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Decades ago, in an attitude of “optimism without illusion,” our nation embarked on a challenge to explore space. With this same attitude, the Bren School addresses environmental challenges here on our own planet. We work toward the future, optimistic that the School, its students, and its faculty will make an enduring contribution to the quality of life around the world. This optimism is grounded by our commitment to research and teaching that integrates natural science, social science, law, policy, and business management in ways that will solve 21st century environmental problems.

Nowhere is this more evident than in the Bren School’s Master of Environmental Science and Management (MESM) program. With its balanced core curriculum and the capstone Group Project, this professionally oriented degree program not only provides a solid scientific framework, but also trains students to approach environmental issues from an integrated perspective, addressing the social, legal, political, and business contexts within which these issues arise. In addition, an intercampus program brings MBA students to Bren from the five UC business schools for a special emphasis in corporate environmental management.

At the Ph.D. level, the Bren School’s approach is multidisciplinary in nature as well as very individualized in implementation. Working closely with a small group of faculty mentors, students undertake in-depth programs of study in important areas of environmental science and policy, or an emphasis in economics and environmental science (EES). The aim of our Ph.D. program is to produce the next generation of intellectual leaders in academia and professional leaders in both the public and private sectors.

Altogether, the learning environment at the Bren School is unique: students from various undergraduate disciplines, work experiences, and backgrounds are brought together with a faculty of unusual ability who are committed to interdisciplinary approaches, in an award-winning “green” building that serves as a living laboratory.

We are at a critical juncture in the evolution of humankind’s relationship to the environment. Rampant exploitation of the Earth’s resources and unfettered pollution of its air, water, and soil are incompatible with a sustainable quality of life for its inhabitants now and into the future. It will take people of unusual skill to manage the multifaceted nature of the issues we must confront and the problems we must solve in order to fulfill our role as stewards of the planet. It is the goal of the Bren School’s MESM, intercampus MBA, and Ph.D. programs to produce those people who will lead, teach, and inspire us.
The mission of the Bren School is to play a leading role in:
• researching environmental issues;
• identifying and solving environmental problems;
• training research scientists and environmental management professionals.

Founded to Prepare Leaders
At the Bren School, science, management, law, and policy converge programatically. We emphasize a fresh, multidisciplinary approach to the study of the environment and humankind’s impact on natural resources that arise in legal, political, and business contexts. The School mentors and prepares the next generation of professional and academic leaders while fostering collaborative teaching and research among University of California campuses.

In 1991, the Regents of the University of California established the School of Environmental Science & Management to fulfill the goal of producing graduate students equipped with the knowledge and tools necessary to assess and meet environmental challenges. In 1994, the first dean was appointed, and in 1995, faculty appointments began. Presently, 20 outstanding permanent faculty and six adjunct or affiliated faculty members represent the Bren School in its goal of producing graduates who will become leaders in the field of environmental science and management. In 1998, the School also initiated a highly individualized Ph.D. program, aimed at training students from diverse backgrounds and with varied interests.

In December 1997, the School was renamed the Donald Bren School of Environmental Science & Management in honor of a major gift from The Donald Bren Foundation. The Bren Gift supports this outstanding graduate program at UC Santa Barbara and also provides funds to support prestigious Bren Fellows, numerous faculty scholars, visiting lecturers, conferences, and the intercampus MBA program in Corporate Environmental Management.

Now more than ever, we have an opportunity to redefine the roles of environmental professionals, corporate managers, and policy makers on a global scale — and to leverage our ability to improve the lives of individuals, companies, communities, and nations.
Master’s in Environmental Science and Management (MESM)

The goal of the MESM Program is to deliver a non-traditional, professional Master’s degree that will train you to become a leader in preventing and solving environmental problems. Our specific objective is to offer you an interdisciplinary, problem-oriented, curriculum with rigorous training in physical and biological science, policy, management, modeling, data analysis and information management and to cultivate in you a suite of qualities including clear and critical thinking, leadership skills, professionalism, and creativity.

The MESM is for students who will begin or advance their careers as environmental analysts and decision-makers, whether it be in government agencies, consulting firms, companies, or non-governmental organizations. MESM students are not trained as specialized research scientists, legal, or financial analysts. Rather, our objective is to provide a foundation of multidisciplinary knowledge and quantitative analytical skills that will enable you to interpret, design, communicate, and implement policy and management solutions.

The program has three main components. During the first year of study, you will focus primarily on a set of core courses required of all students: Earth System Science, Biogeochemical Principles, Ecological Principles, Environmental Economics, Environmental Law & Policy, Organizational Theory & Behavior, Financial Management, Strategic Management, Policymaking & Analysis, Statistics & Data Analysis, and Analytical Methods. You will also choose one of six areas of specialization and begin to take elective courses that will develop depth in your chosen area of study.

These areas are: Conservation Planning, Corporate Environmental Management, Public Environmental Management, Coastal Marine Resources Management, Pollution Prevention & Remediation, and Water Resources Management. Although normally a two-year program, working professionals may be given approval to complete the program in three years.

The capstone of the MESM program is the Group Project. Serving as the master’s thesis, the Group Project trains you to work in a team to conduct comprehensive analyses of current environmental issues that contain both scientific and management challenges and to produce a tangible and useful product. This unique experience provides training that is unequaled in other schools and better prepares you to be a leader in solving the environmental problems of the 21st century. For many of our graduates, the Group Project was a key factor in their placement into rewarding positions and professions.

Our MESM curriculum is different from other professional schools in environmental science, management, and/or policy in requiring a large set of core classes and participation in a Group Project. This unique training will make you a distinctive and competitive environmental professional.

