



UC MERCED  
**graduate studies**



# Graduate Studies at UC Merced

## A MODERN FOUNDATION

At the first American research university of the 21st century, UC Merced's graduate community is built upon the foundational pillars of diversity and interdisciplinarity. Small academic programs, close working relationships between students and faculty members and a commitment to research excellence allow students to explore the connections among related fields while acquiring mastery in specialized areas.

## CENTRAL TO IT ALL

The small city of Merced has a low cost of living and is within a two-hour drive of popular California attractions: Yosemite National Park, San Francisco, Sacramento, Monterey Bay and some of the most beautiful coastline in the world.

The UC Merced campus is ideally located in the heart of the San Joaquin Valley, reflecting the poetry of its landscape, history, resources and diverse cultures while capitalizing on and expanding the Valley's connections to the emerging global society. The university recognizes and appreciates the value of a natural laboratory where research can push the frontiers of the local, national and global intellect.

**PASSION AND UNCOMPROMISING HIGH STANDARDS** fuel a sense of academic, social and environmental responsibility among UC Merced students, faculty and staff.

**SIZE MATTERS AT UC MERCED**, where small programs mean graduate students receive more one-on-one faculty attention and more access to state-of-the-art labs and equipment. Students develop strong connections to their cohorts, their campus and their overall graduate experiences.

Cutting-edge research is complex, as are the demands of the marketplace, so UC Merced faculty members are dedicated to nurturing an academic culture and institutions that foster interdisciplinary and transdisciplinary research and education. This commitment acknowledges that some of the greatest challenges confronting our civilization — as well as some of the greatest intellectual opportunities of our time — require cross-disciplinary approaches. As a result, UC Merced graduate students are better equipped for the fluidity of the current job market, and are prepared and able to seek careers in academia, industry, government or private research.

**Just as important, UC Merced offers impressive and competitive funding options, so the burden of financing a graduate education doesn't get in the way of obtaining one.**

Approximately 95 percent of UC Merced graduate students receive at least partial funding, and 80 percent or more receive full funding in the form of teaching or research assistantships or through fellowships. For more information on financial support please visit [graduatedivision.ucmerced.edu/financial-support](http://graduatedivision.ucmerced.edu/financial-support).

---

**DIVERSITY MATTERS.** Students and scholars from across the world contribute their voices and traditions to the campus, and are positioning UC Merced as a leading global institution. The diverse backgrounds, experiences and perspectives of students, scholars and faculty members offer much to communities within the wider Valley, where local issues often mirror those of the global village: environmental and economic challenges; immigration; cultural understanding; and emerging opportunities.

---

**GREEN IS A WAY OF LIFE.** UC Merced's commitment to the environment is immediately evident from the energy-efficient buildings to the water-wise landscaping. Environmental principals guide every purchase. UC Merced is the only campus in the nation to achieve environmental certification for every one of its buildings under the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) program. UC Merced is also the only university in the nation to have a triple zero commitment: to use zero net energy, create zero net greenhouse gas emissions and create zero landfill waste by 2020. Students participate through recycling, helping compost and reduce food-packaging waste, as well as through environmental research and clubs dedicated to helping the Earth.

---

**INNOVATION** is deeply interwoven into all facets of the UC Merced campus. Superior information technology infrastructure enables the campus community to stay connected and productive. It encompasses innovative Web technologies, smart classrooms and computer labs, digital storage and displays, video presentations, software licensing, printing and programming.

---

**TAKING IT A STEP FURTHER.** Modern technology is invented on the UC Merced campus. From capturing solar energy and increasing the power of lasers to discoveries in energy, communications and computer-generated intelligence, talented researchers have used the campus's laboratories and classrooms to produce technologies that have the potential to change lives, benefit industries and help improve communities.





Ashli Yang is conducting research on Columbian mammoth bones dating back to the last ice age at a storage facility at UC Merced.

**RESEARCH IS THE CORNERSTONE OF UC MERCED.** Innovative faculty members and students conduct disciplinary and interdisciplinary research that directly benefits the world around them, as they tackle complex problems affecting our region, the state and beyond. In state-of-the-art campus labs and in the field, our researchers are working on significant problems and innovative solutions in areas such as data analytics, robotics, solar and renewable energy, water quality and resources, health science, social inequality, immigration, child development, entrepreneurship, materials science and more. Explore our research centers below and join in the excitement of discovery at UC Merced.

