

Renewable Energy Engineering and Policy Certificate (REEP-CERT)

Purpose

This interdisciplinary Graduate Certificate in Renewable Energy Engineering and Policy (REEP-CERT) is offered by the University of Delaware's College of Engineering and is administered through the Engineering Outreach Program, with graduate/non-degree students advised by the Assistant Dean for Engineering Outreach, and matriculated graduate students advised by their respective graduate program advisor. It will serve both as a means of recognition and as a graduate recruitment tool, designed for two audiences to meet their respective needs as follows:

Graduate Students:

A notation on the graduate transcript of having completed courses for the REEP-CERT will recognize the graduate student's interest and academic accomplishments in the field of renewable energy.

Engineering & Science Professionals:

Professionals with the needed prerequisite background (holding an undergraduate degree in a Science-Technology-Engineering-Math (STEM) field) who are seeking to strengthen their knowledge of renewable energy technologies and policy can earn the REEP-CERT as a graduate/non-degree student, with completion noted on a graduate transcript. Then the REEP-CERT courses can be applied toward a graduate engineering degree program if/when the individual applies to/is accepted into such a degree program. The REEP-CERT program, therefore, serves as a recruitment tool. It should be noted that satisfactory completion of the REEP-CERT does not guarantee admission to a graduate degree program, but can serve to strengthen the application if the student has done well in the certificate program.

Admission Requirements

- Students admitted to any STEM graduate program at the University of Delaware are eligible to pursue the REEP-CERT. The STEM graduate student's record will be reviewed to ensure satisfactory completion of courses prerequisite to success in the core and desired elective certificate course(s).
- Non-degree students will apply for graduate/non-degree status (EGOR-ND) through the Engineering Outreach Program, and will indicate their specific interests and targeted elective courses within the REEP-CERT options. Admission requirements for EGOR-ND status involves review of undergraduate transcripts indicating that the applicant holds an undergraduate degree in one of the STEM fields, having taken courses that cover prerequisite knowledge needed for success in the targeted REEP-CERT courses.

Program Requirements

The REEP-CERT requires satisfactory completion of four (4) graduate level courses (12 credits) as detailed below. Each certificate program course must be completed with a grade no lower than C; the overall gpa upon completion of the REEP-CERT courses must be no lower than 3.0.

As research in the REEP fields progresses and new courses are developed that are relevant to the renewable energy and policy certificate, the graduate committee of the home department of the respective proposed elective may add the new course to the list of elective options in the REEP-CERT.

- Required 3-credit Courses:
 - ELEG637 – Energy Systems
 - ENEP625 – Energy Policy and Administration
 - MSEG650 – Topics in Renewable Energy

- Elective Course Options (each 3-credits):
 - CHEG811 – Advanced Topics in Energy Engineering
 - ELEG620 – Solar Energy Systems
 - ELEG628 – Solar Energy Technology and Applications
 - ENEP821 – Seminar: Technology, Environment and Society
 - MAST628 – Offshore Wind Power: Science, Engineering and Policy
 - MEEG635 – Wind Power Engineering
 - MEEG642 – Introduction to Fuel Cells
 - MSEG670 – Solar Energy
 - UAPP – 626 – Conservation and Renewable Energy Policy

Anticipated Participation

It is anticipated that 20 students, including IGERT Program students, will be pursuing the REEP-CERT at any point in time. With marketing to engineering and science professionals interested in earning the certificate as a graduate/non-degree student, the program participation will only be limited by the number of available “seats” in the core courses, which can be extended through distance formatting of the courses.