Ph.D. in Environmental Science and Management

The Bren School’s Ph.D. program furthers the School’s mission of educating high-caliber future research professors while simultaneously meeting the urgent need for innovative researchers and problem-solvers in both the public and private sectors. The cornerstone of the doctoral degree is an original work of high-quality research that focuses on the diagnosis, assessment, mitigation, management, remediation, and/or creating a body of environmental
prevention of environmental problems of today and the future. The Ph.D. program is designed to accommodate a wide range of research interests, from those highly focused in a particular discipline to those that are strongly multidisciplinary.

The Nature of a Bren Ph.D.

The Bren School offers a unique environment where students and faculty in many branches of environmental science and management interact and create new approaches to environmental problem-solving. All faculty engage in research that crosses traditional boundaries, and we encourage you to do the same. However, we uphold the traditional requirement that the Ph.D. thesis be of exceptional quality, which requires that you become an expert in your chosen field. A master’s degree is not required for admission to the Ph.D. program. However, if you wish to obtain a stronger multidisciplinary background before focusing on one research area, you should enroll in our MESM program, and apply to the Ph.D. program during your second year.

All Ph.D. candidates work closely with at least one Bren professor in his or her area of expertise. Applications to the Ph.D. program require the support of a Bren professor whose research interests most closely dovetail with your own.

As a Ph.D. student, you must pass written and oral qualifying examinations, complete a dissertation proposal, and pass a final dissertation defense. You will advance to candidacy upon satisfactory completion of the oral examination, normally within the first two or three years of study. You are expected to complete your dissertation and final examination no later than the end of the sixth year in the program.

“As a Ph.D. student, my research is focused within a discipline. The multidisciplinary approach of the Bren School provides me with a good opportunity to gain knowledge of several disciplines, which is important in identifying and solving environmental problems.”
— Sanya Sirivithayapakorn
Ph.D. Student

Economics and Environmental Science (EES) Ph.D. Training Program

This new multidisciplinary training program is a joint undertaking between the Bren School and UCSB’s Department of Economics. The program is designed to train environmental economists with depth in one of four fields of natural science: Climate, Applied Ecology, Hydrology, or Marine Science. Students prepare for careers in a number of professional settings including academia, government, and consulting. The program is funded by a National Science Foundation program for innovative graduate education and research training (IGERT). NSF/IGERT provides funding for a number of multi-year IGERT fellowships to outstanding applicants. Please refer to our website at www.ees.ucsb.edu for a complete program description.
The Intercampus Program

The Bren School Intercampus Program is a multi-campus interdisciplinary program that facilitates the integration of natural and social science, law, and business programs throughout the University of California system. The program is administered by Dennis Aigner, Bren School Dean and Acting Associate Dean for Business Management; Jody Freeman, Associate Dean for Law & Policy; and Laura Haston, Assistant Dean for Academic Programs at the Bren School.

What makes this program particularly valuable is that Bren School MESM and Ph.D. students have the opportunity to join MBA students in courses on environmental management that are available only on the Santa Barbara campus. Bren students are also benefited by strong ties to the UCLA School of Law, which enable them to absorb and modify those aspects of a law school education most relevant to the Bren School’s interdisciplinary focus on environmental problem-solving.

As a result of the Intercampus Program, a degree emphasis in Corporate Environmental Management (CEM) is available to MBA students in all five business schools in the UC system: Berkeley (Haas), UCLA (Anderson), Irvine, Davis, and Riverside (Anderson). For more information or for a current schedule of courses, please visit the CEM website at www.bren.ucsb.edu/academics/mba_emph.html

“The curriculum, faculty, staff, colleagues, and resources have all contributed to and supported my professional toolkit. Although both directed and flexible, my academic experience within the graduate program was proficient and functional. I am now applying many of the skills and intelligence shared with me during these two years; in particular, the intimate personal interactions were immensely valuable.”
Daniel B. Wilson, MESM 1998

“The multidisciplines of both the faculty AND the students that are found in this graduate program are its greatest strengths. We learned just as much from each other as from the professors.”
Alfred Andrade, MESM 2000

Collaborative, synergistic, and complementary
ADMISSIONS

MASTER’S IN ENVIRONMENTAL SCIENCE AND MANAGEMENT

To be considered for admission to the Bren School, you must have received a bachelor’s degree or its equivalent (with an upper-division grade point average of 3.0 or better) from an accredited institution of higher education, and you must take the general GRE exam. Apply electronically at www.graddiv.ucsb.edu/eapp

Necessary background for the MESM program includes one year of college-level mathematics (calculus), one year of college-level science (chemistry is essential; biology, physics, etc. can be included) and a course in microeconomics. An introductory statistics course is recommended. If you are lacking in some of these prerequisites, you may be accepted for admission, but they must be made up prior to entrance by means of formal coursework or other arrangements agreed upon by the applicant and the Bren School.

APPLICATION CHECKLIST:

• A completed electronic application.
• A non-refundable application fee.
• Two copies of a statement of purpose.
• A resume. Prior work experience strengthens the application.
• Three letters of recommendation.
• Two official transcripts from each institution attended since high school or secondary school.
• Official Graduate Record Exam (GRE) scores for the verbal, quantitative, and analytical sections (no subject test is required). UCSB’s GRE institution code is 4835 and the Bren School’s program code is 0502.
• Official Test of English as a Foreign Language (TOEFL) for applicants whose native language is not English, unless the language of their undergraduate or graduate instruction was in English.

Ph.D. in Environmental Science and Management

Admission to the ESM Ph.D. program is highly competitive. You must have received a bachelor’s degree or equivalent, have a high upper-division/graduate GPA, and excellent GRE scores (80-90th percentile). A master’s degree or equivalent is not required for admission. Admission to the program is determined by the admissions committee and is also dependent upon your acceptance by a faculty sponsor with compatible research interests. Each faculty sponsor’s entrance criteria beyond these minimum requirements will depend upon his or her research focus. Please refer to the faculty members’ web sites (www.bren.ucsb.edu/people/catnew.asp?cat=faculty) for information on prospective applicants.

