

<b>ENST M.S. Graduate Program - Summary of Requirements</b>			
<b>Area of Specialization</b>	<b>Soil and Watershed Sciences</b>	<b>Ecological Technology Design</b>	<b>Wetland Science</b>
M.S. Dept Admission	B.S. in related field; Undergraduate cumulative GPA of 3.0; GRE; Basic Science Requirement (a minimum of one semester of Calculus and 20 credits in Chemistry, Physics, Biology or Mathematics [beyond Calculus I]).		
Grad School Requirements	30 semester hours beyond the B.S. degree, including six hours of thesis research credit (799). Of the 24 hours required in graduate courses, at least 12 must be earned in a major area. A minimum of 12 credit hours must be earned at the 600 level or above		
ENST Core Requirements	ENST 602 - Research Principles and Methodology in Environmental Science and Technology (3 credits) ENST 702 - Communication and Professional Development in Environmental Science and Technology (2 credits) ENST 798 Graduate Seminar (2 semesters – 2 credits) One graduate level statistics course (from among, or equivalent to, those on approved list) <sup>1</sup> ;		
Specialization Requirements	Twelve credits of graduate level soil science courses. The 12 credits must be earned in any four of the following five areas: soil chemistry, soil physics, soil pedology, soil biology, soil fertility. All courses to be approved by the advisory committee.	Six credits of graduate level courses in ecology and six credits of graduate level courses in ecological design or related engineering courses. All courses to be approved by the advisory committee.	Twelve (12) credits from a list of approved graduate level courses <sup>2</sup> in Ecology, Soil Science and Hydrology, with a minimum of 3 credits from each of these three groups. All courses to be approved by the advisory committee.

<sup>1</sup> Approved Statistics Courses:

BIOM 601	Biostatistics I (4)
BIOM 602	Biostatistics II (4)
BIOM 603	Biostatistics III (4)
BIOM 621	Applied Multivariate Statistics (3)
GEOG606	Quantitative Spatial Analysis (3)

<sup>2</sup> Approved Courses for Wetland Science Specialization

**Ecology**

ENST 650	Wetland Ecology (3)	ENST 6xx	Created and Restored Wetlands (3)
ENST 460	Wildlife Management (3)	BSCI 464	Microbial Ecology (3)
BSCI 460	Plant Ecology (3)	MEES 610	Land Margin Interactions (4 credits)
PLSC 400	Environmental Plant Physiology	MEES 611	Estuarine Systems Ecology (3 credits)
MEES 645	Ecology and Management of Wetland and Submersed Aquatic Vegetation Systems (3)		

**Soils**

ENST 430**	Wetlands Soils (3)
ENST 421	Soil Chemistry (4)
ENST 721	Advanced Soil Chemistry (3)
ENST 414	Soil Morphology, Genesis, and Classification (4)

**Hydrology**

ENST 417	Soil Hydrology and Physics (3)
ENCE 431	Hydrologic Engineering (3)
ENCE 432	Ground Water Hydrology (3)
ENCE 630	Environmental and Water Resource Systems I (3)
GEOL 451	Groundwater Geology (3)
GEOL 452	Watershed and Wetland Hydrology (3)
GEOL 652	Advanced Watershed and Wetland Hydrology (3)

\*\*As part of the continued reorganization of the ENST department, these courses are being reorganized and will also be offered at the 600 level