

**ISEN CLUSTER FELLOW COMPETITION
ACADEMIC YEAR 2017-2018****DEADLINE: MAY 29, 2017, 5PM (ALL MATERIALS, INCLUDING
RECOMMENDATION LETTERS, DUE!)****PROGRAM DESCRIPTION**

The Graduate School (TGS) has awarded to the Institute for Sustainability and Energy at Northwestern (ISEN) a Cluster on Energy and Sustainability, whose task is to promote research, development, education, outreach and communication at NU on these topics. This Cluster is central to ISEN's graduate teaching program, which parallels another ISEN undergraduate teaching program. ISEN's mission is to create, advance, and communicate new science, technology and policy for sustainability and energy. Its particular focus is on sustainable energy supply, demand and use.

CLUSTER FELLOWS

ISEN Cluster Fellows are exceptional students with deep interest in energy and sustainability, who will be identified with the Cluster for three quarters. During this time, they are expected to take two ISEN graduate core classes and participate in other ISEN activities (e.g. ISEN seminars and workshops). They will also be required to grade or TA one undergraduate ISEN course (at the level of 5-10 hours per week) for one quarter. Finally, they will participate in regular Cluster Fellow meetings, present their research, and represent ISEN, as appropriate, in judging panels for various student competitions related to energy and sustainability topics.

CLUSTER FELLOWSHIPS

Students will be awarded a full tuition scholarship and a stipend at the base TGS level for two of the three quarters. The stipend is expected to be increased by their graduate research advisers to the level guaranteed by their home graduate program. If applicants are unsure of the total amount of stipend that they will receive, they should check with their adviser. Funding levels for students in Medill, the Kellogg School of Management and the Law School are determined by TGS, in coordination with the appropriate school administrator.

ELIGIBILITY

Graduate students from all schools at Northwestern University are eligible to apply. At the time the Cluster award begins, the Fellows must have completed their first year as a graduate student at NU. Ideally, at the start of the ISEN Cluster, Fellows are in their second year of graduate study. Students who are already supported by external funding are eligible to apply.

DEPARTMENT APPROVAL

Electronic submission of the application by the applicant will generate an email to the department chair or program adviser. The email will provide a link for uploading a recommendation letter from the department chair or program adviser (see below - additional materials required from faculty) constituting confirmation that the application has been vetted and endorsed by the department or program.

DEADLINE AND NOTIFICATION DATES

The deadline to submit an application with all required materials is **May 29, 2017**.

REVIEW PROCESS

The ISEN directors will review all applications. Students and advisers will be notified via email, with a letter to follow.

SUBMISSION PROCESS

The materials indicated below (see materials required from student) will be uploaded into the online application form. Your application is not complete until both recommendation letters are received, due on the same deadline as the application. **Please note: The recommendation letters will be uploaded separately by your department chair and faculty adviser (or a faculty member for KSM and Law students); however, it is your responsibility to ensure that the department chair and your faculty adviser (or a faculty member for KSM and Law students) comply with the deadline.**

Applications must include all required materials and adhere to all page, font, and format restrictions. Please do not include materials other than those requested. Applications that do not comply with these instructions, which are intended to ensure a level playing field for nominees across disciplines, will be returned without review.

MATERIALS REQUIRED FROM STUDENT

The required materials are to be submitted in the following order:

1. The completed application form.
2. Abstract. A short description in lay terms describing the candidate's interest and/or research in energy and sustainability, **not to exceed one page**. The abstract must be double-spaced and in Times New Roman 12-pt. font.
3. A curriculum vitae (CV) and/or resume including education, professional experience, awards, presentations, publications, and professional memberships.
4. An unofficial Northwestern transcript. Unofficial transcripts may be obtained from CAESAR. After logging in to CAESAR, you can view your unofficial transcript by selecting "For Students" then "Academic Information" then "View Unofficial Transcript." Once the transcript is displayed, select "Switch to printer-friendly view" at the top of the screen. To save your unofficial

transcript as an electronic document, copy and paste the entire transcript into a Word (or equivalent) file.

5. A sample of scholarly work in electronic format. This could be a scholarly article, conference paper, research, review article or coursework.