The Ph.D. Training Program in Economics and Environmental Science (EES) has the same admission guidelines. Please indicate your interest in this program by including EES on your statement-of-purpose cover sheet.

APPLICATION DEADLINES:

Ph.D.:
December 15: University and EES fellowship competition
February 1: Final deadline

MESM:
February 1: School-based fellowship competition
March 1: Final deadline

Evolutionary to revolutionary solutions
As an applicant to the Bren School’s MESM program, you should expect to meet a substantial portion of your educational costs through personal funds, federal-based support, extramural fellowships, and self-generated on-campus or off-campus employment. Professional master’s students are NOT eligible for any fellowships sponsored by UCSB’s Graduate Division. A few school-based awards are made for exceptional applicants to the MESM program, and one-year or partial fellowships are awarded to a small number of incoming MESM and Ph.D. students each year. (Generally, these awards range from $2,000–$9,000 per year.) Most Bren Ph.D. students are supported as Graduate Student Researchers (GSRs) by their sponsoring professor and/or by University-based fellowships. Generally, incoming Ph.D. students admitted to the program will receive some form of financial support. Yearly estimates fees and expenses are $25,947 per year for resident graduate students, and $38,436 per year for nonresident graduate students. Most nonresident students can establish residency after one year. These estimates include housing, insurance, utilities, transportation, food, books and supplies, personal expenses, and student fees.

Estimated student fees and expenses per quarter can be found in the UCSB Online General Catalog at www.registrar.ucsb.edu/feechart-grad.htm

For more information on funding your graduate education, please visit www.bren.ucsb.edu/admissions/financial_index.html

Further questions may be e-mailed to the Bren School’s Graduate Program Assistant at gradasst@bren.ucsb.edu

All domestic graduate students at UCSB are required to file the Free Application for Federal Student Aid (FAFSA) by March 2 to be considered for any student support funds, even if you do not plan on taking out student loans. For more information on the FAFSA, please see www.fafsa.ed.gov

While graduate study at UCSB is comparatively quite reasonable, financing your graduate education requires careful planning prior to enrollment. Useful information, including university fellowships, can be found at www.graddiv.ucsb.edu/financial and also at www.graddiv.ucsb.edu/source

“The new Bren Hall is an amazing example of the possibilities that can be achieved when environmental concerns and development are not seen as mutually exclusive. The course work and Group Project experience complement each other to allow the realization of this synergy between business and the environmental community.”

Jim Dalton, MESM 1999
The Bren School has an excellent and comprehensive Career Development Program designed to help students become highly sought-after applicants and effective environmental professionals. The program is committed to helping you develop short- and long-term career goals, acquire professional experience, and learn effective job search and career development skills.

Under the guidance of David Parker, Director of Career Development, you can receive individual and group assistance on any career-related topic or issue. The Career Development Program consistently receives high ratings from students and continues to be viewed as one of the School’s greatest strengths. Students often comment on the quality of the service and the value of the personal one-on-one attention they receive.

**INTERNSHIPS**

Internships provide an opportunity for you to apply what you have learned in the classroom, to gain valuable work experience, and to make key contacts in the field. Many of the internships have been instrumental in helping students obtain career positions after graduation.


The Bren School places a strong emphasis on professional experience and expects all MESM students to complete internships during the summer between their first and second year of study.

**JOB PLACEMENT**

With the Bren School’s interdisciplinary approach and strong Career Development Program, students are able to develop successful careers in a number of environmental sectors and within a wide array of excellent organizations.

**PLACEMENT – CLASS OF 2002 GRADUATES**

Students who have made career development a priority and who have followed all the steps involved in the Career Development Program have been highly successful in obtaining satisfying positions prior to graduation or soon thereafter.
A campus of the University of California, the country's premier public university, UC Santa Barbara is internationally recognized for its teaching and research excellence, and distinguished for its interdisciplinary programs and commitment to innovation.

Recognition of UC Santa Barbara's academic quality takes many forms. One of the most prestigious is support from the National Science Foundation. The campus is now home to eight national centers and institutes, five of which are sponsored by the NSF, including the Materials Research Laboratory, the National Center for Ecological Analysis and Synthesis, the Southern California Earthquake Center, and the renowned Kavli Institute for Theoretical Physics.

Because of its pre-eminence in physics, engineering, and materials science, UCSB has been selected as the site of one of the prestigious California Institutes for Science and Innovation. The interdisciplinary California NanoSystems Institute, a research partnership between UCSB and UCLA, is probing matter at the scale of a billionth of a meter in search of beneficial technologies that could revolutionize environmental management, medicine, communications, computing, data storage, electronics, instrumentation, and materials.

UCSB enrolls some 19,600 students, about 2,600 of them at the graduate level. Offering more than 90 undergraduate majors and 45 graduate programs, UCSB has achieved national prominence in a wide range of disciplines.

Preparing the next generation of scholars is one of the primary purposes of any research university. UCSB offers an array of graduate programs and has two professional schools, the Gevirtz Graduate School of Education and the Donald Bren School of Environmental Science & Management.

The outstanding 900-member faculty includes three winners of Nobel Prizes and scores of elected members of national and international academies and societies.

National Academy of Sciences, the National Academy of Engineering, the American Academy of Arts and Sciences, and the American Association for the Advancement of Science. A leading research institution, UCSB is one of the 62 research-intensive institutions elected to membership in the prestigious Association of American Universities.

The University of California’s Natural Reserve System, consisting of 34 protected natural areas throughout the state of California, maintains significant examples of California’s diverse aquatic and terrestrial ecosystems for teaching, research, and public service. UCSB oversees seven such sites. These surrounding ecological habitats provide a natural laboratory where new approaches to conservation and environmental restoration are tested.

