BOURNS COLLEGE OF ENGINEERING

We Engineer Excellence

UNIVERSITY OF CALIFORNIA, RIVERSIDE
Let’s Get Real…

Who we are
- The Bourns College of Engineering has emerged as one of the best choices in the nation for an engineering education
- We offer B.S., M.S., and Ph.D. degrees in a diverse range of disciplines, and are ranked nationally in the very top tier of engineering colleges of similar size
- We are large enough to be outstanding, and yet small enough to give you personal attention

What we do …
- Help you stay on track to complete your degree on time
- Stay engaged with you, and nurture your academic and personal growth
- Ensure that you get the classes you need, when you need them
- Mentor you throughout your program, so you develop as a leader in the engineering profession of your choice

… and what we don’t!
- Inflate our admissions requirements to keep you out
- Bring you into an impacted program that prevents you from graduating on time
- Ignore you or your particular needs

Consider the academic features that are important to you: reputation, up-to-date and modern facilities, world-class faculty, professional guidance, and individual opportunity. You will find all this and a fulfilling college experience in the Bourns College of Engineering at the University of California, Riverside.

Our degree programs, described individually in this brochure, are designed to give you excellent preparation for all your post-graduation plans. Our students go on to study at premier graduate schools such as M.I.T., Stanford, Caltech, and Johns Hopkins, and are hired by companies such as Apple, Microsoft, Northrop Grumman, ESRI, Abbott Vascular, and the Naval Surface Warfare Center. We help you stay on track to finish your degree in four years. Our world-class dynamic faculty are dedicated to giving undergraduate students the attention they deserve and committed to delivering the best education possible. Our programs are accredited by ABET, the agency that ensures the nation’s highest academic standards in engineering.

Bourns’ facilities are state-of-the-art, incorporating the most advanced technology available from the get-go. And two new engineering buildings are approved for construction in the next few years.

DIVERSE Programs with a commitment to help you select the best one for you

A hallmark of our college is the opportunity for close student-faculty and peer interactions. Every Bourns undergraduate receives the guidance of a designated faculty mentor, who personally guides and contributes
to his or her academic development. Small classes—many are fewer than 60 students—encourage individual participation and open idea exchanges with peers and professors. By design, our flexible programs encourage strong collegial relationships within the College, which contribute to lifelong personal and professional ties.

You can be assured of **personal attention throughout your undergraduate career.** In addition to your faculty mentor, you will have professional staff advisors available year-round to answer your academic questions. Starting with specialized advising in your freshman year, you will always have guidance to oversee your progress and ensure you take the right courses at the right time for your program objectives.

A world-class institution is judged by its excellence in research. At the Bourns College of Engineering our undergraduate students not only benefit from our faculty research activities through current theory and practice included in curriculum, they have the opportunity to engage in research themselves. Faculty welcome student research assistance and are often able to fund undergraduate laboratory positions. There are also three research centers within the College which offer additional opportunities to reinforce classroom knowledge with real-world experience.

A wealth of engaging **extracurricular activities** in the College encourages professional, personal and leadership development. Bourns has 13 organizations, a Leadership Council and an Honor Society, all offering social activities, projects and opportunities to participate in regional and national conferences. A popular activity is competing in national design competitions. Our students have placed well in contests such as the Ethanol Vehicle Challenge, the American Institute of Chemical Engineers competition to design a non-alcoholic beer production facility, and the Monsanto $1 million challenge to develop a technology to recover materials from wastewater.

More information on our programs and what you can expect at the Bourns College of Engineering can be found on the following pages.
Engineering is a prestigious and exciting profession, and Bourns puts you on the track to success from day one. We offer a wealth of career-enhancing opportunities and support mechanisms to help you to reach your full professional potential.

**BECOME A LEADER:** We foster opportunities for all students to participate in a wealth of student and professional organizations.

Few other programs offer academic quality comparable to ours, and our emphasis on mentoring students to become high achievers truly sets us apart. We have a broad range of programs to help our students succeed. Each of our students has a unique and rewarding experience, but the extraordinary opportunities driving this experience are common to all.

**READY FOR THE BIG TIME:**
Our unique Professional Development Milestones Program helps keep you on track toward your career goal, making you ready to compete with the best of the best.

