



ESI Call for Education Proposals: Creating an Integrated Environment & Sustainability Curriculum

The MIT Environmental Solutions Initiative (ESI) mobilizes students, faculty, and staff from all MIT schools and departments to forge a people-centric, planet-positive future through educational experiences, research, and convening.

ESI welcomes proposals from MIT faculty for undergraduate curriculum activities in environment and sustainability. MIT faculty are encouraged to apply for funds to create new classes, adapt existing classes, and generate innovative teaching and learning opportunities in environment and sustainability that can become permanent components of MIT's curriculum. A total of \$500,000 is available for grants in FY18 to support development of education activities that will (a) help populate the multidisciplinary undergraduate minor in environment and sustainability that is currently under development and (b) be incorporated into permanent MIT curriculum offerings.

Full proposals are due March 17, 2017 by 5:00 pm.

Proposals may address any area of environment and sustainability. Proposals should articulate how the chosen topic relates to the four "pillars" that comprise the proposed undergraduate minor in environment and sustainability:

- 1. Earth Systems and Climate Science** encompasses distinct disciplines such as ecology, geology, meteorology and more for an understanding of the physics, chemistry and biology of the Earth and its climate.
- 2. Environmental Governance** includes political science, environmental law and justice, environmental management and other fields in an understanding of the distribution of power and decision-making in society and, in particular, the strategies and tools that are directed toward consciously directing our relation to the environment.
- 3. Environmental Histories and Cultures** enlists historical, anthropological, cultural studies and the humanities as well as urban studies and planning for an understanding of the anthropogenic transformation of the environment through our economies, cities and other human settlements, and institutions.
- 4. Engineering for Sustainability** is comprised of a vast panoply of engineering disciplines directed toward design and innovation and including expertise in construction and manufacture processes, operation, use, reuse and disposition of materials, devices, and systems for a sustainable society.

We welcome proposals for educational projects that help support an integrated environment and sustainability curriculum. This may be achieved with problem-focused learning and hands-on experiences; with team teaching or other collaborative teaching methods; with class assignments or projects that engage multiple disciplines, topics, and/or societal sectors; with explicit links with classes or educational activities in different departments or topics; or through other approaches.

We envision grant awards ranging from \$50,000 - \$75,000. Projects should be designed with a 12-month award period and may commence June 1, 2017. Students are welcome to participate in proposals and grant activities as members of a faculty-led team.

Successful grantees will submit a 6-month progress update and an end of year report.

Proposal Submission Details

Proposals should include the components described below (additional materials such as syllabi or sample assignments should be included as feasible). Funds may be spent within MIT only, except for purchases of materials, supplies or specific support subcontracting (e.g, web designer).

*All components must be submitted via Formsite
(<https://fs27.formsite.com/MIT-ESI/EducationProposal/index.html>)
by 5:00 pm on Friday, March 17.*

1. **Project information.** Please complete the information on the Formsite form.
2. **Proposal narrative.** Please submit a concise proposal narrative that includes the five sections listed just below, referring to the [Guidelines for Drafting Learning Objectives and Measurable Outcomes](#).
 - a) What type of educational activity do you propose? i.e., lecture, seminar, studio, workshop, etc. (if the proposal is for an educational activity other than a formal subject, please describe the nature of the activity and why the chosen format is needed)
 - b) Subject/activity overview (include content, methodology/pedagogy; note MIT guidelines at <http://web.mit.edu/registrar/general/cs/catalog/standards/descriptionen.html>)
 - c) Subject/activity learning objectives (see [Guidelines](#)).
 - d) Measurable outcomes and assessment strategy(ies) for the subject/activity (see [Guidelines](#)).
 - e) Department/Institute requirements: will the subject/activity fulfill any department or Institute requirements?
3. **Confirmation of support from department head.** Please include a statement, letter, or email communication from the head of the department that will host the for-credit offering confirming that s/he is aware of the proposal and supports the development of the offering as well as its inclusion in the curriculum.
4. **Budget and budget narrative.** Include line items for all expenses that you anticipate. Describe each item and why it is necessary for the project. Allowable expenses are those in the following categories:
 - a. RA/TA support
 - b. UROP support
 - c. Faculty summer salary
 - d. Materials & supplies
 - e. Development of web-based educational resources
5. **Estimate of recurring costs.** To the degree possible, estimate annual direct, non-personnel costs for the class (ie field trips, lab supplies, prototyping facilities, etc). Please provide this estimate

separately from the grant proposal budget.

Proposal/Award Schedule

- *Proposals Due:* March 17, 2017
- *Notification of Awards:* April 17, 2016
- *Earliest Project Start Date:* June 1, 2017
- *Latest Project End Date:* August 31, 2019

Proposals will be reviewed by a multi-school faculty committee.

Source of Funding

This call for curriculum projects is supported by a grant from the Dirk and Charlene Kabcenell Foundation which seeks to create a multidisciplinary undergraduate program of study in environment at MIT.