---

**MERCED NANOMATERIALS CENTER FOR ENERGY AND SENSING (MACES)** is a new research center funded by a \$5 million grant from NASA. The center will harness the university's strong nanomaterial-based research programs and create new materials solutions enabling high-performance, reliable, compact and lightweight energy conversion, storage and sensing devices for NASA missions.

---

**THE CENTER FOR COMPUTATIONAL BIOLOGY (UCM-CCB)** is a research and education center that sponsors multidisciplinary scientific projects in which biological understanding is guided by computational modeling. The center also facilitates the development and dissemination of graduate course materials based on the latest research in computational biology.

---

**THE RESOURCE CENTER FOR COMMUNITY ENGAGED SCHOLARSHIP (ReCCES)** helps community members connect with UC Merced students and faculty and staff members so they can work together toward common research goals. ReCCES is designed to increase the effectiveness of higher education and address important community concerns.

---

**THE CENTER FOR INFORMATION TECHNOLOGY RESEARCH IN THE INTEREST OF SOCIETY (CITRIS)** creates information technology solutions for many of our most pressing social, environmental and health care problems. CITRIS was created "to shorten the pipeline" between world-class laboratory research and the creation of start-ups, larger companies and whole industries. CITRIS facilitates partnerships and collaborations among more than 300 faculty members and thousands of students from numerous departments at four University of California campuses (Berkeley, Davis, Merced and Santa Cruz) with industrial researchers from more than 60 corporations.





Professor Fabian Filipp, who studies systems biology and cancer metabolism, is working in the lab with Theo Crouch, a graduate student from Quantitative and Systems Biology.

Faculty and students are utilizing a radio-controlled boat equipped with GPS navigation and a sensor to map bodies of water and collect water data.



---

**THE HEALTH SCIENCES RESEARCH INSTITUTE (HSRI)** applies knowledge from advanced research to create solutions for complex health issues. Research themes include the biomolecular basis of health and disease, prevention and control of chronic disease, health disparities, immunology and infectious disease and stem cell biology.

---

**THE ROY FAMILY GENOME CENTER** was founded in 2007 to promote and develop the use of molecular biology in research programs at UC Merced.

---

**THE SIERRA NEVADA RESEARCH INSTITUTE (SNRI)** has experts in the natural sciences, engineering and policy sciences working together to address resource-related questions for the Sierra Nevada and the Valley, exploring fields like hydrology, fire science, ecology and climate change.

---

**THE STEM CELL INSTRUMENTATION FOUNDRY (SCIF)** provides stem cell researchers at UC Merced and throughout California access to advanced instruments, techniques and collaborators for single-cell analysis. The foundry will enable innovations in biotechnologies that will lead to new discoveries about stem cells — discoveries that will enable researchers to increase our understanding about the molecular signals that influence the properties and behavior of stem cells.





Professor Peggy O'Day and students are collecting soil samples during a field trip to the Merced Vernal Pools and Grassland Natural Reserve at UC Merced.

**THE UC MERCED CENTER FOR THE HUMANITIES** supports the exchange of intellectual and creative ideas and activities among faculty members, students and the broader regional community. This is accomplished through a wide array of forums, from lectures and seminars to exhibits and films. The center enriches imaginations by deepening explorations of our interconnected lives.

---

**THE UNIVERSITY OF CALIFORNIA ADVANCED SOLAR TECHNOLOGIES UNIT (UC SOLAR)** is dedicated to designing and developing innovative solar-energy-generation technologies that are more efficient, more affordable and easier to integrate. UC Solar comprises participants from the University of California's Merced, Berkeley, Santa Barbara, Davis, San Diego, Riverside, Irvine, Santa Cruz and Los Angeles campuses, and is supported by research grants, philanthropic gifts and corporate sponsors.

---

**PARTNERSHIPS** with other UC campuses and with entities such as Lawrence Livermore National Laboratory, Sequoia-Kings Canyon and Yosemite national parks enhance education and research at UC Merced.