**HIT THE REAL WORLD RUNNING:**
Even as a freshman, you’ll have the opportunity to work with faculty on your own research project or one of theirs that applies what you’re learning to today’s—or tomorrow’s—important problems.

Live in an environment conducive to engineering success. Enginuity Hall is a new residence hall option designed specially to enhance success among engineering majors. Living in Enginuity will enhance the academic and social bonds you will form with your peers as you participate in our Community of Scholars program.

Learn, discover and connect with scholars in your peer group. Bourns has a special Community of Scholars program to cluster students with common career interests in the same courses, and augment these clusters with enrichment programs to encourage the formation of strong bonds and informal networks beyond the classroom. The friendships and networks that form reinforce the individual and collective pursuit of academic excellence. We have a special Student Success Coordinator dedicated to help you get the best out of this program.

**LEVERAGE YOUR TALENTS:**
We help you position yourself for scholarships, internships, awards and other recognition.

Develop strong leadership skills in national engineering professional organizations. Bourns boasts a full range of student chapters of national engineering
At first I chose UCR because I knew there would be lots of research opportunities and I would not be just a number in the system. After getting to design, build, and test a catapult and fluid mechanics testing contraption, I was hooked on engineering as a major. It turned out that Bourns is one of the top places in the nation to study atmospheric sciences. The College of Engineering’s Center for Environmental Research and Technology (CE-CERT) has the world’s largest indoor environmental chamber. So BCoE was a perfect fit for my interests and goals.

Ultimately, each person’s college experience is really self-directed and it’s up to you to make something happen. Having an “I can” attitude and maintaining my motivation, as well as an appreciation for engineering and life as a whole, have propelled my successes.

My college experience at UCR has dramatically changed my life in many ways. I’ve come to appreciate the people around me and the non-textbook part of my education. I love the community at Bourns College—it keeps me here.

My extra-curricular activities have included being President of the Society of Women Engineers, Treasurer of the BCoE Leadership Council, and active in the Air and Waste Management Association. I’ve done research with professors at CE-CERT for almost 3 years, studying secondary organic aerosol formation in air quality. I recently got first place at the Jim Guthrie Undergraduate Research Symposium.

For fun I spend time with my engineering friends, play violin, experiment with recipes, run, and collect post cards.

Lindsay Yee ’08
Hometown: Walnut, CA
Career Goal: Professor of Engineering and/or Air Quality Engineer
GLUCOSE AT A GLANCE

For those who hate needles – how about a microsensor surgically implanted in the skin, which changes color as blood glucose levels change? A quick look, and you know your blood glucose level.
Bioengineering, which is concerned with living systems, is already changing our lives dramatically with innovations like blood sensors, pacemakers, and new drug delivery systems. Bioengineers produce medicines such as antibiotics and insulin, design artificial organs, and apply gene therapies. Biomedical companies and research institutions already employ more high-tech professionals than any other industry in California, and biomedical applications are rapidly expanding. Bioengineering graduates will find themselves in high demand in an exciting and rapidly evolving industry.

WHERE THE ACTION IS:
Nearly 40% of the Life Sciences companies in the world are in California, mostly in Southern California.

At UCR, bioengineering students study a broad array of subjects needed to pursue biotechnology, biomedical engineering and medicine, ranging from biology and engineering to specialized courses like biomechanics, biosystems, and biomaterials. Professors and researchers from many other departments on campus are involved with bioengineering, bringing with them diverse expertise and unique research opportunities for undergraduate and graduate students in areas such as nanobiocircuits, genetic patterns, medical lasers, and computer-assisted surgery.

A new building with state-of-the-art laboratories is under construction for the program. The building design fosters interdisciplinary collaborations with Material Science and the Health Sciences Research Institute. The university also plans to extend the two-year biomedical program into a full four-year medical school, providing bioengineering students an even greater level of involvement in medicine and practical applications.

Bioengineering is a young, rapidly growing program in the Bourns College of Engineering, ready to engage its students in this exciting new domain.

