

Special Course Announcement: Alternative Energy Devices & Materials

This course is for upper level undergraduates and early graduate students interested in the scientific challenges of alternative energy generation, storage, and conservation. The course will cover photovoltaic and solar power in depth, with additional coverage of fuel cells, hydrogen, energy storage, wind power, modern nuclear power, thermoelectrics, geothermal, and more. Upon completion of this course, students should be able to analyze important devices and predict the power output under various conditions, compare their strengths and weaknesses, plan a sustainable power grid, and describe the technical, economic, and political challenges to making each of these alternative energies successful.



Solar panels cover San Francisco's Moscone Convention Center rooftop (moscone.com)

Course #:	EE47010 (undergrad) or EE67034 (grad)
Time:	MWF, 8:30-9:20 AM
Credit Hours:	3 credits
Location:	TBD (see web site)
Instructor:	Prof. Mark Wistey, mwistey@nd.edu
Prerequisites:	Physics 20330 or consent of instructor.
Web site:	nd.edu/~mwistey/energy



Vestas turbine, Sweden
Public Domain (Wikipedia)



Chevy Volt, Creative Commons Lic.