On or off campus, the UC Santa Barbara experience presents opportunities for students to learn, contribute, and grow in a setting of unmatched beauty and in a supportive and collaborative intellectual climate.

For further information about the University of California, Santa Barbara, please visit our website: www.ucsb.edu

UCSB’s renowned faculty includes three winners of Nobel Prizes and scores of elected members of national and international academies and societies.
 Located approximately 100 miles northwest of Los Angeles, UCSB’s main campus sits on 989 acres at the edge of the Pacific Ocean. Seven miles of bikeways link this close-knit academic community, giving students easy access to a rich selection of social, cultural, academic, and athletic events.

UCSB is in close proximity to two very different communities. Isla Vista, the adjacent student community is a place for social and civic growth, where students serve on local boards and county committees. Nearby Santa Barbara, an energetic, mid-sized city with deep concern for history, the arts, and the environment, is highly regarded for its educational, cultural, and recreational facilities. These include the Santa Barbara Symphony, the Santa Barbara Botanic Garden, the Santa Barbara Zoo, Museum of Art, the Maritime Museum, and the Museum of Natural History.

With moderate temperatures, clean air, pristine beaches, and the Santa Ynez Mountains as a backdrop, the Central Coast of California is a beautiful place to live and study.

The housing market in the area is competitive, and rents are relatively high. The Community Housing Office, located in the University Center, serves as a one-stop resource for rental housing information and referrals. It can be reached at (805) 893-4371.

UCSB provides some university-owned housing for graduate students. The Office of Apartment Living, located in the Santa Ynez Apartment complex on El Colegio Road, provides information about single and family student apartments. Graduate students with families are eligible for Family Student Housing. Families with children have priority. Call (805) 893-3640 for listings.

For further information about university and community housing, please visit the Housing and Residential Services website: www.housing.ucsb.edu. For further information about the Santa Barbara community, visit www.santa-barbara.ca.us
We invite you to schedule a visit to coincide with our Open House on November 7, 2003 — but if this is not possible, formal visits to the School are available Monday through Friday between 9 a.m. and 4 p.m. throughout the academic year. To make your visit most productive, appointments should be made at least two weeks in advance with a follow-up confirmation five days before your arrival. Depending on the length of your stay and your preference, your tour may include the following:
• meeting with our Graduate Program Assistant to discuss the program and the admission process;
• touring the campus and surrounding area;
• attending a class or classes that are in session; and
• meeting with a faculty member.

Please email the Graduate Program Assistant at gradasst@bren.ucsb.edu for further information or to schedule an appointment. Please also visit the School’s website at www.bren.ucsb.edu for more information about admissions and programs at the Bren School.

“The Bren faculty have been incredibly supportive of my own research interests. The breadth of expertise and experience at the Bren School is amazing and really facilitates unique approaches and ideas to research.”
Rachel Steinberger, Ph.D. student, Holden Lab
Donald Bren Hall, the “greenest” laboratory building in the United States, is a physically realized manifestation of the School’s mission, and provides a world-class arena for scientific and academic initiative, leadership, invention, and research. By using cutting-edge technology with environmentally sound principles, products, and services, Bren Hall has set a new standard for sustainable design, surpassing stringent 1998 Title 24 requirements for energy by more than 31%.

Opened in April 2002, Donald Bren Hall was among the first 12 buildings certified by the US Green Building Council (USGBC) for achieving the Leadership in Energy and Environmental Design (LEED™) award. LEED™ is a comprehensive rating system that provides direction and definition for sustainable design, construction, and technologies. Bren Hall achieved platinum status, the highest level of LEED™ certification.

Built around a central courtyard, Bren Hall has four floors of spacious teaching and research laboratories and offices for faculty and administrative staff. The building includes many interaction areas, including a commons room, seminar rooms, terraces, and “bridges” for faculty, students, and visitors to interact and exchange ideas.
Bren Hall is a showcase for setting new sustainable design standards, and for implementing green building guidelines for future construction at UCSB and throughout the UC system statewide. The building incorporates a full range of sustainable features. To ensure efficient use of energy, the building is designed to harvest natural light, heat, and cooling. Facing the ocean, the offices have no air conditioning but rely on flow-through ventilation using operable windows. The windows also interlock to an electronic system, shutting the heaters off upon opening. Daylight harvesting is coupled with a lighting plan that incorporates energy-efficient fixtures and bulbs controlled by ambient, heat, and motion sensors. Photovoltaic panels on the roof supply seven to 10 percent of the building’s energy needs. The ventilation system in the laboratories is the most efficient available. The building is connected to a new chilled water loop that provides cost-effective cooling for the laboratory wing and much of the UCSB campus. The first-floor toilets use reclaimed water and the urinals are waterless. The concrete, structural steel, fireproofing material, insulation, carpets, wallboard, ceiling tiles, and furniture are all made from recycled materials. Wood paneling in the building comes from certified sustainable harvests. Labs and storerooms are designed to minimize the probabilities and consequences of mishandling of toxic materials. Approximately 93 percent of the construction waste was recycled. Finally, the landscaping shades and shelters the building, defines and embellishes outdoor spaces, uses drought-tolerant native plants, and uses reclaimed water for irrigation.

Unicork is a green, renewable, and natural resource. It is hypoallergenic and is great for acoustical and thermal insulation, durability, and resistance to mold and mildew. Cork trees shed their cork naturally. By harvesting this product it allows the tree to live longer.

The Bren School partnered with a number of corporations in “greening” Donald Bren Hall. We wish to acknowledge them for their vision in helping us create a structure that embodies all the components of our program. Our partners include: Armstrong, Milliken Carpet, Johnson Controls, Pacific Earth Resources, Parker Boiler, Powerlight, Sarnafil, Southern California Edison, To Market, Valley Crest Tree Company, and Waterless Company.

