

**Graduate Student and Advisor Checklist
DOCTOR OF PHILOSOPHY 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 year</i>)	ENST FORM
_____ Admission conditions (if any) satisfied	
_____ Preliminary/Comprehensive examination held (<i>end of 3rd year</i>)	ENST FORM
_____ Admission to Candidacy form submitted to Grad School (cc ENST)	GRAD SCHOOL FORM
_____ Admission to candidacy approved by Grad School	<i>Must register each semester thereafter.</i>
_____ Course requirements completed:	
_____ Application for Diploma form submitted to Grad School (<i>Early in semester in which student expects to complete degree requirements by published deadline.</i>)	GRAD SCHOOL FORM
_____ Appointment of Doctoral Examining Committee form submitted to Grad School (<i>At least 3 months prior to final exam and before deadline.</i>)	GRAD SCHOOL FORM
_____ Dissertation completed	
_____ Final examination held	
_____ Report of Examining Committee form submitted to Grad School (cc ENST)	GRAD SCHOOL FORM
_____ Signed dissertation submitted to Grad School	
_____ Dissertation copy (pdf) submitted to ENST Grad. Coordinator for student file	

ENST Ph.D. Graduate Program - Summary of Requirements				
Area of Specialization	Soil and Watershed Sciences	Ecological Technology Design	Wetland Science	Ecosyst. Health & Nat. Res. Mgmt
Ph.D. Dept Admission	M.S. Degree in a closely related field ¹ ; All admission requirements for the M.S. degree (ie Basic Science Requirement, GRE, etc).			
Grad School Requirements	12 credits of dissertation research (899); A dissertation based on original research			
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) Two graduate level statistics courses (from among, or equivalent to, those on approved list) ² ;			
Other ENST Requirements	Students are expected to complete a minimum of 50 credits beyond the B.S. degree (In addition to research credits 799, 898 and 899)			
Specialization Requirements	Completion of M.S. specialization requirement plus one graduate level course on chemistry or biochemistry ³ and at least one additional graduate level course in chemistry, biochemistry, physics, mathematics, engineering, or computer science. All courses to be approved by the advisory committee.	Completion of M.S. specialization requirement plus one semester of graduate level modeling and one additional graduate level course in ecology, ecological design or ecological engineering. All courses to be approved by the advisory committee.	Completion of M.S. specialization requirement plus one graduate level course in modeling; two additional graduate level courses from within the areas of Ecology, Soil Science, or Hydrology. All courses to be approved by the advisory committee.	Completion of M.S. specialization requirement plus three additional graduate level courses in Ecosystem Health and Natural Resource Management. All courses to be approved by the advisory committee.

1 In special cases, exceptional students may be admitted to a Ph.D. program without first completing an M.S. degree. These students should have an exceptional academic record and test scores and should have demonstrated significant research experience during their B.S. program (such as completion of a research based honors thesis.)

2 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)
- GEOL 651, Statistics for Geoscientists
- GEOL 789C, Advanced Data Analysis Workshop
- BIOL 709D, Statistics and Modeling for Biologists
- MEES 604, Biometry
- SURV 615, Statistical Methods I
- MEES 608R, Applied Bayesian Statistics
- MEES 708M, Environmental Statistic II

3 This could be Physical Chemistry, Biochemistry, or some other grad level course in chemistry offered in such departments/programs as MEES (Modeling Chemical Equilibrium in Natural Waters), ENCE (Chemistry of Natural Waters) or GEOL (Principles of Biogeochemistry), etc.

Ph.D. 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 Resource Management

I. Admission Requirements: (Check if completed)

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

II. M.S. Course Requirements (check if completed):

A. 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.

B. 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.

C. 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.

D. 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.

III. Ph.D. Course Requirements (List course number. Must be 400 level or higher):

A. Soil & Watershed Science Candidates

- _____ a. one graduate level course on chemistry or biochemistry
- _____ b. one additional graduate level course in chemistry, biochemistry, physics, mathematics, engineering, or computer science..

B. Ecological Technology Design Candidates

- _____ a. one semester of graduate level systems modeling
- _____ b. one additional graduate level course in ecology, ecological design or ecological engineering.

C. Wetland Science Candidates

- _____ a. one graduate level course in modeling
- _____ b. two additional graduate level courses from within the areas of Ecology, Soil Science, or Hydrology.

D. Ecosystem Health and Natural Resources Management Candidates

- _____ a. three additional graduate level courses in Ecosystem Health and Natural Resource Management that have been approved by the advisory committee.

D. All candidates must complete these courses:

- _____ a. ENST602 (may be taken during the MS program)
- _____ b. ENST702 (may be taken during the MS program)
- _____ c. Seminar (798) -- 2 Credits (Entrance and Exit)
- _____ d. Research (899) -- 12 Credits
- _____ e. Two graduate level statistics courses
- _____ f. A total of 50 credits in post BS courses (excluding research)

RESEARCH 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. _____
(Advisor) | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ | 6. _____ |

**ENST Committee Report Form
Doctor of Philosophy Candidate
Environmental Science and Technology**

Candidate: _____

Advisor: _____

I. Comprehensive Examination⁴

Date _____

A. Committee Action

Passed Failed

Date of Second Examination (if needed) _____

Passed Failed

B. Examination Committee (signatures)

1. _____, Committee Chair

2. _____

3. _____

4. _____

5. _____

6. _____

⁴NOTE: A written exam followed by an oral comprehensive examination is required near the end of the student's course program. Both examinations must be scheduled within a one-month period, and must be passed prior to admission to candidacy for the Ph.D. The student must be admitted to candidacy at least six months before the date on which the degree will be conferred.