ADDITIONAL MATERIALS REQUIRED (FROM REFERENCES)

Two letters of recommendation. One letter of recommendation should be provided by the department or program chair, which should describe the outstanding qualities of the nominee and his or her research and/or academic work. A second letter of recommendation should be provided by the student's Adviser (if the student has been previously financially supported by a RA) or other designated faculty member (or previous employer for KSM and Law students) best qualified to comment upon the student's scholarship, research goals, or work experience in the energy & sustainability field. Both letters should address the following points: the qualities that set this student apart from others in the department or program; the significance of the scholarly research in energy and/or sustainability (within the discipline or across disciplines) and how the nominee would contribute to and benefit from ISEN courses. Furthermore, the Adviser letter (or designated faculty member for KSM and Law students) should contain a statement acknowledging that he/she understands that "the student will be involved with the Cluster for three quarters, and during this time, will take the two ISEN graduate core classes (see below), assist with one undergraduate ISEN course (at the level of 5-10 hours per week) for one quarter, and participate in other ISEN activities.

APPLICANT'S RESPONSIBILITIES

Prior to the deadline, the ISEN Cluster student applicant should prepare the required items as electronic documents and provide these to his or her adviser (or other faculty member, previous employer for KSM and Law students), who will write a recommendation letter. The student is responsible for asking the faculty members to prepare the recommendation letters in electronic form. The applicant is responsible for assembling the documents (except the recommendation letters) and submitting the application to ISEN online. Once the application is submitted, an email will be sent to the department or program chair and the Adviser or other designated faculty member (or previous employer for KSM and Law students), requesting that the letter of recommendation be uploaded.

ISEN Cluster Requirements

A. Coursework Requirements

A Fellow is required to take two ISEN core courses in the three consecutive quarters of the Fellowship as follows:

► ISEN 410 – Topics in Contemporary Energy & Climate Change (Fall 2017)

The increasing worldwide demand for energy presents a number of complex interdisciplinary challenges, from oil depletion to global warming. This class will challenge students to

answer the question, How shall we power the world in the 21st century? We will examine the history and geography of energy use; links between energy and climate change; and technological, economic and environmental benefits and drawbacks of various energy sources. This is a non-technical course and students from all disciplines are welcome.

► **ISEN 430 – NUvention: Energy (Winter 2018)**

NUvention: Energy is one of an expanding NUvention portfolio of topically focused cross-campus entrepreneurship programs. Over an intense quarter, graduate students from schools across campus will come together in interdisciplinary teams to develop a product or service and a business in the burgeoning sustainable energy industry. Students benefit from interaction with NUvention: Energy's Advisory Board of business leaders in the sustainable energy field.

B. Other Required Participation

A Fellow is required to grade or TA one undergraduate ISEN course (at the level of 5-10 hours per week) for one quarter.

C. Additional Optional Courses

The Fellows are encouraged to take, on an optional basis, additional courses with energy or sustainability topics offered by other departments and programs. Other ISEN graduate courses are listed on the ISEN web site at:

<http://isen.northwestern.edu/isen-courses-graduate>

Cluster activities will be funded and supported through ISEN as described below, and ISEN Cluster Fellows are encouraged to participate in:

- **Educational workshops**, offered at multiple junctures throughout the year.
- **Northwestern Energy & Sustainability Coalition (NESC)** will offer Cluster Fellows the opportunity to enhance communication and collaboration among all NU student groups, undergraduate and graduate, with an interest in energy and sustainability. This group will work with ISEN to maximize its outreach and impact.
- **ISEN's web site** will include links to the Cluster program, individual Fellows pages and summaries of Fellows' research, publications, honors or awards. Fellows will be encouraged to provide content for the web site.
- **Three or four conferences/symposia** will be held yearly at Northwestern University on various topics connected to energy and sustainability, and will be integrated into the Cluster teaching schedule.
- **Distinguished scholars** in the field of energy and sustainability will be invited to visit Northwestern University and will contribute to the Cluster graduate teaching program.

To fill out the application:
<http://isen.northwestern.edu/cluster-fellowships>

DEADLINE: May 29, 2017