To help promote sustainable construction, Kermit the Frog was a guest speaker at Bren Hall’s opening ceremonies. His message—and ours—is that “being green is easier than you think!”

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Certain features were installed within Bren Hall so that students and faculty could have the opportunity to use the structure as a living laboratory for comparison studies and lifecycle analyses. One example is the electrical metering that gives us the ability to monitor actual loads for dry labs, wet labs, and offices. Other examples include the weather monitoring station located on the roof, and the photovoltaic monitoring system. For ease of access, web interface systems are used to track and record many of these items. This work will help us gather data so that better decisions will be made in future buildings, furthering sustainability efforts begun here at the Bren School.

**Teaching Laboratories**

**Biogeochemistry Teaching Laboratory**
This second floor 950-square-foot laboratory supports the Bren School’s unique interdisciplinary curriculum in biology, geology, and chemistry. Leading-edge analytical instrumentation includes chromatographs, spectrophotometers, and field meters, as well as measuring and field sampling equipment. These elements support innovative and advanced research techniques for graduate students.

**GIS/Computing Teaching Laboratory**
This third floor 950-square-foot laboratory supports the Bren curriculum in computational modeling, geographic information systems, and environmental information management. Thirty-one high-end workstations with advanced graphics, visualization, and processing capabilities share access to large-format high-resolution color printers and scanners. For AV needs, the lab has a podium with a computer linked to data projectors, a DVD, VCR, audio inputs, and screens to display information.

**Micro-Environmental Imaging & Analysis Facility (MEIAF)**
This state-of-the-art imaging facility, available to the public, features an environmental scanning electron microscope (ESEM) with X-ray microanalysis and a new cold stage that together enable high-resolution imaging of hydrated specimens, observation of dynamic experiments such as crystal formation and dehydration, freeze-fracturing, and ultra-low temperature imaging. Applications include archaeology, museum conservation, biology and microbiology, cement science, fiber technology, forensic science, geological sciences, medicine, microelectronics, and pharmaceutical and soil sciences.

**Bren Hall Student Facilities**

**Davidson Student Commons**
The 880-square-foot Davidson Student Commons is located on the third floor of Bren Hall. It features large, east-facing windows that overlook the courtyard, and cheerful furnishings made with recycled and sustainable materials. The commons includes 12 Group Project computers and workspaces, along with comfortable and casual seating spaces.

**School Infrastructure Laboratory (SIL)**
The School Infrastructure Laboratory (SIL) is used as a shared resource room by MESM students so they may complete lab work associated with their Group Projects. The lab is outfitted with air, gas, and vacuum, and houses a fume hood along with an assortment of equipment to assist students with their experiments and data collection.

**Student Computing Facility (SCF)**
Mastery of technical skills is an integral part of our program. For this reason, the Bren School maintains and operates a state-of-the-art Student Computing Facility (SCF), which houses 41 PC-compatible computers, a high-speed (24 pages per minute) duplex-capable black and white printer, a high-speed duplex-

### Awards

- **U.S. Green Building Council’s PLATINUM RATING for Leadership in Energy and Environmental Design (LEED™)**
- **International Interior Design Association’s 2003 Calibre Award for Environmental Leadership**
- **Congressional Record, Hon. Lois Capps: “one of the greenest commercial buildings in the nation.”**
- **Commendation from California Governor Gray Davis: “[Bren Hall] serves as a model of excellence in building construction.”**
- **Resolution by the Honorable Jack O’Connell, 18th Senatorial District and the Honorable Hannah-Beth Jackson, 35th Assembly District**
- **Resolution and Commendation from the County of Santa Barbara**
- **Case Study for the California Energy Commission**
- **Case Study for the California State and Consumer Services Agency**
- **Goleta Valley Beautiful 2002 Award for Sustainable Development**
Bren Hall Public Facilities

Visitor’s Center
The Visitor’s Center is located on the first floor near the main entrance to Bren Hall. This bright and airy center features informational displays about the School and its programs and the sustainable features of the building. The center also provides a reception area for many conferences and other events hosted by the Bren School.

Colloquium Room
This 1,785-square-foot lecture theater located on the first floor has stadium-style seating for 100 students or conference attendees. It is the primary teaching space for science, environmental economics and business, and law and policy classes.

Seminar Room
Located on the first floor, this 1,293-square-foot space is dedicated to special lectures and symposia and accommodates approximately 45 to 70 people.

Conference Rooms
Bren Hall has five versatile and well-equipped conference rooms. These spaces are set up with state-of-the-art multimedia equipment, including data projectors, DVD, VCR, audio, and online connectivity. Room capacity ranges from six to 30 conferees.

Outdoor Spaces
The sunny Central Courtyard, featuring sycamore trees and wooden benches, is the physical focal point of Donald Bren Hall. Conference and meeting rooms open out to this space, which is often used for large outdoor receptions or gatherings. This and other outdoor spaces, spread across three floors of Bren Hall, were designed for both formal and informal social gatherings, group interaction, and solitary contemplation. They include decks, terraces, and bridges with picnic-style seating.
The Associate Deans for Law and Policy and Business Management oversee the development and implementation of intercampus programs in business and law, and assist in the integration of business and law into the UC Santa Barbara curriculum. The Associate Deans are integral components of the Bren School, and their experience and perspective about the unique challenges of professional school education is invaluable.

**Dennis Aigner**
Dennis Aigner (Ph.D. UC Berkeley, 1963) is Dean of the Bren School, Acting Associate Dean for Business Management in the Bren School, and Professor of Management and Economics at the Graduate School of Management at UC Irvine. He has taught courses in the areas of international trade and risk management, and is an expert in corporate environmental management, international trade and U.S. competitiveness, state and local economic issues, and workers’ compensation. He was a recipient of the Distinguished Research Award in 1999 from the A. Gary Anderson Center for Economic Research at Chapman University for his ongoing work on the Orange County regional economy and has been listed in *Who’s Who in Economics* since 1982. In 2001, he was named International Professor in Environmental Management and Strategy at the Graduate School of Business Administration and Leadership, Monterey Institute of Technology (Mexico). In 2003, he was appointed to the National Advisory Committee to the US Representative to the Commission for Environmental Cooperation, which advises the EPA Administrator on environmental issues relating to NAFTA.

