

# Renewable Energy, Graduate Certificate

The Graduate Certificate in Renewable Energy focuses on the combination of analysis and integration of energy systems engineering technology with key renewable engineering technology, including solar and wind generation, with environmental protection and manufacturing considerations.

This four-course graduate certificate seeks to provide students with opportunities to apply the fundamentals of engineering knowledge and skills to analyze energy systems with a specific focus on renewable energy technologies along with EPA regulatory structure, including the LEED certification program, as well as industrial ecology, including life-cycle analysis and technical cost modeling.

## Program Requirements

Complete all courses and requirements listed below unless otherwise indicated.

### Core Requirements

Code	Title	Hours
ENSY 5000	Fundamentals of Energy System Integration	4
ENSY 5585	Wind Energy Systems	4
ME 5685	Solar Thermal Engineering	4

### Elective

Code	Title	Hours
Complete one of the following:		4
ENSY 5100	Hydropower	
ENSY 5200	Energy Storage Systems	
ENSY 5300	Electrochemical Energy Storage	
ENSY 5500	Smart Grid	

### Program Credit/GPA Requirements

16 total semester hours required

Minimum 3.000 GPA required