## **Ecology & Ecosystem Sciences (E&ES) Graduate Program**

The Ecology and Ecosystems (EES) group brings together faculty and graduate students to solve problems at the forefront of ecology and ecosystem science. We define ecology broadly; our research interests cover the spectrum of biological organization from microbes to ecosystems, and take us to terrestrial and aquatic habitats worldwide. Our work is an exciting mix of basic research on natural systems, coupled with work designed to inform social policy, resource management, and conservation practices.

<u>Core courses:</u> All students are strongly recommended to take the following 5 credits of coursework plus 4 credits of seminars (the student will consult with their graduate committee to determine the additional 9+ credits of coursework – see table on next page for details):

**BES 550:** Advanced Ecology (4 credits, taken in the fall of the first year). Introduction to ecological principles and processes with an emphasis on theory and methods.

BES 500: Advanced Scientific Ethics (1 credit, taken in the fall of the first year). This course focuses on the ethics of scientific research. Students are encouraged to also consider taking the companion course (BES 501, Advanced Scientific Communication, 2 credits)

**BES 600:** Graduate Seminar in BES (1 credit, taken twice; spring semester only). Graduate students provide one talk on their proposed research in the early phase of their careers and one talk on their research results in a later phase. This seminar is designed to create an active student body knowledgeable about their peer's research, and foster collegiality among the student body and mentoring of younger grads by senior grads and faculty. Students must take this twice for credit (i.e. two presentations are required), but students are required to attend the seminar each semester when in residence at URI.

BES 581 & 582: BES Colloquium, (1 credit, taken twice). All BES faculty and graduate students participate and take turns hosting the seminar.

<u>Summary of proposed credit structure</u>: All students are expected to take at least 5 credits of core courses, 2 credits of Grad seminar, and 2 credits of BES seminar, for a total of 9 credits. For MSc and PhD students this leaves 9+ credits for other courses.

Program	Coursework credits*** (minimum required)	Research Credits (599, 699)	Special Problems (591, 592, 691, 692)	Total
M.S.	18 – 21	6 – 9	0 - 6	30*
PhD.	18	42+	0 – 12	72**

\*MSc students are required to take 6-9 research credits; the remaining credits (30 cr minimum for MSc degree) can be taken as Special Problems course(s) or additional coursework. Note that current URI Graduate School policy (Section 7.44.1 of Graduate Manual) states that MSc students can take a <u>maximum</u> of 9 thesis research (599) credits, whereas for PhD students there is no maximum number of the thesis research (699) credits. MSc students may transfer a limited number of credits from another institution (see Section 7.20 of Graduate Manual for details).

\*\*Coursework for PhD students is decided in close consultation with the student's PhD committee and with careful consideration of past coursework completed and the student's career goals. PhD students with a MSc degree may transfer up to 30 credits from their MSc program and thus must complete at least 42 credits at URI. PhD students without a MSc degree may be allowed to transfer up to 20% of credits (e.g., 15 credits for a 72 credit program) from another institution but restrictions apply (see Section 7.50-54 of Graduate Manual for details). All BES PhD students must complete at least 18 coursework credits with the remaining credits satisfied by additional URI courses, research credits or special problems. Note that the required 18 coursework credits for BES PhD students can be satisfied entirely or in part by transfer course credits with approval of the students' PhD committee.

\*\*\*Note: Graduate Certificate in GIS and Remote Sensing (15 credits) is available for EES students. GIS and remote sensing classes can be used to concurrently fulfill the course requirements for a certificate and the MS/PhD degree.

## EES Program Requirements (For students starting Fall 2014 or thereafter).

	M.S. program	Ph.D. Program	
Program of Study (POS)	Submitted by the end of 2 <sup>nd</sup> semester.	Submitted by the end of 2 <sup>nd</sup> semester.	
Thesis Proposals	Submitted by the end of 2 <sup>nd</sup> semester.	Submitted by the end of calendar year 2 (24 months from start).	
Advisory Committee	See BES committee composition PDF.	See BES committee composition PDF.	
Committee Selection	Selected by the end of 2 <sup>nd</sup> semester.	Selected by the end of 2 <sup>nd</sup> semester.	
Annual Review Form and committee meeting	Students must meet with their committee annually. The review form documents adequate progress and is due no later than the end of each academic year.	Students must meet with their committee annually. The review form documents adequate progress and is due at the end of each academic year, starting at year 2.	
Qualifying and Comprehensive Examinations	Not applicable.	Qualifying exam to determine if a student without a M.S. degree is prepared to do Ph.D. level work. Taken no later than end of 2 <sup>nd</sup> semester. Comprehensive exam (written, oral) to evaluate the student's ability to think critically and assess knowledge of their field within the BES program. Taken no later than 12 months after completing required coursework.	
Maximum time limit	Five calendar years.	Seven calendar years.	
Coursework (minimum)	30 credits (see table above for distribution of credits). All non-research POS coursework should be completed by the end of the 4 <sup>th</sup> semester.	72 credits (see table above for distribution of credits). All non-research POS coursework should be completed by the end of 5 <sup>th</sup> semester.	
TA support	Maximum of 2 years' funding, dependent upon satisfactory progress.	Maximum of 3 years' funding, dependent upon satisfactory progress.	
Core courses	BES 550 (4 credits); BES 500 (1 credit); BES 600 (2 credits total), BES 581 & 582 (2 credits total).		
Defense	2-hour examination by Committee; 45-minute project summary/seminar required (may precede defense).	2-hour examination by Committee; 45-minute project summary/seminar required (may precede defense). Equivalent to a "job talk".	
Grad. Seminar (BES 600)	Two 20 minute talks: one on proposal and one on results.	Two 20 minute talks: one on proposal and one on results.	