“T here are many opportunities to further one’s education, social life and future success all at the same time here at the Bourns College of Engineering at UCR. The College is helping me get the most out of not only my major, but my college experience as well. For the past two years, the College has given me an NSF-funded CSEMS (Computer Science, Engineering, and Mathematics) scholarship. I am currently conducting research with Dr. Cengiz Oztan (Mechanical Engineering) in the synthesis and use of nanowires.

One of the greatest things about UCR is how easy it is to meet new people and make connections. The friends you make and the people you spend time with can truly make or break your college experience. I am part of numerous organizations on campus, such as the Biology in Medicine and Engineering Society (BMES). I am the secretary of the national Honor Society Alpha Lambda Delta, and I started my own club on campus called Hike to the C!. I also volunteer with the Campus Safety Escort Service and the Counseling Center’s Stressbusters program.

I chose the Bourns College of Engineering because it is an up-and-coming college and affords infinite opportunities. I’m in engineering because I want to do more than just cure people as a doctor. I want to build and prepare the tools that doctors use to help people. Bioengineering at BCoE will give me the necessary knowledge and capabilities that I can use to treat my future patients.”

Naubahar Agha ’10
Hometown: Mission Viejo, CA
Career goal: Prosthetics Designer
Where do industry and government go to understand new air quality technologies and concepts? Our research center, CE-CERT, operates one of the world’s largest and most advanced atmospheric laboratories for clearing the air on smog and climate.
Environmental engineering is a relatively new field, and is concerned with creating and managing processes and systems to help reduce or eliminate pollutants in the environment. For example, environmental engineers have designed high-efficiency smog control devices and are now hard at work developing pollution-free cars powered by alternative fuels such as electricity, propane, and hydrogen. They have also made our water resources cleaner and safer by vastly improving our wastewater treatment facilities and our systems for processing hazardous waste. Even our landfill needs have been reduced with the advancement of solid waste recycling systems.

As an environmental engineer, you can work in any aspect of environmental protection. Major areas for work include air pollution control, industrial hygiene, radiation protection, hazardous waste management, toxic materials control, water supply, wastewater management, storm water management, solid waste disposal, public health, and land management. Within each of these major categories are many sub-specialties.

The kind of work you can do as an environmental engineer is very diverse. You can be a researcher, designer, planner, operator of pollution control facilities, professor, government regulatory agency official, program manager, or you could be involved in professional society work. Your employer might be a private consulting/engineering firm, a university, a private research firm, a testing laboratory, a government agency (federal, state, or local), a major corporation, or a private business.

Bourns is unique in offering a dedicated major in Environmental Engineering. At many other schools Environmental Engineering is simply an option under another engineering program. Our program is designed to teach you the fundamentals of the discipline, such as air-quality and water-quality control, waste disposal, and process design. Beyond these basics, in-depth electives give you the opportunity to specialize in either air- or water-quality.

**IT’S EASY BEING GREEN:**

Demand for environmental engineers is expected to increase by 54% world-wide over the next 10 years

Thanks to the Bourns College of Engineering at UCR, I have become more confident and more ambitious in my field than I ever thought imaginable. I love it here and could not have acquired all the skills and knowledge of my field and self-realization of my identity at any other university. The college is diverse, small enough to pay attention to the needs of individual students, still developing with endless room for expansion in every department, has excellent and new engineering labs and classrooms, and a challenging and thorough curriculum taught by excellent professors.

I have been active in two organizations; the Society of Women Engineers and Tau Beta Pi, the engineering honor society. I have been so actively involved that I have made dozens of friends in different majors, applied myself professionally, and have made my college experiences much more enjoyable with the devoted friends with whom I make memories I will never forget.

The BCoE faculty has helped me attain my goals in research, network with companies, enrich my professional development and expand knowledge of my field. I have done research on secondary organic aerosol formation at the College of Engineering’s Center for Environmental Research and Technology (CE-CERT) and have acquired hands-on experience that academia cannot replace. Few people know that the engineering researchers at UCR have created many of the most commonly used air models in the nation. CE-CERT works directly with the EPA to continue accurately setting the standard for the air quality regulations in California.