**Jody Freeman**
Jody Freeman (S.J.D. Harvard, 1995) is a Professor of Law at UCLA, specializing in environmental and administrative law, and toxic torts. She is one of the team of environmental law faculty that founded the UCLA School of Law’s Environmental Law Center. Professor Freeman also serves as the Bren School’s Associate Dean for Law and Policy. Her scholarship focuses on public-private collaboration in governance and her work in administrative law encompasses governance theory, dispute resolution, regulatory innovation, and privatization. She has published widely, both in legal journals and books. Professor Freeman was named Professor of the Year by UCLA’s Class of 2001. Also in 2001, she received the annual scholarship award from the American Bar Association’s Section on Administrative Law and Regulatory Practice. Professor Freeman serves as Vice-Chair of the ABA Administrative Law Section sub-committees on both Dispute Resolution and Environmental Law and Natural Resources, and she is a member of the AALS Executive Committee on Administrative Law. She lectures widely both in the United States and abroad.

Excelling in environmental leadership
Antonio Bento (Ph.D. University of Maryland at College Park, 2000) is an Assistant Professor with expertise in environmental economics at the Bren School. His research interests are in the areas of environmental economics, transportation, urban public finance, and development economics. Currently, he has a major research agenda on the causes and consequences of urban sprawl. In addition, since 1998 he has held the position of Consultant for the Development Research Group at the World Bank in Washington, DC.

Christopher Costello (Ph.D. UC Berkeley, 2000) is an Assistant Professor with expertise in environmental economics whose research is largely in the area of management of natural resources under uncertainty. His current research interests include renewable resource management with learning and information, economics and policy for controlling non-indigenous species, and the economics of biodiversity conservation.

Frank Davis (Ph.D. Johns Hopkins, 1982) brings expertise in the fields of terrestrial biogeography, plant ecology, and conservation biology. His research has focused on the ecology of California chaparral and oak woodlands, and on the use of digital satellite data and geographic information systems for mapping vegetation, modeling species distributions, gap analysis, and conservation planning. Currently he is working with the Resources Agency of California and NatureServe to develop spatial decision support systems in local and regional conservation planning.

Magali Delmas (Ph.D. HEC Graduate School of Management, Paris, 1996) is an Assistant Professor specializing in business strategy. Previous to embarking on an academic career, she worked at the European Commission at the Directorate for Industry. Her research is on the interaction between regulation and firms’ competitive strategies. She is currently analyzing how alternative forms of environmental regulations, such as voluntary agreements and self-regulation, can impact firms’ environmental performance and competitive advantage.
Jeff Dozier

Professor Jeff Dozier (Ph.D. University of Michigan, 1973), founding Dean of the Bren School, works in the fields of snow science, hydrology and hydrochemistry of alpine regions, remote sensing, and environmental science and information systems. He is a participant in NASA’s Earth Science Enterprise, which aims to establish a comprehensive global observing system to better understand the natural processes that govern our Earth and the possible changes that may occur in the atmosphere, on the land, and in the oceans as a result of human activities. Professor Dozier and his graduate students are involved in several operational efforts to measure snow, forecast runoff, and evaluate snow metamorphism in the Sierra Nevada. He also applies his hydrological and information systems skills to sustainable agriculture.

Thomas Dunne

Professor Thomas Dunne (Ph.D. Johns Hopkins, 1969) is an internationally recognized Earth scientist known for his studies of erosion on environmentally sensitive landscapes, including Mount St. Helens, the Andes, and the Amazon basin. He specializes in geomorphology and hydrology — the sciences that treat the role of water in shaping Earth’s surface and conditioning its range of environments. Dunne has collaborated with engineers and scientists from many disciplines to study environmental processes in a wide range of conditions. His current research focus is on the flow of water and the transport of sediment through river channels and flood plains in the Amazon and Sacramento River basins. This work is funded by NASA, the National Science Foundation, and the State of California.

James Frew

Assistant Professor James Frew (Ph.D. UC Santa Barbara, 1990) comes to the School from UCSB’s Institute for Computational Earth System Science (ICESS), where he worked on data systems issues for earth science and digital libraries. Professor Frew has served as both Manager and Acting Director of the Computer Systems Laboratory (ICESS’ predecessor), and as the Associate Director of the Sequoia 2000 Project, a three-year $14 million multi-campus consortium formed to investigate large-scale data management aspects of global change problems. He currently leads the Earth System Science Workbench project (part of NASA’s Federation of Earth Science information Partners), and is a co-principal investigator on the Alexandria Project (part of the NSF-NASA-ARPA Digital Libraries initiative), where he directs the development of the Alexandria Digital Library testbed system.
Roland Geyer
Roland Geyer (Ph.D. University of Surrey 2003) is Assistant Professor in Corporate Environmental Management. His main research is in green supply chain management with special emphasis on the role of reuse and recycling. Combining the theories of industrial ecology and management science, he explores the correlation between the environmental and economic performance of production and consumption systems. Professor Geyer successfully applied this approach in his previous position at the Centre for Environmental Strategy, University of Surrey, where he worked together with the UK steel and aluminum industries to develop industrial ecologies on firm, supply chain, and sector level. His wide range of professional experience includes work as Research Associate at INSEAD, France, and as a consultant in financial risk management.

