### ENST M.S. Graduate Program - Summary of Requirements

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<tr>
<th>Area of Specialization</th>
<th>Soil and Watershed Sciences</th>
<th>Ecological Technology Design</th>
<th>Wetland Science</th>
<th>Ecosyst. Health &amp; Nat. Res. Mgmt</th>
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<tr>
<td>M.S. Dept Admission</td>
<td>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]).</td>
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<td>Grad School Requirements</td>
<td>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.</td>
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**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 (400-800 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 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 ENST604** (3 credits) and 9 additional credits in Ecosystem Health and Natural Resource Management. All courses to be approved by the advisory committee.

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1. **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  
   - MEES 608R, Applied Bayesian Statistics  
   - MEES 604, Biometry  
   - MEES 611, Estuarine Systems Ecology (3 credits)  
   - 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 Submerged 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)  

3. **ENST 604 - Advanced Ecosystem Health and Natural Resource Management**

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