539	Landscape Ecology	Currie	Winter/every other year	No
EAS 546/Environ 466	Herbaceous Flora and Ecosystems	Kost	Fall	Yes
Statistics, Modeling, and Research Skills				
Course	Title	Instructor	Term	Lab Based
EAS 635	Multivariate Statistics	Gronewold	Fall/every other year	No
EAS 545	Applied Ecosystem Modeling	Currie	TBD	No
EAS 549	Analysis and Modeling of Eco Data	Ibanez	Winter/every other year	No
EAS 542	Conservation and Development	Butt	Fall	No
EAS 518	Wildlife Ecology and Mgmt	Foufopoulos	Winter	Yes
EAS 547	Wildlife and Society	Carter	Fall	No
Additional Courses				
Course	Title	Instructor	Term	Lab Based
EAS/EEB 433	Ornithology		Fall	No
EAS 480	Climate Change		Winter	No
EAS 561	Psych of Environmental	De Young	Winter	No

	Stewardship			
EAS 562	Environ Policy & Politics	Yaffee	Fall	No
EAS 563	International Environ Policy	TBD	TBD	No
EAS 570	Environmental Econ		Fall	No
EAS 592	Comparative Environmental Planning	Pimental Walker	Winter	No
EAS 639	Seminars in REM	Staff	Fall/Winter	No
EARTH 417	Geology of the Great Lakes	Arnaboldi	Fall	No
EARTH 449	Marine Geology	Alt	Winter	No
EARTH 477	Hydrogeology	Cruz Da Silva Castro	Winter	Yes
EARTH 478	Geochemistry of Natural Waters			
ENVIRON 463	Michigan Fishes in Changing Environ	Alofs	At UMBS/Su	Yes
CEE 520	Physical Processes of Land-Surface Hydrology	Ivanov	Winter	No
CEE 521	Flow in Open Channels	MacVean	Fall	No
CEE 522	Sediment Transport	MacVean	Winter	No
CEE 527	Coastal Hydraulics	MacVean	Fall	No
CEE 624	Restoration Concepts	Cotel	Fall	Yes
CLIMATE 401	Geophysical Fluid Dynamics	Jablonowski	Fall	No
EEB 442	Biology of Insects	Kurdziel	Fall	No
EEB 445	Biogeography	TBD	TBD	No
EEB 453	Field Mammalogy (UMBS)	Light	at UMBS/Su	Yes
EEB 457	Algae in Freshwater Systems (UMBS)	Lowe	at UMBS/Su	Yes
EEB 463	Neotropical Plants	TBD	TBD	Yes
EEB 470	Microbial Diversity	TBD	TBD	
EEB 472	Plant Animal Interaction	Staff	Fall	No
EEB 483	Freshwater Ecosystems	Kling	Fall	Yes
EEB 485	Population and Community Ecology	Kumawat	Fall	Yes

EEB 486	Biology and Ecology of Fishes (UMBS)	Alofs	at UMBS/Su	Yes
EEB 498	Agroecosystems	Vandermeer	Fall	No
EEB 556	Field Botany of N. Michigan (UMBS)	Staff	TBD	
Integrated Analytic Methods and Skills Requirement Students are required, at some point during their time enrolled in the program, to take 2 courses composing at least 3 credits from a faculty-approved list of courses that focus on integrative analytic methods and skills. IAMS courses can double-count with core requirements but we do not double-count the actual credits.				