

Advanced Certificate in Green Energy

Program Description

The Green Power and Sustainable Energy Advanced Certificate educates professionals in the areas essential to the field of green power and sustainable energy, such as engineering, business analytics, economics, sustainability, and organizational leadership. This program equips graduates with the practical information and tools they need to understand the engineering, economics, and ethics of the sustainable energy sector. This advanced certificate program is a 15-credit hour, post-baccalaureate level, interdisciplinary program with courses from the O'Malley School of Business, the School of Engineering, and the School of Arts and Sciences.

Course Structure

The Green Power and Sustainable Energy Advanced Certificate offers two tracks for students, online and in-person. For both tracks, students are required to complete one engineering course (either MCEG 614 or ECEG 768) and one business course (MBA 640). Students are also required to take three additional elective courses. Students may select their three electives from a selection of engineering, business, and/or organizational leadership courses.

Program Learning Goals

Upon completion of the program, students will:

- Differentiate between alternative energy sources in terms of generation and utilization.
- Critique the integration of business into its natural environment through the utilization of the triple bottom line framework for long-term sustainability.
- Evaluate the role of the natural environment on business management and strategy, operations, supply chain, product innovation, and marketing.
- Formulate effective solutions to challenges surrounding sustainability as faced by various organizations.
- Examine the fundamental physics behind energy, energy conversion, fuels, power production, district energy systems, cogeneration, trigeneration, delivery systems, regulation, economics, and markets.
- Analyze strategies that will maximize the value of the project experience to the organization by capturing best practices and lessons learned.

Program Courses

MECG 614 or ECEG 768	Energy Management (15 week) Green Energy Sources	3
MBA 640	Decision Making for Sustainability	3

Three OL/BUS/EN electives (9 credits)	9
Total Credits	15

Admission Requirements

To apply for this certificate, please submit:

- Application form
- Resume
- Statement of Interest
- One letter of recommendation
- Bachelor's degree from an accredited college or institution
- An undergraduate cumulative grade point average (GPA) of 2.75 on a 4.00 scale, although other factors can be considered in the decision for admission.
- Official transcript(s)

For any questions about applying to this program, email admissions at gradadmit@manhattan.edu.