NATURAL RESOURCES AND ENVIRONMENT
UNIVERSITY OF MICHIGAN

Sustainable Water Resources

Summary of Requirements for a Master of Science and a Master of Science in Civil & Environ Engineering
Effective Fall 2008

Two Year M.S/M.S.E Program

	Requirement	Notes	Course #	Credits	Term
AS Core	9-12 credits in Aquatic Sciences Specialization Courses are listed on the back of this worksheet. *[Plan-specific requirement]*	One course each from Organismal Biology, Ecosystem Ecology, And Ecosystem Modeling			
Civil & Environ Engineering Core	The following courses are required	CEE 520 CEE 521 CEE 522			
	A minimum of 2 additional CEE courses in Environ and Water Resources Eng				
NRE Core	NRE 509 NRE 510 NRE 580 *[School-wide requirement]*				
Analytics	2 Analytics courses *[School-wide requirement]*	NRE 538 or approved alternate and one additional analytics course			
Opus	Students are not expected to complete an Opus, but could petition to do a thesis/practicum or project	At most, 6 credits of NRE 700/701			
Cognates	*[Rackham requirement]*	Please see reverse for cognate requirement information			
	Total credit hours by school	**SNRE -Minimum 25 credit hours** **CEE – Minimum 15 credit hours**			
TOTALS	**TOTAL CREDIT HOURS**	Minimum 54 credit hours (this total includes NRE & CEE credits)			

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

Current courses in Aquatic Sciences

One course from - Organismal Biology

NRE 409 Ecology of Fishes
NRE 422 Biology of Fishes
EEB 457 Algae in Freshwater Systems
NRE 516 Aquatic Entomology

One course from - Ecosystem Ecology

NRE 476 Ecosystem Ecology
EEB 483 Limnology
NRE 520 Fluvial Ecosystems

One course from - Ecosystem Modeling

NRE 501.114 Ecosystem Modeling and Synthesis
NRE 534 GIS and Landscape Modeling
EEB 401 Interrogating Data with Models

Cognate

SNRE – Minimum 4 credits outside SNRE. Can be fulfilled with CEE coursework.
CEE – 6 credits of Non-CEE coursework. Can be fulfilled with one advanced Mathematics course (proper choice of SNRE analytical courses can also satisfy this requirement) and one SNRE course