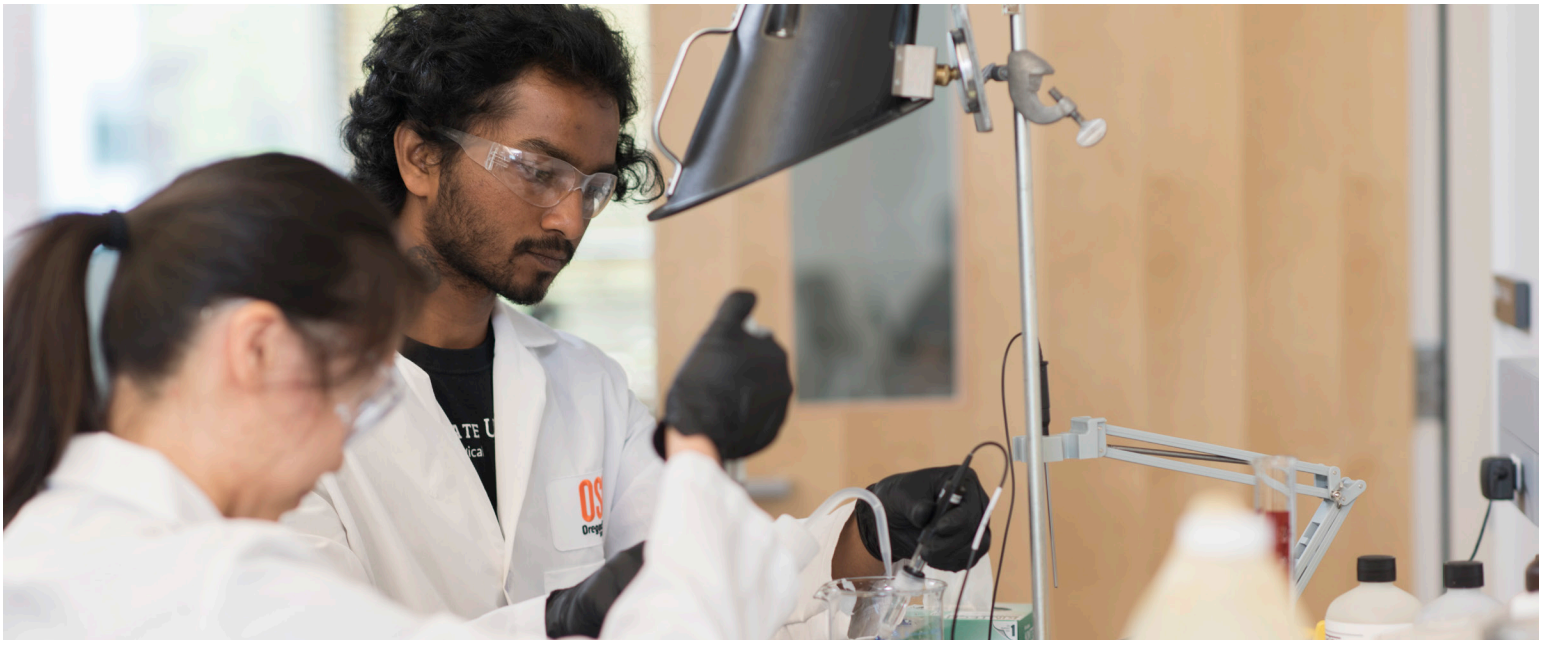


BY THE NUMBERS

55
Ph.D. students

41
master's students

37
faculty

$7.9M
research expenditures

Based on data as of Sept. 1, 2019.

Oregon State University

COLLEGE OF ENGINEERING

CHEMICAL, BIOLOGICAL, AND ENVIRONMENTAL ENGINEERING

Graduate Programs

The School of Chemical, Biological, and Environmental Engineering at Oregon State University offers master of engineering, master of science, and doctoral degrees in chemical engineeering, bioengineering, and environmental engineering. The school emphasizes the integration of chemical, biological, and environmental engineering principles and practice in a student-centered learning environment to provide work-ready graduates and technical solutions for a sustainable future.

We seek applicants who will broaden our capacity to advance student success across individual identities, racial/ethnic categories, and socioeconomic backgrounds. A diversity of faculty interests, broadened and reinforced by cooperation between CBEE and other engineering programs and research centers on campus, makes tailored individual programs possible.

