

School of Chemical, Biological and Environmental Engineering @ OSU

Undergraduate Programs

Bioengineering

Bioengineers apply biology, chemistry and math to create new biological materials, devices and processes. They can be involved in the fields of bioenvironmental, biomedical and bioprocess technology.

Where do bioengineers work?

- Pharmaceutical Industry
- Environmental Cleanup
- Biomaterials- Implantable Materials
- Biomechanics- Prosthetic Design
- Medicine
- Food Industry
- Fermentation
- Biofuels
- Teacher
- Lawyer



Undergraduate research opportunities

- WERC Environmental Design Contest
- NASA Project
- Research opportunities in Faculty Labs
 - Medical device coatings
 - Joint health
 - Nanoparticles in marine plants
 - Microscale kidney dialysis units



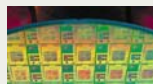
AICHe Society for Biological Engineers

- **First SBE Student Chapter in the country**
- Field trips- corn maze, beach, ski trip
- Professional development
- Industry speakers
- Outreaches
- Fun!!!



Chemical Engineering

Chemical engineers apply chemistry, math, and economics to the process of converting raw materials or chemicals into more useful or valuable forms.



Where do chemical engineers work?



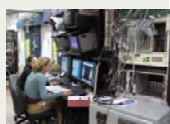
- Semiconductors
- Petrochemicals
- Pulp and Paper
- Pharmaceuticals
- Manufacturing
- Cosmetics
- Lawyers
- Doctors
- Teachers
- Astronauts

- Intel Corp.
- Weyerhaeuser
- Boise Cascade Corp.
- Chevron/Texaco
- BP
- Dow Chemical
- And many more ...



Undergraduate research opportunities

- WERC Environmental Design Contest
- AIChE Chemical Powered Car Team
- NASA microgravity flight team
- Coffin Butte Landfill Fuel Cell Project (with CVHS)
- OSU Biodiesel Initiative (with Philomath HS)
-and research opportunities in many faculty labs



American Institute of Chemical Engineers (AIChE)

- **2005 Outstanding Student Chapter**
- Over 60 AIChE Student Chapter members
- K-12 outreaches and community service
- Host Regional and National Student Conferences
- Guest speakers from industry with PIZZA party!
- Maintain the large *student lounge*
- Publish *The Reactor* newsletter
- Intramural sports teams, tutoring, plant trips
-and have tons of fun!!!

Environmental Engineering

Environmental engineers apply science and engineering to improve the quality of water, air and land. They focus on cleaning polluted sites and preventing environmental degradation by reducing human impact.



Where do environmental engineers work?

- Environmental Protection Agency
- Hazardous Waste Clean-up Sites
- Department of Environmental Quality
- Air Pollution Control
- Alternative Energies
- Water Treatment
- Lawyers, Teachers, etc ...



Undergraduate research opportunities

- Design competition at Cal Poly
- Local restoration projects
- Bioremediation research.



Environmental Engineering Student Organization

- Speaker Meetings
- Ice Cream Socials
- Community Service
- Design Competition
- Lots of FUN !!!!



Why OSU?

Engineering classes in 1st quarter of 1st year

Get connected with your fellow classmates

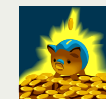


First year chemical engineering students building robotic LEGO® cars and Chem-E Chemical Powered Cars

Big school with a small school environment

- All the resources of an 18,000 person major university
- Close-knit community with a student/faculty ratio of 20:1
- Approx. 430 students in ChE, BioE, and EnvE

SCHOLARSHIPS



- **College of Engineering** gives over **\$2.5 million** each year in Engineering Scholarships
- **Chemical Engineering Dept.** gives an additional **\$50,000/yr** in Scholarships
- **Johnson Scholarship** for *High School* students - \$11,000 over 4 yrs with a guaranteed summer internship after your first year!

MECOP / CECOP

Multiple Engineering Cooperative Program
Civil Engineering Cooperative Program

- Two 6 month internships in the NW @ 80% BS engineering salary (approx. \$20/hr!)
- Get working experience before you graduate
- Unique to Oregon State University
- Over 70 companies

