

ENVIRONMENTAL SCIENCE AND TECHNOLOGY, DOCTOR OF PHILOSOPHY (PH.D.)

To earn a Ph.D. degree, the University of Maryland Graduate School requires that the student complete a minimum of 12 credits of dissertation research (ENST899) and complete and successfully defend a dissertation based on original research.

ENST Departmental Core Requirements: All ENST Ph.D. students are expected to complete a minimum of 50 credits beyond the B.S. degree (in addition to research credits ENST898 and ENST899) and are required to complete ENST602, ENST702 and two graduate level statistics courses (these can be taken during either the M.S. or Ph.D. program), and two semesters of Graduate Seminar (ENST798).

Course	Title	Credits
Required courses:		
ENST602	Research Principles and Methodology in Environmental Science and Technology	3
ENST702	Environmental Science and Technology: Communication and Professional Development	2
ENST798	Graduate Seminar	2
ENST799	Master's Thesis Research	6
Select two graduate level statistics courses, if not already completed in the M.S. program		
Choose an area of specialization		minimum of 12 credits
Soil and Watershed Sciences:		
Complete one semester of graduate level physical chemistry or biochemistry and at least one additional graduate level course in chemistry, biochemistry, physics, mathematics, engineering, or computer science		
Ecological Technology Design:		
Complete one semester of graduate level systems modeling and one additional graduate level course in ecology, ecological design or ecological engineering		
Wetland Science:		
Complete one graduate level course in modeling; two additional graduate level courses from within the areas of Ecology, Soil Science, or Hydrology		
Ecosystem Health and Natural Resource Management:		
Complete three additional graduate level courses in Ecosystem Health and Natural Resource Management		
Dissertation Research Requirements		
ENST899	Doctoral Dissertation Research	12