**GRADUATE ENROLLMENT BY ETHNICITY**

- LATINO/HISPANIC 12%
- ASIAN 10%
- BLACK/AFRICAN AMERICAN 2%
- PACIFIC ISLANDER 1%
- WHITE 39%
- TWO OR MORE RACES 4%
- DECLINE TO STATE/UNKNOWN 3%
- NONRESIDENT ALIEN 29%

**UNIVERSITY ENROLLMENT**

UNDERGRADUATES	<b>5,884</b>
GRADUATES	<b>384</b>
<b>TOTAL</b>	<b>6,268</b>

FALL 2014 DATA PREPARED BY INSTITUTIONAL PLANNING



## HOW AND WHEN TO APPLY

Additional information on UC Merced graduate studies, application requirements and the online graduate admissions application are available at [graduatedivision.ucmerced.edu](http://graduatedivision.ucmerced.edu).

Prospective students are encouraged to begin the admissions process as early as possible during the prior academic year. Check our website for the most current domestic and international application fee requirements. The application deadline for all academic programs is Jan. 15; however, some programs and funding options may have earlier deadlines.

---

## INTERNATIONAL STUDENTS

Students with credentials from universities outside the United States should begin the application process well in advance of the deadline. Applicants whose native language or language of instruction is not English must show evidence of having recently taken the Test of English as a Foreign Language (TOEFL) or the International English Language Testing Service (IELTS) examination.

Please visit the Graduate Division website at [graduatedivision.ucmerced.edu](http://graduatedivision.ucmerced.edu) and the International Students and Scholars Office website at [iss.ucmerced.edu](http://iss.ucmerced.edu) for additional information.

---

## HOUSING

Students are able to choose from a wide variety of housing options in the Merced community, including condos, houses, room rentals and apartments. For information on off-campus housing, please visit [housing.ucmerced.edu](http://housing.ucmerced.edu).

## PLANNING A VISIT?

Campus visits can be scheduled online, by phone and by email. Call us at 209-228-6316, email us at [tours@ucmerced.edu](mailto:tours@ucmerced.edu) or visit our website at [tours.ucmerced.edu](http://tours.ucmerced.edu) to make reservations using our online calendar.

## CONTACT US

P: 209-228-4723

F: 209-228-6906

E: [grad@ucmerced.edu](mailto:grad@ucmerced.edu)

W: [graduatedivision.ucmerced.edu](http://graduatedivision.ucmerced.edu)



[facebook.com/ucmgraddiv](https://facebook.com/ucmgraddiv)



[twitter.com/ucmgraddiv](https://twitter.com/ucmgraddiv)



[instagram.com/ucmercedgraddiv](https://instagram.com/ucmercedgraddiv)





Professor Stefano Carpin's robotics lab studies grasping and manipulation through a National Sciences Foundation (NSF) funded dual-arm WAM Barrett robot.

Professor Ramesh Balasubramaniam is exploring sensorimotor neuroscience to study the brain and behavior with graduate students Butovens Mede and Jessica Ross from Cognitive and Information Sciences.



UC MERCED  
**graduate studies**  
GRADDIV.UCMERCED.EDU

Brendan Smith, a graduate student in Mechanical Engineering, is flying an unmanned aerial vehicle to gather data that can assist in a variety of fields including precision agriculture, water management and environmental development.





## GRADUATE DEGREES OFFERED

APPLIED MATHEMATICS (M.S., Ph.D.)

BIOLOGICAL ENGINEERING AND SMALL-SCALE TECHNOLOGIES (M.S., Ph.D.)\*

CHEMISTRY AND CHEMICAL BIOLOGY (M.S., Ph.D.)

COGNITIVE AND INFORMATION SCIENCES (Ph.D.)

ELECTRICAL ENGINEERING AND COMPUTER SCIENCE (M.S., Ph.D.)

ENVIRONMENTAL SYSTEMS (M.S., Ph.D.)

INTERDISCIPLINARY HUMANITIES (M.A., Ph.D.)

MECHANICAL ENGINEERING (M.S., Ph.D.)\*

PHYSICS (M.S., Ph.D.)

POLITICAL SCIENCE (Ph.D.)

PSYCHOLOGICAL SCIENCES (Ph.D.)

QUANTITATIVE AND SYSTEMS BIOLOGY (M.S., Ph.D.)

SOCIAL SCIENCES (Ph.D.)\*

SOCIOLOGY (Ph.D.)

*\*An emphasis within the Individual Graduate Program (IGP).*