CHEMICAL ENGINEERING

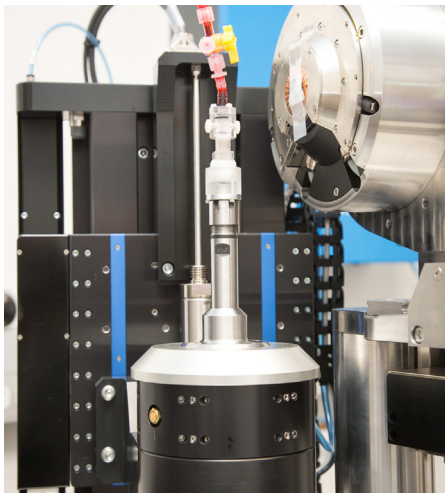
Course offerings and research in the following areas: Biochemical Reactors, Biotechnology, Electrochemical Deposition, Environmentally Benign Manufacturing, Fluidization Engineering, Materials Synthesis and Processing, Micro Energy and Chemical Systems, Polymer Rheology and Processing, Process Control/Optimization, Thin Film Processing, and Waste Minimization and Sustainable Processing

BIOENGINEERING

Course offerings and research in the following areas: Biomaterials, Biomedical devices and Instrumentation, Human Performance Engineering, Medical Imaging, and Systems and Computational Biology

ENVIRONMENTAL ENGINEERING

Course offerings and research in the following areas: Physical, Chemical and Biological Processes for Treatment and Remediation, Subsurface Processes, Environmental Microbiology, Environmental Toxicology, Aquatic Chemistry, Transport Processes in the Environment



CUTTING-EDGE FACILITIES

The School of Chemical, Biological, and Environmental Engineering is located in Johnson Hall, a 58,000-square-foot building, completed in fall 2016.

Lab areas consists of large, open, well-lit research bays designed to enhance interactions between faculty and students. Small, custom-designed ancillary rooms provide dedicated space for applications such as microscopy, cell culture, and materials characterization. Proximate office space for graduate students provides an environment for collegial interaction and innovation.

Our surface characterization laboratory is home to an ambient-pressure X-ray photoelectron spectroscopy system (AP-XPS), the first in the United States to incorporate near-ambient scanning tunneling microscopy capabilities.

Our new microCT laboratory (see photo above) houses the most sophisticated instrument of its kind available to academic researchers in the Pacific Northwest, capable of producing sharp, 3D images with unprecedented, micron-scale resolution.

ADMISSIONS AND FINANCIAL SUPPORT

We offer a number of graduate fellowships as well as graduate teaching and research assistantships. For full consideration, the application deadline for fall admission is Dec. 15. Visit **cbee.oregonstate.edu/grad** for more information.

AREAS OF RESEARCH EXCELLENCE

Bioremediation and Subsurface Processes

Contaminant flow and transport in porous media, carbon dioxide sequestration, degradation of toxic substances in soil and water.

Bioprocess Engineering

Bioconversion of biomass materials, algae bioprocessing.

Biomaterials, Diagnostics, and Therapeutics

Biocompatible interfaces and hydrogels, and cryopreservation.

Complex Fluids and Soft Solids

Polymers, rheology (bulk and interfacial), fluid mechanics (Newtonian and non-Newtonian), biofluids, biofilms, composites, gels, foams, and miscible interfaces.

Engineering Education Research

Industrial virtual laboratories, conceptual learning in engineering courses, engineering thinking and learning, and social inequality in engineering education and practice.

Reaction and Separation Processes

Catalytic materials and microchannel devices for improving the performance of chemical reactions and separations.

Sustainable Energy

Renewable fuels, solar energy, and electrochemical energy systems (batteries, fuel cells).

Thin Films, Nanomaterials, Nanotechnology, and Environmental Nanotoxicology

Materials for electronic devices, solar photovoltaics, nanopatterning, and environmental implications of nanotechnology.

Water Quality and Treatment

Particle removal from drinking water, anaerobic and aerobic wastewater treatment, hazardous waste treatment, and stormwater characterization and treatment.

OREGON STATE UNIVERSITY

As Oregon's leading public research university, Oregon State's impact reaches across the state and beyond.

With campuses in Corvallis and Bend, the OSU Portland Center, the Hatfield Marine Science Center in Newport, 11 academic colleges, and research and extension centers across the state, Oregon State has a presence in every one of Oregon's 36 counties, with a statewide economic impact of $2.714 billion.

COLLEGE OF ENGINEERING

Our college endeavors to create solutions that promote strong economies, healthy people, and a sustainable natural environment. Our program has a long history of producing world-class engineering graduates who make major impacts on society through significant contributions in science and technology. Alumni achievements include breakthrough innovations such as a revolutionary artificial heart valve, the computer mouse, and the concept of email.

By emphasizing practical, experiential engineering within our curriculum, we equip students with the knowledge, skills, and passion to advance innovative solutions to today's most complex engineering challenges in an inclusive environment.

CORVALLIS, OREGON

A beautiful college town nestled in the heart of the Willamette Valley, Corvallis is consistently ranked among the top 10 college towns in the nation and is known for innovation, education, entertainment, and overall livability. Corvallis embodies the spirit of the Northwest, with beautiful landscapes, friendly citizens, and an outstanding quality of life.

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