Christina Zapata ’08
Hometown: Burbank, CA
Career goal: Air Quality Engineer
Bourns researchers are using carbon nanotube structures as the internal scaffolding for promoting new bone growth. The strength of the nanotube framework helps make the newly grown bone much stronger.
Chemical engineers design processes to make an impressive array of products we use every day, such as semiconductors, pharmaceuticals, gasoline, plastics, fertilizers, foods, and beverages. Chemical engineering involves combining engineering with other fields such as chemistry, physics, mathematics and biology, and applying communication and teamwork skills to find innovative, efficient, and economical solutions. Chemical engineers may improve food processing techniques, or methods of producing fertilizers to enhance the quality and increase the quantity of food. They may construct synthetic fibers for our clothes, develop methods to produce drugs, find efficient and safe means of refining petroleum products, or remediate and control environmental problems.

However, chemical engineers do not simply “make things.” Their expertise is also applied in the areas of law, education, publishing, finance, and medicine, as well as in many other fields that require technical training. Consider the challenges of purifying polluted air and water, discovering more versatile and desirable products, improving methods of recycling, harnessing solar power, producing safer cosmetics, and developing more efficient pharmaceutical products. Chemical engineers work in an array of exciting industries.

UCR’s major in Chemical Engineering provides a strong foundation in the basic and applied sciences, and gives students a solid grounding in modern chemical engineering processes and their practical applications. Students can choose either a traditional chemical engineering program or one that specializes in biochemical processes or bioengineering. The goal of each of our concentrations is to provide our students with solid training that will enable them to make meaningful contributions throughout their careers.

Where the Big Bucks Are:
Average starting salaries for chemical engineering grads are among the highest across all disciplines.
Can’t name that song? Just hum it! An indexing mechanism developed at Bourns has been used for retrieving songs from peer-peer systems after the user has hummed a few bars.
The Information Systems degree at Bourns is offered jointly with the Anderson Graduate School of Management. This degree is the perfect background for a career in information management in a corporate setting. It is also excellent preparation for an M.B.A. degree.

The Information Systems program at Bourns is unique in its emphasis on the breadth and depth of technical preparation. Students complete almost the same suite of courses as Computer Science majors, and augment this preparation with a solid suite of core business courses in areas like management, accounting, finance, marketing, and communications. It would be hard to find a comparable degree elsewhere.

The technical component of the degree includes the principles and design of computers and computer systems, programming techniques, systems analysis and design, networking, databases, and security. This range of preparation produces graduates competent for both managerial as well as technical roles.

Career prospects for information systems specialists are excellent, and include both technical and managerial positions. Information systems managers coordinate computer-related activities of a company and oversee the work of programmers and technical staff. Project managers manage technology projects. Network managers are responsible for the administration and maintenance of local area networks. Other career opportunities involve management of databases, web programming, application programming, or system programming.

Information Systems graduates can go on to complete advanced degrees, whether in computer-related fields or in management.

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To help in diagnosis of respiratory ailments, researchers at Bourns are building sophisticated methods for modeling and animating the respiratory system.
Computing is now central to simple everyday tasks—surfing the net, shopping with a credit card, playing a video game, or just simply driving a car. Computer science is concerned with designing computer systems and software to process information efficiently. All of science and engineering now depends on computing, as do many aspects of other fields as diverse as art and music.

The demand for computer scientists has continued to grow, and will remain at the top of the growth charts for the foreseeable future. The Department of Labor estimates that computer scientists and computer systems analysts will be among the fastest growing occupations in the US throughout the next decade.

Where the Jobs Are:
The National Science Foundation expects the number of jobs in computer software to grow by 1.4 million between 2002-2010.

The computer science program at Bourns emphasizes theory and hands-on experience, creativity and active problem solving. Our courses typically include a substantial laboratory component under the guidance of an instructor or teaching assistant, where students put to work the concepts learned in class.

Students acquire breadth as well as depth. The areas we cover include computer architecture, operating systems, compilers, networking, software engineering, graphics, as well as foundational areas such as principles of computation and algorithm design. We also offer an excellent suite of electives in areas including networking, databases, computer graphics, artificial intelligence, operating systems, computer architecture, and algorithms.

Our department maintains close ties with industry through an advisory board of high-ranking executives from leading computer companies. Faculty and students work on research sponsored by companies including Intel, Qualcomm, AT&T, Aerospace Corp., Hewlett-Packard, Philips, and Motorola. Many faculty members have industry experience, either through prior appointments, consulting activities, or sabbaticals spent at industry research labs.

