

Bourns College of Engineering (BCOE)

We Engineer Excellence

For 25 years, UC Riverside's Bourns College of Engineering (BCOE) has distinguished itself through faculty leadership, partnerships with



industry and government, engagement with local and global communities, remarkable growth, and top-tier rankings. We are consistently positioned as the top-ranked public engineering college of our size in the country (*U.S. News and World Report*).

BCOE is dedicated to educating the next generation of engineering leaders to discover and apply groundbreaking solutions and innovations that improve the quality of life.

CAREER JOB OPPORTUNITIES

Students at the Bourns College of Engineering have had tremendous success in securing professional positions upon graduation:

- **89% BCOE students are employed within 6 months of graduation** (*data is based on 2014 grads*).
- **Average Salaries** (*data is based on 2014 grads*)
 - Undergrad: \$59,429
 - Grad: \$86,941

Among the many companies who have hired BCOE graduates, are:

3M	IBM
ARCO	Intel
Boeing	Microsoft
Dupont	Raytheon
ESRI	Toyota
Ford Motor Company	Unisys
General Motors	Walt Disney
Google	Imagineering
Hewlett Packard	Xerox



RESEARCH

BCOE has several affiliated research centers that serve to attract funding, build expertise, and pursue research missions. In addition, Bourns Hall boasts nearly 200,000 square feet of laboratories and classrooms, and a \$10 million nanofabrication clean room.

Transparent skull implants

A team of UCR researchers led by **BCOE Professor of Mechanical Engineering Guillermo Aguilar** have developed unique, ceramic-based transparent cranial implants that provide a permanent window through which doctors can perform laser-based procedures on the brain. Now working as a project with the UC MEXUS program.

Making Batteries with Portabella Mushrooms



Researchers, **Cengiz Ozkan** and **Mihri Ozkan**, both professors in the Bourns College of Engineering at the University of California, Riverside have created a new type of lithium-ion battery anode using portabella mushrooms, which

are inexpensive, environmentally friendly and easy to produce. The current industry standard for rechargeable lithium-ion battery anodes is synthetic graphite, which comes with a high cost of manufacturing because it requires tedious purification and preparation processes that are also harmful to the environment.

Clean battery power

Winston Chung, Chinese battery technology scientist, inventor and entrepreneur, has given \$10 million to support clean battery power, solar energy and sustainable transportation research at BCOE. The first floor of UCR's Winston Chung Hall is powered by one of the largest storage battery installations at a university in the world.

CE-CERT

Established in 1992, the **Center for Environmental Research & Technology (CE-CERT)** has become a recognized leader in environmental education and a collaborator with industry and government to improve the technical basis for regulations and policy. Students who have worked at CE-CERT graduate with a set of skills that are desirable to employers and suitable for further academic pursuits.



FACULTY

Reza Abbaschian, Director of Winston Chung Global Energy Center, has been named the Albert Sauveur Achievement Award for 2013 by ASM International.

Professor of **Electrical Engineering and Founding Chair of the Materials Science and Engineering Program Alexander Balandin** was awarded the 2013 Materials Research Society Medal for his work on the thermal properties of graphene and the development of a new materials characterization technique. Named in UC's Highly Cited Researchers in 2015.

Professor of Bioengineering and Founding Chair of the Department of Bioengineering **Jerome S. Schultz** is a fellow of the American Chemical Society (ACS) and American Institute of Chemical Engineers (AIChE).

STUDENT TESTIMONIALS

"UCR is one of the few schools that combine chemical engineering and environmental engineering into a joint program. Because of that I can be a chemical engineer and also take classes that can give me a better understanding of environmental engineering. Another plus is if you were to plan to get a masters or PhD at UCR for chemical or environmental engineering, you technically graduate with both degrees. –

Larry Tran, Chemical Engineering

STUDENT SUCCESS

Materials Science and Engineering major **Brian Weden**, '13, won the 2012 Institute of Materials, Minerals and Mining (IOM3) Young Persons' World Lecture Competition.

"Team Inspiration" – a student team from UC Riverside – was one of only three finalists from the United States in Microsoft's Imagine Cup. The team designed **"Trash Boy"** – a game designed for mobile phones that allows players to protect fish by preventing trash from entering the ocean.

Majors

Bourns College of Engineering

- **Bioengineering MP**
- **Computer Science with Business Applications**
- **Chemical Engineering MP**
- **Computer Engineering M**
- **Computer Science MP**
- **Electrical Engineering MP**
- **Engineering Online M**
- **Environmental Engineering MP**
- **Materials Science and Engineering MP**
- **Mechanical Engineering MP**

Combined B.S. plus M.S. five-year programs are offered in Bioengineering, Chemical Engineering, Computer Engineering, Computer Science, Electrical Engineering, Environmental Engineering, and Mechanical Engineering. A combined B.S. Computer Engineering plus M.S. Computer Science five-year program is also offered.

M = Masters Degree P = Ph.D. Degree

CONTACT

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