Dual MSES-JD Program Requirements (115 credit hours)

Students in the MSES/Doctor of Jurisprudence (JD) program take 36 credit hours towards the MSES degree prioritizing the core competencies of the MSES degree, 79 credit hours towards the JD degree, and satisfy all other JD requirements of the Maurer School of Law. For specific requirements, see the Maurer School of Law Academic Regulations.

Each student should have training in the following areas: mathematics and statistics, chemistry, and biology/ecology. Additional quantitative skills and basic competence in economics and/or policy are also required.

Note regarding registration: Students pursuing a second degree outside of O'Neill are expected to register equally through both schools during their time in the dual degree program. In general, students should enroll through the school in which the majority of their credits are being taken for a given term. The O'Neill Graduate Records Office will check dual degree student enrollments each term to ensure enrollments are placed under O'Neill when necessary. The O'Neill Graduate Records Office will reach out to students whose enrollments need switched to adhere to this rule.

MSES Requirements: (36 credit hours)
Students are required to complete 36 credit hours of courses distributed among the environmental science competencies, environmental sciences focus, and a multidisciplinary capstone project.

Environmental Science Core Competencies: (15 credit hours)
In consultation with a concentration advisor, select 15 credit hours:

	P=Prerequisite, C=Corequisite, & R=Recommendations
SPEA-E 512 Risk Communication	
SPEA-E 518 Vector-based Geographic Information Systems	
SPEA-E 526 Applied Mathematics for Environmental Science	**R:** differential and integral calculus
SPEA-E 527 Applied Ecology	
SPEA-E 529 Application for Geographic Information Systems	**P: E518** or other introductory GIS course with lab, or equivalent practical experience
SPEA-E 536 Environmental Chemistry	**P:** undergrad chemistry course with lab
SPEA-E 538 Statistics for Environmental Science	
SPEA-E 560 Environmental Risk Analysis	**P: E538**, **V506**, or consent of instructor. A firm foundation in math and/or science is useful.

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Environmental Science Core Competencies (continued):

	P=Prerequisite, C=Corequisite, & R=Recommendations
SPEA-P 541 Benefit-Cost Analysis	**P: V517** or consent of instructor
SPEA-P 562 Public Program Evaluation	**P: V506** or equivalent coursework
SPEA-R 625 Environmental Economic and Policy	**P: V517**
SPEA-R 643 Natural Resource Management and Policy	
SPEA-V 517 Public Management Economics	

MSES Concentration or Specialized Concentration: (18 credit hours)

Due to the reduced credits in the MSES as part of the MSES-JD and the wide latitude to include economics and policy courses among the core courses, we encourage students and their concentration advisor(s) (see handbook for a list of advisors) to ensure that the science content of the MSES concentration or Specialized concentration classes is high. The environmental science course lists for the Ecology and Conservation and Environmental Chemistry, Toxicology and Risk Assessment concentrations will often match the needs of MSES-JD students interested in natural resources law and in environmental regulation, respectively. In the case of a specialized concentration, please access the Specialized Concentration Form in the Forms section of the Current Student Portal.

Capstone: (3 credit hours)

The Capstone requirement allows a student to participate in a multi-disciplinary study in which they draw on several of the competencies they have developed. The Capstone requirement for the MSES-JD can be met using any of the usual Capstone options open to the MSES degree.

Select **one** of the following:

	P=Prerequisite, C=Corequisite, & R=Recommendations
SPEA-E 546 Stream Ecology	**P: E556** or permission of instructor
SPEA-E 517 BMP Design for Healthy Urban Watersheds	**R: E545**
SPEA-E 560 Environmental Risk Analysis	**P: E538**, **V506**, or consent of instructor. A firm foundation in math and/or science is useful.
SPEA-E 625 Research in Environmental Science	
SPEA-V 600 Capstone in Public and Environmental Affairs	