

Graduate Student and Advisor Checklist
MASTER OF SCIENCE PROGRAM
Environmental Science and Technology

Personal Checklist

(due) **Date**

Form

- | | | |
|-------|--|--|
| _____ | admitted to program | |
| _____ | Advisory Committee formed (<i>end of 2nd semester</i>) | |
| _____ | Proposed Plan of Study form in file (<i>end of 2nd semester</i>) | ENST FORM |
| _____ | Research Proposal in file (<i>end of 2nd semester</i>) | ENST FORM |
| _____ | Admission conditions (if any) satisfied | |
| _____ | Course requirements completed: | |
| | | |
| _____ | Application for Diploma form submitted to Grad School | GRAD SCHOOL FORM |
| _____ | Thesis completed | |
| _____ | Nomination of Thesis Examining Committee form submitted to Grad School (cc ENST) | GRAD SCHOOL FORM |
| _____ | Approved Program for the Master of Science form submitted to Grad School (cc ENST) | GRAD SCHOOL FORM |
| _____ | Final examination held | |
| _____ | Report of Examining Committee form submitted to Grad School (cc ENST) | GRAD SCHOOL FORM <i>Form sent to advisor from Grad School</i> |
| _____ | Signed thesis submitted to Grad School | |
| _____ | Thesis copy (pdf) submitted to ENST Grad. Coordinator for student file on MEGS | |
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ENST M.S. Graduate Program - Summary of Requirements				
Area of Specialization	Soil and Watershed Sciences	Ecological Technology Design	Wetland Science	Ecosyst. Health & Nat. Res. Mgmt
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) 1;			
Specialization Requirements	Must have completed a minimum of 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 ² 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.	Twelve (12) credits of graduate level courses, including ENST6043 (3 credits) and 9 additional credits in Ecosystem Health and Natural Resource Management. All courses to be approved by the advisory committee.

1 Approved Statistics Courses:

BIOM 601	Biostatistics I (4)	GEOL 651, Statistics for Geoscientists
MEES 608R,	Applied Bayesian Statistics	
BIOM 602	Biostatistics II (4)	GEOL 789C, Advanced Data Analysis Workshop
MEES 708M,	Environmental Statistic II	
BIOM 603	Biostatistics III (4)	BIOL 709D, Statistics and Modeling for Biologists
BIOM 621	Applied Multivariate Statistics (3)	MEES 604, Biometry
GEOG606	Quantitative Spatial Analysis (3)	SURV 615, Statistical Methods I

2 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

3 ENST 604 - Advanced Ecosystem Health and Natural Resource Management

M.S. PLAN OF STUDY
Environmental Science and Technology

Candidate: _____ Student Number: _____

Check Current Program: _____ Soil & Watershed Sciences
 _____ Ecological Technology Design
 _____ Wetland Science
 _____ Ecosystem Health and Natural Resources Management

I. Admission Requirements: (Check if completed)

- _____ a. Calculus (1 semester)
 - _____ b. Basic science (20 credits) (Chem., Biochem., Physics, Biol, Math beyond Calculus)
 - _____ c. Other provisions: (if any) _____
-

II. Course Requirements (List course number; must be 400 level or higher.):

A. **All** candidates must complete these courses:

- _____ a. ENST798 Seminar -- 2 Credits (Entrance and Exit)
- _____ b. ENST799 Research -- 6 Credits
- _____ c. ENST602 -- 3 Credits
- _____ d. ENST702 -- 2 Credits
- _____ e. One approved graduate level course in statistics -- 3 Credits
- _____ f. 600+-level courses – total of 12 credits or more

B. Soil & Watershed Sciences Candidates

- _____ a. Must have completed a minimum of 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.

C. Ecological Technology Design Candidates

- _____ a. Six credits of graduate level courses in ecology
- _____ b. Six credits of graduate level courses in ecological design or related engineering courses.

D. Wetland Science Candidates

- _____ a. Twelve (12) credits from a list of approved graduate level courses in Ecology, Soil Science and Hydrology, with a minimum of 3 credits from each of these three groups.

E. Ecosystem Health & Natural Resources Management Candidates

- _____ a. Twelve (12) credits of graduate level courses, including ENST604 (3 credits) and 9 additional credits in Ecosystem Health and Natural Resource Management. All courses to be approved by the advisory committee.

III. List by semester all course work completed and planned for the M.S. degree. All M.S. programs must have a minimum of 12 credits of 600+-level courses⁴ and a minimum total of 30 credits of 400+-level courses beyond the B.S. degree (of which, no more than 6 credits of 799 can be included among the 30).

Year	Semester	Course No.	Title	Credit	Grade

Approved: _____ Advisor
 _____ Member, Advisory Committee
 _____ “ “ “
 _____ “ “ “
 _____ “ “ “

Date _____

⁴ Research credits (ENST799) do not count toward the 12 credits of 600+ level courses.

RESEARCH PLAN/PROPOSAL COVER PAGE
Environmental Science and Technology

Candidate: _____ Student Number: _____

Check Current Program: _____ M.S. _____ Ph.D.

- _____ Soil & Watershed Sciences
- _____ Ecological Technology Design
- _____ Wetland Science
- _____ Ecosystem Health and Natural Resources Management

Title: _____

Indicate whether or not the project involves any of the following:

- | | | |
|------------------------------|-----------------------------|----------------------------------|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Human subjects |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Animal subjects |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Radioactive materials |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Genetically engineered organisms |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Biological materials |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Select Agent Toxins |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Scientific diving |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Boats Used in Research |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Chemicals |

(Any Yes responses may require completion of University forms or training.)

Approval: The advisory committee has reviewed the attached research proposal and feels it is appropriate and sufficient for the degree program.

1. _____ 4. _____
(Advisor)

2. _____ 5. _____

3. _____ 6. _____