I chose engineering because I have always been interested in computers and electronics and I enjoy logic and problem solving. In future research, I plan to study computer security and networks. I plan to continue my studies next fall as a doctoral student at Bourns College of Engineering.

To have a fun college experience means you must first be successful. I study as much as possible with students who excel—studying with friends who play around will not help—and talk with professors, do research and get internships. I take pride in excelling as a student leader, being a Dean’s Honor student, and being active in my community. I am the president of the National Society of Black Engineers, am on the UCR Career Services Student Advisory Board, and have been very active in the Pi Epsilon chapter of the Alpha Phi Alpha fraternity. My social activities include attending student organization events and programs, traveling, hanging out with friends, watching movies and TV, bowling, and working out at the UCR Rec Center.

I have participated in both research and internships. My research experience includes projects at both UCR and UC Berkeley, including the prestigious Berkeley Summer Undergraduate Program in Engineering. The goal of my UCB summer project was to assist in advancing research in bio-artificial liver technology. Last summer in an internship at Southern California Edison (part of one of the world's largest power conglomerates), I worked in the IT Technical Resources & Frameworks division and shadowed members of the computer security and forensics department.

Dorian Perkins '07
Hometown: Riverside, CA
Career goal: R&D in Network Technologies and Security Applications
Work by Bourns researchers has enabled the manufacture of gem quality, high-carat genuine diamonds for a fraction of the price of natural diamonds. (Yes, real diamonds.)
Mechanical engineering is traditionally divided into three areas: energy, manufacturing, and design. Mechanical engineers are concerned with energy from natural sources and its economical conversion into useful energy, the processing of materials into useful products, and the education of new engineers. Mechanical engineers also act as the interface between society and technology. There are over twenty-four subfields in mechanical engineering, ranging from air pollution control to underwater technology. Mechanical engineers frequently shift among the areas of design, production, and testing.

Mechanical engineers require broad education to solve complex problems in today’s technological world. The Mechanical Engineering program at UCR has been structured to give you the necessary foundation in mathematics, physics, chemistry, and mechanics, as well as that required for employment in modern industry and the pursuit of higher education.

Joel Miller ’10
Hometown: Hesperia, CA
Career goal: Professional Race-car Driver

"I chose my major and the Bourns College because it relates very well with my passion for racing. I live and breathe racing cars. I am the 2006 North American champion in go-karting, and my racing accomplishments have a large range. I started racing at the age of 7 and won my first regional championship when I was 8 years old. I have also always been interested in design and how things work, so I chose Mechanical Engineering at UCR.

My racing career, which started as a family thing, has taught me public relations skills and how to speak with corporations. I have been offered the opportunity for several internships at different locations, but had to turn them down because of my rigorous schedule. For example, Ford Motor company’s Saleen division offered me an internship.

BCoE offers many opportunities such as internships, extracurricular projects, and club projects, but my devotion to my career and my school work dictate a rigorous schedule. I am a very driven person who works hard until the job is finished. My fun is at the racetrack, but when I have free time I like to play golf and do various forms of water sports, such as water skiing and wake boarding.

I want to be a professional Indy car racer by the time I’m 22. My mechanical engineering degree will ensure that I’ll be part of a racing team, even if I’m not behind the wheel, and give me more options in life."
Computer Engineering

Hot-Wired CPUs

Computer too slow? Research at Bourns is pursuing self-adapting computer CPUs that will “re-wire” themselves and adapt to each program as it executes, speeding up execution by a factor of 100.
Computer Engineering  Few people in the world have been untouched by the computer revolution. Computers are central to work in all industries and all disciplines. The computing industry needs engineers who understand hardware, software, circuits, and algorithms, and who can apply this expertise to areas such as computer architecture, computer communications, computer systems, digital design and interface, information and signal processing, and control and automation.

Employment opportunities for computer engineers abound. They may work in high-tech Fortune 500 companies, government agencies, or in small engineering-design firms and private consulting firms. Industry demand for these skills is currently very high, and goes beyond traditional computing industries. Computer engineers work in communications, media, entertainment, manufacturing, and numerous other fields.

