What in the world is EARTH SYSTEM SCIENCE?

The Department of Earth System Science (ESS) at UC Irvine offers a unique blend of coursework focusing on atmospheric science, ecosystem science, hydrology and ocean science. In ESS, we strive to better understand these natural systems individually, how they interact as part of a system, and how humans are impacting Earth’s processes.

Undergraduate Degree Program

Earth System Science at UC Irvine
Program highlights the scientific aspects of environmental problems
Provides students with a fundamental understanding of the oceanographic, atmospheric and terrestrial sciences
Students have the option of specializing in Atmospheric Science, Hydrology and Terrestrial Ecosystems, or Oceanography
Prepares students for graduate studies, careers in science education and environmental research

Environmental Science at UC Irvine
Program highlights environmental problem solving
Students study the scientific, socioeconomic, and policy aspects of environmental problems
Courses offered focus on local and global environmental issues, sustainability and climate change
Graduates are prepared for science and policy careers in government, private industry and non-profit sector

Ph.D. Degree Program

For more than two decades, ESS has prepared students to make a difference as scientists, researchers and educators

Graduate coursework includes physical, chemical and biological aspects of Earth system science
Our Ph.D. degree program is ranked among the top doctoral programs in the country by the National Research Council
Work with distinguished and highly recognized faculty in the classroom, laboratory and field
Earn your Ph.D. in our fully-funded doctoral program

Graduate Students Have the Opportunity To...

Fly at the top of the troposphere
Trek through giant sequoia groves
Sail the world’s oceans
Develop computer models in hi-tech labs
Analyze atmospheric samples in Antarctica
Graduate students have the opportunity to...

A UC Irvine professor-student team won the Nobel Prize for discovering that CFCs destroy the ozone layer. A UC Irvine glaciologist’s work led to one of last month’s reports showing one of the Earth’s major ice sheets in irreversible retreat. Students and professors are in the field working to predict changing weather patterns, fire seasons and water tables—working to understand how shifting seasons affect global ecosystems; to get zero-emission vehicles on the road faster; to help coastal communities adapt to rising seas;...

Even the President Thinks We’re Awesome!

President Obama at UC Irvine Commencement 2014

UC Irvine Set Up the First Earth System Science Department in America

President Obama at UC Irvine Commencement 2014

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www.ess.uci.edu