

# CLIMATE CHANGE, ENERGY, AND ENVIRONMENTAL SUSTAINABILITY, GRADUATE CERTIFICATE

As the world's population increases and technological advances accelerate, demands for natural resources and energy continue to threaten Earth's physical and ecological systems. Johns Hopkins Engineering for Professionals' Climate Change, Energy, and Environmental Sustainability graduate certificate program provides valuable knowledge to engineers, scientists, and managers to design and implement solutions to these environmental, social, and economic challenges. The program provides students with the expertise needed to enter or advance in public and private sector roles related to energy, sustainability, and climate. Students gain advanced knowledge in areas such as climate change, energy planning, alternative energy technologies, transportation innovation to curtail atmospheric pollution, sustainable development, next generation buildings, air resources management, pollution control technologies, and related public health considerations.

## Admission Requirements

Applicants who are interested in taking graduate-level courses, but not necessarily interested in pursuing a full master's degree, would be eligible for the Graduate Certificate in Climate Change, Energy, and Environmental Sustainability as long as they satisfy the requirements for admission for the Climate, Energy, and Environmental Sustainability (<https://e-catalogue.jhu.edu/engineering/engineering-professionals/environmental-engineering-science-management-programs/climate-energy-environmental-sustainability/#admissiontext>) Master's degree program (<https://e-catalogue.jhu.edu/engineering/engineering-professionals/environmental-engineering-science-management-programs/climate-energy-environmental-sustainability/#admissiontext>).

Admitted students have typically earned a grade point average of at least 3.0 on a 4.0 scale (B or above) in the latter half of their undergraduate studies. Significant relevant work experience or a graduate degree in a relevant technical discipline may be considered in lieu of meeting the GPA requirement.

If the student should decide to pursue the full master's degree, all courses will apply to the master's degree provided they meet program requirements and fall within a five-year time limit.

## Program Requirements

The program requires five courses that must be completed within five years. The curriculum consists of a minimum of three courses at the 700-level (575.7XX) that must be selected from the master's degree requirements of the Climate, Energy, and Environmental Sustainability program (<https://e-catalogue.jhu.edu/engineering/engineering-professionals/environmental-engineering-science-management-programs/climate-energy-environmental-sustainability/#requirementstext>) and a maximum of two electives.

Electives may be selected from any of the four environmental areas of study: Environmental Engineering (<https://e-catalogue.jhu.edu/engineering/engineering-professionals/environmental-engineering-science-management-programs/environmental-engineering-master/>), Environmental Engineering and Science (<https://e-catalogue.jhu.edu/engineering/engineering-professionals/environmental-engineering-science-management-programs/environmental-engineering-science-master/#requirementstext>), or Environmental Planning and Management (<https://e-catalogue.jhu.edu/engineering/engineering-professionals/environmental-engineering-science-management-programs/environmental-planning-management-master-science/#requirementstext>), or Climate, Energy and Environmental Sustainability (<https://e-catalogue.jhu.edu/engineering/engineering-professionals/environmental-engineering-science-management-programs/climate-energy-environmental-sustainability/>), subject to prerequisite restrictions. All applicable courses must have a (575.XXX) number. Except for the prerequisite restrictions, there is not any specific sequence in taking these courses. Only one grade of C+, C, or C- can count toward the graduate certificate.

Program chair approval is required for any deviation from this program and requisites specified in the student's admission letter.