The Computer Engineering major at Bourns combines the hardware and circuitry elements from electrical engineering with the software and programming elements from computer science to give students a stronger understanding of how computers work and to prepare them to design both current and future computing systems. These systems include consumer electronics, such as cell phones and digital cameras, factory automation equipment, office automation equipment and automotive electronics, as well as traditional desktop and laptop computers.

JOBS, JOBS, JOBS:
As organizations integrate increasingly sophisticated technologies and systems, the growth of computer engineering jobs will grow much faster than average.

Elective courses in our curriculum allow students to specialize in sub-disciplines, including computer architecture, software engineering, real-time systems, embedded systems, communications, networking, signal processing, or robotics. Our goal is to support both the growing industrial need for graduates well-trained in relevant topics, as well as to prepare students for graduate study in Computer Engineering or related fields.

“...I decided to pursue computer engineering because computers have always fascinated me; I just love technology. I also wanted to find a major that was well-rounded and challenging. I chose UCR’s Bourns College of Engineering because I knew it was a top engineering school and it has well-established professors.

Presently, I’m doing research with Dr. Frank Vahid which includes hands-on experience. I work with electronic blocks, called eBlocks, used to make life simpler for anyone whether or not they have a technological background. They’re meant to be used as building blocks to make more complicated electronic systems.

I also love to travel and I know four languages fluently, so next year I plan to intern at an engineering company in a foreign country. The College has many resources to help place us in internships.

I realized early on that to succeed in engineering meant organization, dedication and of course studying! While staying organized and keeping on task, it’s easier to work and have fun! But if I’m not coding, researching or studying, I’m usually snowboarding or watching movies. Besides that, I make sure to stay involved in school by participating in games and being a member of clubs such as Society of Women Engineers, National Society of Black Engineers, Nigerian Student Association and UCR Choir.”

Margaret Ukwu ’09
Hometown: Paris, France
Career goal: United Nations Engineer
To help in counter-terrorism work, Bourns researchers have developed some of the best available methods for automated recognition of human faces and gaits.
Enrollment in the Bourns College of Engineering was the first step in what I hope will be an ambitious and productive career. I originally chose UCR and the Bourns COE for its advanced nanotechnology research, but have since found much more.

The faculty has regularly awed me with their accomplishments and intelligence, as well as their enthusiasm and willingness to help students.

The College staff and administration have proven to be flexible and supportive of all my academic and extracurricular pursuits. They regularly support and encourage student involvement in engineering clubs, organizations, and student-driven initiatives. I have found that the student leadership and involvement opportunities in the Bourns COE are far superior to what can be found in larger colleges of engineering.

The encouragement and enthusiasm for undergraduate participation in research have been unparalleled, and I began working in a nano-electrochemistry lab shortly after entering Bourns. Since then I’ve had the opportunity to participate in research symposiums, conferences, and competitions along with other COE students.

My College experience has put me in a position to be competitive nationally for scholarships, internships, contests and graduate school admissions. I can’t imagine a better first step for the prestigious career path I plan to pursue."

Megan Nix ‘07
Hometown: Auburn, AL
Career goal: Nanotechnology Research for Space Exploration and the Environment


Aguilar, Guillermo. Assistant Professor of Mechanical Engineering. Ph.D. (Mechanical Engineering), University of California Santa Barbara, 1999.


Barth, Matthew. Professor of Electrical Engineering. Ph.D. (Electrical Engineering), University of Southern California, 1981.

Beni, Gerardo. Professor of Electrical Engineering. Ph.D. (Theoretical Physics), University of California, Los Angeles, 1974.

Bhanu, Bir. Professor of Electrical Engineering. Ph.D. (Electrical Engineering), University of Southern California, 1981.


Dames, Christopher. Assistant Professor of Mechanical Engineering. Ph.D. (Mechanical Engineering), Massachusetts Institute of Technology, 2006.


Faloutsos, Michalis. Associate Professor of Computer Science and Engineering. Ph.D. (Computer Science), University of Toronto, Canada, 1999.


Fleisch, Brett. Associate Professor of Computer Science and Engineering. Ph.D. (Computer Science), University of California, Los Angeles, 1989.


