

FALL 2006 ENGINEERING 150 CLASS ACTIVITIES BALLOT

_____ **Alumni Speakers Week Sept 18 - Sept 22** 5-1279, engrg150@cornell.edu

An opportunity for first-year students to hear about and explore their potential as future engineers.

_____ **Major Information Fair** held in October, check the Sundial for dates and times

TOURS OF ENGINEERING/SCIENCE FACILITIES

_____ **Beebe Lake Central Heating Hydroelectric Plant**, Harry (Andy) Andersen, 5-7437, hfa2
Overall view of Cornell's utility systems.

_____ **Chilled Water Plant and Lake Source Cooling**, Ed Wilson, 5-4774, erw24
Learn how cold water from Cayuga Lake is used to cool campus buildings.

_____ **Heat, Hot Water & Pollution Control**, Ed Wilson, 5-4774, erw24
Learn how more than 200 buildings on campus are provided with steam for heat and hot water.

_____ **Student Led Tours of the Engineering Quad**, ENGR Admissions Office, 5-5008
An overview of the engineering quad, including classrooms, labs, and research facilities

_____ **Earthquake Engineering and Space Structures Lab (Winter Lab)**, Tim Bond, 5-4078, tkb2
Guided tour of ongoing research in structures and material properties

_____ **Advanced Design Consulting USA, Inc.** Alex Deyhim, alexdeyhim@adc9001.com 533-3531
Tour facility in Lansing, NY. ADC's expertise and activities are primarily related to engineering design, research and development, testing and custom fabrication in mechanical, electrical, and computer science.

_____ **Food Processing & Development Lab & Cornell Dairy Plant**, Vincent Nykeil, 4-4882, vln3
Tour the plant and discuss engineering applications within the food industry. Can run an experiment in the food lab.

_____ **DARPA Urban Challenge** Brian Schimpf, 5-9690, bws22
Learn about the DARPA Urban Challenge, an open competition to design a vehicle capable of driving itself through 60 miles of urban roads, intersections, and parking lots with absolutely no human intervention.

_____ **Formulae SAE race car**, cufsae@cornell.edu, 5-2541
Tour of the facility to see how the team designs and constructs from the ground up a racecar geared for the weekend amateur autocrosser.

_____ **Wilson Synchrotron Laboratory**, Sharon Peterson, sap16, 5-5253
Laboratory tour. Video shown about the history of the lab.

TOURS OF COMPUTING-RELATED FACILITIES

_____ **The CAVE – A virtual reality experience**, Mary Yetsko, yetsko@tc.cornell.edu, 4-8691
A room-sized virtual reality environment, a 3-wall, immersive facility.

_____ **Desktop Virtual Reality at the Cornell Theory Center**, Cathy Norton at 4-8692, or email
norton@tc.cornell.edu
Introduction to 3D multi-user virtual worlds running on the Internet.

_____ **Digital Consulting and Production Services (DCAPS) Olin Library**, Danielle Mericle, 5-
9965 dkm26. Demonstration using high-end digital cameras and scanners to convert objects to
digital form.

_____ **Library Research on the Web**, Jill Powell, 5-8701, jhp1
Learn how to become skilled in library research.

_____ **Creating Your Own Web Page**, Jill Powell, 5-8701, jhp1
A hands-on class on creating web pages. Learn how to design a web page with graphics, lists,
links, and tables.

OTHER TOURS

_____ **Cornell Plantations**, Outreach Coordinator, 5-2406
Explore the botanical garden, arboretum, and natural areas of Cornell University.

_____ **Herbert F. Johnson Museum of Art**, Assistant Coordinator for University Programs, 4-4657
Tour one of the most important university museums in the country.

_____ **McGraw Tower and the Cornell Chimes**, chimes@cornell.edu, 5-5350
Climb the 161 steps to learn about the history, past and present, of the tower and bells.

_____ **The Carol Tatkon Center**, Laurie Fuller, llf5, 3-4282
The center is here to help you connect with a wide range of resources and program.

SPEAKERS / TOPICS FOR CLASS

_____ **Celebrating Nanotechnology at Cornell**, engrg150@cornell.edu, 5-7414
A series of 3 videos in which Cornell professors discuss their research in the field of
nanotechnology. Borrow all 3 from Engineering Advising.

Communications Challenge, Rick Evans, rae27

Program to help students get acquainted with one another. Work in small groups to write instructions and then follow instructions prepared by another group. Illustrates practical side of engineering and the need for communication skills.

Co-Op Program, 255-5103 AFTER AUGUST 21 to schedule
Opportunities to work in industry during the junior year.

CoursEnroll Demonstration, Your Peer Advisors!

Safety: Health and Environment for Engineers, Robin Goodloe, 5-5613, jag16
An overview of health and safety issues for engineering students.

Technological Predictions through the Year 2050, 255-5103 AFTER AUGUST 21 to schedule
Career services offerings, the nature of job markets and the development and application of skills in a world of ever-changing technologies.

FACULTY SPEAKERS / SPECIAL TOPICS IN ENGINEERING

BME: The Biomedical Engineering: Education and Opportunities, Mike Shuler,
mls50@cornell.edu, 5-7577

This presentation will focus on students who wish to work as professional engineers in biomedical engineering.

CEE: Engineering Management: The challenge to do things well, Mark Turnquist, 5-4796,
mat14

This presentation discusses contemporary engineering management challenges, the role of management in engineering practice, and engineering management courses available to undergraduates in engineering.

CEE: AguaClara: Honduras Water Supply Project, Monroe Weber-Shirk, 5-8445, mw24

The AguaClara mission is to improve water treatment technologies so that communities in the Global South can afford safe, clean drinking water. Tour the lab where the team conducts research and tests water treatment technologies for implementation in Honduras.

COM S: The Many Facets of Computer Science, Graeme Bailey at bailey@cs.cornell.edu to schedule)

A look at varied ways in which the ideas of computer science can appear in a wide range of disciplines.

ECE: Electronics and Telecommunications Lead Engineering into the 21st Century

Contact Sandi Goodwin, 5-4309 to schedule

Presentations on technologies ranging from the tiniest nanoscale and quantum-optical devices through small-and large-scale integrated circuits through mid-scale devices all the way up to the largest, most complex sensor and telecommunication networks.

GEO S: Earthquakes, Oil and Water: Seismology and Society, Larry Brown, ldb7, 5-7357

Examine examples of how seismic waves are used to help understand where and why earthquakes occur. Includes a tour of the Snee Hall seismograph station.

MAE: Mechanical & Aerospace Engineering Activities, Elizabeth Fisher, emf4

A presentation outlining the field, course and project offerings and career opportunities.

MSE: Materials for the 21st Century, Mike Thompson (Contact Joseph Sweet, 5-9159)

A presentation outlining the field with many demonstrations, including some hands-on.

OTHER SOURCES

ENGRG 150 Faculty Advisors

Talk with other faculty members who are conducting ENGRG 150 seminars. It may be possible to work some cooperative arrangements with each other, i.e. talk with each other's students about your own engineering major.

Major Consultants

Major consultants can discuss Majors in their departments. See the Engineering Undergraduate Directors and Coordinators directory.