Patricia Holden
Associate Professor Patricia Holden (Ph.D. UC Berkeley, 1995) is an environmental microbiologist who focuses on bacterial ecology and physiology. Her group studies two main concerns in environmental microbiology and microbial ecology: 1) the factors that influence bioavailability and biodegradation of sparingly soluble hydrocarbons in the vadose zone including mass transfer, water availability, exopolymer matrices, community composition and biosurfactant production, and 2) the presence and origins of pathogenic bacteria in coastal waters, including the use of community fingerprinting to understand bacteria as tracers for other pollutants and to screen for potentially pathogenic bacteria in complex environmental samples.

Arturo Keller
Associate Professor Arturo Keller (Ph.D. Stanford, 1996) brings to the School several years of experience in developing management strategies in the private sector. His research and teaching interests focus on the fate and transport of pollutants in the environment. His current research involves watershed and water quality issues, in particular understanding the role that management practices in different land uses play in the loading of pollutants to receiving water bodies. He also has an active research group working on treatment and remediation technologies for various organic pollutants, including membrane separation and advanced oxidation processes.

Bruce Kendall
Assistant Professor Bruce Kendall (Ph.D. University of Arizona, 1996) is a quantitative ecologist whose research focuses on animal and plant population dynamics. He is currently developing improved ways to model small populations in order to increase the accuracy of predictions about extinction risk for use in conservation planning. He also has ongoing projects examining the causes of cyclic population fluctuations and modeling the effects of habitat fragmentation and other spatial structure on the dynamics and persistence of populations.
Charles Kolstad
Donald Bren Professor of Environmental Economics and Policy, Charles Kolstad (Ph.D. Stanford, 1982) is an environmental economist who concentrates on the theory of regulation and the valuation of environmental goods and services. He works on climate change, focusing on the role of information, uncertainty, and learning in the control of greenhouse gases. He also directs the new Ph.D. training program in Economics and Environmental Science, funded by a significant NSF grant. Professor Kolstad is the former President of the Association of Environmental and Resource Economists, is a member of the US Environmental Protection Agency’s Science Advisory Board, and has served on other advisory boards in the area of energy and environmental policy. He also edits the journal Resource and Energy Economics.

Hunter Lenihan
Hunter Lenihan (Ph.D. University of North Carolina at Chapel Hill, 1996) is an Assistant Professor specializing in marine ecology and resource conservation. His research is focused primarily on conserving and restoring marine populations, communities, and their habitat. Much of his work is experimental and designed to examine mechanisms causing variation in the distribution and abundance of marine organisms, especially at-risk invertebrates and fish. Professor Lenihan’s current research projects include coral population dynamics and reef restoration, kelp forest community ecology, fishery oceanography and alternative management practices (including Marine Protected Areas), and biological impacts of marine pollutants.

Christopher Marwood
Assistant Professor Christopher Marwood (Ph.D. University of Guelph, Canada, 1999) is an environmental toxicologist. His research primarily involves applying sub-cellular and molecular techniques to monitor the exposure and effects of anthropogenic contaminants on fish and other aquatic organisms. Currently, he is examining the role of oxygen-scavenging enzymes in fish as sensitive markers of polycyclic aromatic hydrocarbons, which are produced by the combustion of fossil fuels. Marwood’s interests also include the effects of elevated ultraviolet radiation on photosynthesis in phytoplankton, the factors controlling penetration of UV in aquatic environments, and the interaction between UV and photo-toxic contaminants.

Carol McAusland
Carol McAusland (Ph.D. University of Michigan, 1999) is an Assistant Professor in the Bren School and the Economics Department at UCSB. Her research interests are in international trade, environmental economics, and political economy. In particular, her interests lie in studying the channels through which trade liberalization affects environmental quality and resource use.
John Melack (Ph.D. Duke, 1976), a Professor at the Bren School, has been a professor at UCSB since 1977 in the department of Ecology, Evolution, and Marine Biology. His fields of expertise are limnology — the study of inland waters — of tropical, saline, and alpine lakes; phytoplankton and zooplankton ecology; biogeochemistry; wetland ecology; and remote sensing. Currently, he is conducting studies of how coastal streams influence the near-shore waters of the Santa Barbara Channel, performing long-term research on the ecology of Mono Lake and alpine catchments in the Sierra Nevada mountain range, and collaborating with Brazilian scientists on regional-scale analyses of wetland inundation and biogeochemistry in the Amazon basin. His many associations in South America, Africa, and Australia complement the international perspective of the School.

Catherine Ramus

Catherine A. Ramus (Ph.D. University of Lausanne, 1999) is an Assistant Professor of Organizational Behavior and Environmental Management. One focus of her research is on factors affecting employee environmental innovation in firms. She also works on issues related to corporate social responsibility and stakeholder relations. Ramus joined the Bren School from the International Institute for Management Development in Lausanne, Switzerland where she held the position of MIBE Research Program Manager.

Oran Young

Oran R. Young (Ph.D. Yale, 1965), a Professor at the Bren School, is also an affiliate professor in UCSB’s Political Science department and an adjunct professor of political science at the University of Tromsø in Norway. His scientific work encompasses both basic research focusing on collective choice and social institutions, and applied research dealing with issues pertaining to international environmental governance and to the Arctic as an international region. Professor Young is the author or co-author of over 20 books and numerous scholarly articles. He served for six years as the founding chair of the Committee on the Human Dimensions of Global Change of the National Academy of Sciences in the United States and is now chair of the Scientific Steering Committee of an international project on the Institutional Dimensions of Global Environmental Change (IDGEC) under the auspices of the International Human Dimensions Programme on Global Environmental Change. At the Bren School, he has established the international Program on Governance for Sustainable Development.
2003–2004 Visiting Faculty

Each year, the Bren School hires a number of highly esteemed visiting faculty to engage in scholarly interactions with the Bren community and to provide depth and diversification to our curriculum.

