

# Sustainable Energy Systems, Graduate Certificate

The Graduate Certificate in Sustainable Energy Systems focuses on the integration of energy systems engineering technology with sustainable building systems, including the design and operation of buildings with minimal energy and environmental impact.

This four-course graduate certificate seeks to provide students with opportunities to apply the fundamentals of engineering knowledge and skills to analyze energy systems as they relate to sustainable engineering building design with a focus on renewable energy with LEED certification or with a focus on 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
SBSY 5200	Sustainable Engineering Systems for Buildings	4
ENSY 5000	Fundamentals of Energy System Integration	4

### Electives

Code	Title	Hours
Complete two of the following:		8
ENSY 5100	Hydropower	
ENSY 5200	Energy Storage Systems	
ENSY 5300	Electrochemical Energy Storage	
ENSY 5585	Wind Energy Systems	
ME 5685	Solar Thermal Engineering	

### Program Credit/GPA Requirements

16 total semester hours required  
Minimum 3.000 GPA required