### ENST Ph.D. Graduate Program - Summary of Requirements

<table>
<thead>
<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>Grad School Requirements</td>
<td>M.S. Degree in a closely related field[^1]; All admission requirements for the M.S. degree (i.e., Basic Science Requirement, GRE, etc.)</td>
<td>12 credits of dissertation research (899); A dissertation based on original research</td>
<td>ENST 602 - Research Principles and Methodology in Environmental Science and Technology (3 credits)</td>
<td>ENST 702 - Communication and Professional Development in Environmental Science and Technology (2 credits)</td>
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<td><strong>ENST Core Requirements</strong></td>
<td>ENST 798 Graduate Seminar (2 semesters – 2 credits)</td>
<td>Two graduate level statistics courses (from among, or equivalent to, those on approved list)[^2]</td>
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<td><strong>Other ENST Requirements</strong></td>
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<td>12 credits of dissertation research (899); A dissertation based on original research</td>
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<td><strong>Specialization Requirements</strong></td>
<td>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.</td>
<td>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.</td>
<td>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.</td>
<td>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.</td>
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[^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 Statistics 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.