Adjunct Faculty

Peter Kareiva, Ph.D.
Adjunct Professor
Lead Scientist
The Nature Conservancy

Affiliated UCSB Faculty

Sanjoy Banerjee, Ph.D.
Professor of Chemical Engineering and Mechanical & Environmental Engineering

Robert Deacon, Ph.D.
Professor of Economics

Lorelei Moosbrugger, Ph.D.
Assistant Professor of Political Science

Mary Nisbet, Ph.D.
Senior Lecturer, Economics

David Siegel, Ph.D.
Professor of Geography
The Bren School staff — comprising Academic and Student Affairs, Administrative Services, Career Services, Computing Services, Development, Events, Facilities Services, and Research — provides expert support to our students and faculty. These departments are integral to the Bren School’s leadership in identifying and solving environmental problems, researching environmental issues, and training research scientists and environmental management professionals.
Mrs. Brigitte Bren  
Of Counsel  
Arter & Hadden LLP  
President & CEO  
International Strategic Planning

Mr. Donald Bren  
Owner & Chairman  
The Irvine Company

Mr. Graham Chisolm  
Executive Director, California Division  
The Nature Conservancy

Mr. Bruce Darling  
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Department of Insurance  
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Mr. Gary Hunt  
Partner  
California Strategies

Mr. Tachi Kiuchi  
Chairman  
Patent & License Exchange Corporation, Counselor  
Mitsubishi Electric

Dr. Jean-Bernard Minster  
Professor and Director  
Institute of Geophysics & Planetary Physics  
University of California, San Diego

Ms. Mary Nichols  
Secretary  
Resources Agency  
State of California

Dr. Claude Poncelet  
Former Manager of Environmental Affairs  
Pacific Gas & Electric Company

Dr. Paul Portney  
President  
Resources for the Future

Mr. Richard Rogers  
Chairman of the Board  
Pacific Earth Resources

Ms. Leanna Stuzziery  
MESM Class of 2004  
Donald Bren School of Environmental Science & Management

Mr. Doug Wheeler  
Partner  
Hogan & Hartson LLP

Dr. Melvin Willis  
Environmental Planning Consultant

The Bren School Advisory Board provides high-level direction to ensure that the School and its programs offer the best and most comprehensive, balanced, cutting-edge approaches to environmental science and management.
## Academic Calendar 2004–2005

<table>
<thead>
<tr>
<th>Event</th>
<th>Fall 2004</th>
<th>Winter 2005</th>
<th>Spring 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter begins</td>
<td>September 19, 2004 (Sunday)</td>
<td>January 2, 2005 (Sunday)</td>
<td>March 27, 2005 (Sunday)</td>
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<tr>
<td>Convocation</td>
<td>September 20, 2004 (Monday)</td>
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<tr>
<td>Pre-instructional activities</td>
<td>September 20–22, 2004 (Monday–Wednesday)</td>
<td>January 2, 2005 (Sunday)</td>
<td>March 27, 2005 (Sunday)</td>
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<tr>
<td>Instruction begins</td>
<td>September 23, 2004 (Thursday)</td>
<td>January 3, 2005 (Monday)</td>
<td>March 28, 2005 (Monday)</td>
</tr>
<tr>
<td>Holidays</td>
<td>November 11, 2004 (Thursday)</td>
<td>January 17, 2005 (Monday)</td>
<td>May 30, 2005 (Monday)</td>
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<tr>
<td></td>
<td>November 25–26, 2004 (Thursday–Friday)</td>
<td>February 21, 2005 (Monday)</td>
<td></td>
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<tr>
<td>Instruction ends</td>
<td>December 3, 2004 (Friday)</td>
<td>March 11, 2005 (Friday)</td>
<td>June 3, 2005 (Friday)</td>
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<tr>
<td>Study day</td>
<td>December 4, 2004 (Saturday)</td>
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<tr>
<td>Final examinations</td>
<td>December 6–11, 2004 (Monday–Saturday)</td>
<td>March 12–18, 2005 (Saturday–Friday)</td>
<td>June 4–10, 2005 (Saturday–Friday)</td>
</tr>
<tr>
<td>Quarter ends</td>
<td>December 11, 2004 (Saturday)</td>
<td>March 18, 2005 (Friday)</td>
<td>June 10, 2005 (Friday)</td>
</tr>
<tr>
<td>Administrative holidays</td>
<td>December 23–24, 2004 (Thursday–Friday)</td>
<td>March 25, 2005 (Friday)</td>
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<td></td>
<td>December 30–31, 2004 (Thursday–Friday)</td>
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<td></td>
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<tr>
<td>Commencement</td>
<td></td>
<td></td>
<td>June 11–12, 2005 (Saturday–Sunday)</td>
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</table>

We are poised to make a serious and lasting impact on the choices, economic conditions, policies, and quality of life here and around the world.
Through innovative strategic partnerships with individuals, foundations, and corporations, the Bren School is quickly becoming a world-renowned institution. Philanthropic contributions of all sizes ensure that the Bren School will always have the resources it needs to attract the finest scholars and graduate students, to enable them to conduct leading-edge teaching and research in the most sophisticated green environment in academia.

For information regarding supporting the Bren School, please contact Jennifer L. Purcell, Assistant Dean of Development, (805) 893-5743 or jennifer@bren.ucsb.edu
The University of California, in accordance with applicable Federal and State law and University policy, does not discriminate on the basis of race, color, national origin, religion, sex, disability, age, medical condition (cancer-related), ancestry, marital status, citizenship, sexual orientation, or status as a Vietnam-era veteran or special disabled veteran. The University also prohibits sexual harassment. This nondiscrimination policy covers admission, access, and treatment in University programs and activities. Inquiries regarding the University’s student-related nondiscrimination policies may be directed to Raymond Huerta, Affirmative Action Coordinator, (805) 893-2089.

If you need this information in another format due to a disability, please call (805) 893-7611.