New Courses for Winter 2009

ME 499/699-04 Computational Materials Science – Dr. Amir Farajian (MW 4:10-5:50 p.m.)
Computer simulation of materials; introduction to theories and algorithms of atomistic modeling; computation of structures and properties; hands-on experience with simulation procedures and applications in nanoscience and nanotechnology. Prerequisite is ME 370 (Intro Material Engineering Science).

Open to graduate and undergraduate students. This course is an approved technical elective for undergraduate MME students; it does not count as a 499 Special Problems course. For graduate MME students, this is an approved 600 level course. To register, please contact the instructor at amir.farajian@wright.edu

ME 890-04 Advanced Energy Materials – Dr. Hong Huang (MW 6:05-7:45 p.m.)
This course will focus on advanced electrochemical energy conversion and storage systems including fuel cells, lithium-ion batteries, and supercapacitors. Through the journey in this course, students are anticipated to understand why and how these systems are advantageous in renewable energy applications. Prerequisites are ME 515 or 575 (Thermodynamics) and ME 483/683 (Intro to Ceramics).

This is a required core course for the new Renewable and Clean Energy Masters program, and an approved 700 level course for other tracts. To register, please contact the MME Dept 775-5040.

ME 890-03 Photovoltaics – Dr. Jim Menart (MWF 7:15-8:20 a.m.)
Photovoltaics is the process of generating a voltage from light. This light source can be the sun which is essentially an inexhaustible source of energy. This course will look at a number of topics related to photovoltaics. Prerequisiste is PHY 244 (General Physics III) or equivalent.

Open to graduate and undergraduate students (Undergrads, please contact instructor james.menart@wright.edu, Grads may register online). This is an approved 700 level course for MME Masters' students.