Korotkov, Alexander. Professor of Electrical Engineering. Ph.D. (Physics), Moscow State University, Russia, 1991.

Krishnamurthy, Srikanth. Associate Professor of Computer Science and Engineering. Ph.D. (Electrical and Computer Engineering), University of California, San Diego, 1997.

Lake, Roger. Professor of Electrical Engineering. Ph.D. (Electrical Engineering), Purdue University, 1992.


Liao, Jiayu. Assistant Professor of Bioengineering. Ph.D. (Biological Chemistry/Signal Transduction), University of California, Los Angeles, 1999.

Liu, Jianlin. Assistant Professor of Electrical Engineering. Ph.D. (Physics), Nanjing University, 1999.

Lonardi, Stefano. Assistant Professor of Computer Science and Engineering. Ph.D. (Computer Science), Purdue University, 2001.


Matsumoto, Mark. Professor of Chemical and Environmental Engineering. Ph.D. (Civil Engineering), University of California, Davis, 1982.

Molle, Mart. Professor of Computer Science and Engineering. Ph.D. (Computer Science), University of California, Los Angeles, 1981.


Mulchandani, Ashok. Professor of Chemical and Environmental Engineering. Ph.D. (Chemical Engineering), McGill University, 1985.

Myung, Nosang. Assistant Professor of Chemical and Environmental Engineering. Ph.D. (Chemical Engineering), University of California, Los Angeles, 1998.


Norbeck, Joseph. Professor of Chemical and Environmental Engineering. Ph.D. (Theoretical Chemistry), University of Nebraska, 1974.


Ozkan, Cengiz. Associate Professor of Mechanical Engineering. Ph.D. (Materials Science), Stanford University, 1997.

Payne, Thomas. Associate Professor of Computer Science and Engineering. M.S./Ph.D. (Mathematics), University of Notre Dame, 1967.


Rodgers, Victor. Professor of Bioengineering. DSC (Chemical Engineering), Washington University, 1989.


Tan, Xiang-Dong. Associate Professor of Electrical Engineering. Ph.D. (Electrical & Computer Engineering), University of Iowa, 1999.


Tuncel, Ertem. Assistant Professor of Electrical Engineering. Ph.D. (Electrical and Computer Engineering), University of California, Santa Barbara, 2002.


Venkatrami, Sundararajan. Assistant Professor of Mechanical Engineering. Ph.D. (Mechanical Engineering), University of California, Berkeley, 2000.
Bourns College of Engineering students have the best of both worlds—the excellence and resources of the University of California and the personalized atmosphere and support services of an elite small college.

Living on campus is a great way to immerse yourself in campus life. There are many on-campus housing options, including residence halls, apartments and family housing. You can maximize your engineering experience by opting for a coveted spot in Enginuity Hall, located across the street from the Bourns engineering complex. This comfortable new suite-style residence hall is a dedicated Engineering Learning Community, providing study lounges, computer labs outfitted with high speed internet access, seminar rooms and academic support programs like tutoring, study groups and peer mentoring.

Finances should not keep you from a superior UCR education. Financial aid is plentiful and takes many forms, including grants, loans, scholarships, payment plans and work-study opportunities. In addition, College of Engineering students may be eligible for scholarships from corporate and private donors supporting the College, and from such agencies as the National Science Foundation, through their CSEMS Scholar Program.

With over 180 campus clubs and organizations available to you, as well as spiritual and recreational activities, UCR is a multicultural village for you to explore, pursue your interests and make new friends.

The campus is located in the heart of Southern California, one hour from beaches, skiing, mountain-climbing and desert resorts. The area is traversed by major transportation corridors, including a regional light rail system connecting local commuters to Orange, Los Angeles and San Diego counties. The Los Angeles-Ontario airport, only 20 miles away, serves all major transportation corridors with daily nonstop flights to major U.S. cities and select international destinations.

The city of Riverside, with a population of nearly 300,000, is in one of the country’s fastest growing regions. It serves as Inland Southern California’s cultural, educational and social center. The city has a vibrant downtown rich in history, an expanding high-tech industry and the second-fastest growing small business sector in the nation.

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