COLLEGE OF SCIENCE AND ENGINEERING

College Administrative Offices

<table>
<thead>
<tr>
<th>Title</th>
<th>Officer</th>
<th>Office</th>
<th>Telephone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dean</td>
<td>Keith Bowman</td>
<td>TH 323</td>
<td>338-1571</td>
</tr>
<tr>
<td>Associate Dean</td>
<td>Robert Ramirez</td>
<td>TH 323</td>
<td>338-1571</td>
</tr>
<tr>
<td>Director, Student</td>
<td>Nilgun Ozer</td>
<td>SCI 247</td>
<td>405-3955</td>
</tr>
</tbody>
</table>

College Directory

<table>
<thead>
<tr>
<th>Department/Program</th>
<th>Chair/Director</th>
<th>Office</th>
<th>Telephone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>Mike Goldman</td>
<td>HH 534</td>
<td>338-1548</td>
</tr>
<tr>
<td>Chemistry and Biochemistry</td>
<td>Jane DeWitt</td>
<td>TH 806</td>
<td>338-1288</td>
</tr>
<tr>
<td>Computer Science</td>
<td>William Hsu</td>
<td>TH 907</td>
<td>338-2156</td>
</tr>
<tr>
<td>Earth &amp; Climate Sciences</td>
<td>David Dempsey</td>
<td>TH 509</td>
<td>338-2061</td>
</tr>
<tr>
<td>Engineering</td>
<td>Wenshen Pong</td>
<td>SCI 163</td>
<td>338-1228</td>
</tr>
<tr>
<td>Geography &amp; Environment</td>
<td>Jerry Davis</td>
<td>HSS 279</td>
<td>338-2049</td>
</tr>
<tr>
<td>Mathematics</td>
<td>David Bao</td>
<td>TH 937</td>
<td>338-2251</td>
</tr>
<tr>
<td>Physics and Astronomy</td>
<td>Maarten Golterman</td>
<td>TH 334</td>
<td>338-1659</td>
</tr>
<tr>
<td>Psychology</td>
<td>Jeffrey Cookston</td>
<td>EP 301</td>
<td>338-7555</td>
</tr>
</tbody>
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Centers and Institutes

<table>
<thead>
<tr>
<th>Center/Institute</th>
<th>Director/Coordinator</th>
<th>Office</th>
<th>Telephone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center for Science and Mathematics Education</td>
<td>Eric Hsu</td>
<td>SCI 211</td>
<td>405-4190</td>
</tr>
<tr>
<td>Institute for Geographic Information Science</td>
<td>Jerry Davis</td>
<td>HSS 288</td>
<td>338-3566</td>
</tr>
<tr>
<td>Moss Landing Marine Laboratories</td>
<td>James Harvey</td>
<td>Moss Landing (831) 771-4402</td>
<td></td>
</tr>
<tr>
<td>Romberg Tiburon Center for Environmental Studies</td>
<td>Karina J. Nielsen</td>
<td>Tiburon</td>
<td>338-6063</td>
</tr>
<tr>
<td>SF Bay National Estuarine Research Reserve</td>
<td>Michael Vasey</td>
<td>Tiburon</td>
<td>338-3707</td>
</tr>
<tr>
<td>Sierra Nevada Field Campus</td>
<td>J.R. Blair</td>
<td>TH 323</td>
<td>338-1571</td>
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The College of Science and Engineering offers undergraduate degrees in the following disciplines:

**Bachelor of Science**

- Biology 04011
- Chemistry 19051
- Earth Sciences 19171
- Geography 22061
- Mathematics
- Mathematics for Liberal Arts 17011
- Mathematics for Teaching 17011
- Mathematics for Advanced Study 17011
- Physics
- Concentration in Astronomy 19111
- Psychology 20011

**Bachelor of Science**

- Applied Mathematics 17031
- Biochemistry 04141
- Biology
  - Concentrations in:
    - Botany 04021
    - Cell and Molecular Biology 04171
    - Ecology 04201
    - Marine Biology and Limnology 04181
    - Microbiology 04111
    - Physiology 04101
    - Zoology 04071
- Chemistry 19051
- Civil Engineering 09081
- Computer Engineering 09094
- Computer Science 07011
- Earth Sciences 19171
- Electrical Engineering 09091
- Environmental Science 49011
- Mechanical Engineering 09101
- Statistics 17021

The College of Science and Engineering offers the following graduate degrees:

**Master of Arts**

- Geography 22061
  - Concentration in Resource Management and Environmental Planning
- Mathematics 17011
- Psychology
  - Concentrations in:
    - Developmental Psychology 20091
    - Mind, Brain, and Behavior 20992
    - Social Psychology 20051

**Master of Science**

- Biology
  - Concentrations in:
    - Cell and Molecular 04171
    - Ecology, Evolution, and Conservation Biology 04011
· Marine Biology 04181
· Microbiology 04111
· Physiology and Behavioral Biology 04101

· Biomedical Science 04153
  · Concentrations in:
    · Biotechnology
    · Stem Cell Science

· Chemistry 19051
  · Concentration in: Biochemistry 04141

· Computer Science 07011
  · Concentrations in:
    · Computing and Business
    · Computing for the Life Sciences
    · Software Engineering

· Engineering 09011
  · Concentrations in:
    · Structural/Earthquake Engineering
    · Embedded Electrical and Computer Systems
    · Energy Systems 09013

· Geographic Information Science 22063
· Geosciences 19172
· Physics 19021
  · Concentration in Astronomy
· Psychology
  · Concentrations in:
    · Clinical Psychology 20031
    · Industrial-Organizational Psychology 20081
    · School Psychology 20013

Certificate Program
· Certificate in Weather Study (Geoscience Department)

Mission
The mission of the College of Science and Engineering at San Francisco State University is to provide an encouraging environment to develop the intellectual capacity, critical thinking, creativity, and problem-solving ability of its students so that they may become honorable, contributing, and forward-thinking members of the science and engineering community of the San Francisco Bay Area and beyond; to foster a conducive environment for scholarly and creative activities so that new knowledge or solutions to problems are discovered or created; and to provide science education to all students in the university so that they may be equipped to succeed in the modern world.

Programs
The College of Science and Engineering is committed to providing superior scientific, engineering, and mathematical education in the context of a major urban university with a liberal arts tradition. The college offers programs at both the undergraduate and the graduate levels in astronomy, atmospheric sciences, biology, chemistry, geology, biochemistry, computer science, physics, and mathematics through the eight departments of Biology, Chemistry and Biochemistry, Computer Science, Mathematics, Earth & Climate Sciences, Geography & Environment, Psychology, and Physics and Astronomy. Through the School of Engineering, the college offers Bachelor of Science degrees in civil, computer, electrical, and mechanical engineering. At the graduate level, the school offers the Master of Science in Engineering. The College offers a Professional Science Master’s in Biotechnology and Stem Cell Science through the Biology Department. The Professional Science Master’s is an innovative degree designed to allow students to pursue advanced training in science or mathematics, while simultaneously developing workplace skills highly valued by employers. Finally, the College offers a multidisciplinary degree program in statistics drawing from courses in Business, Economics, and Mathematics. The statistics program is listed in the Department of Mathematics.

The college provides all of its students with a current, relevant, hands-on education in science and engineering. Close interaction between student and faculty in the laboratory and field environments fosters the development in the student of the critical skills required in science and engineering: the ability for objective analysis of a problem; the ability to design and carry out critical tests; and the ability to make objective interpretations of data.

Students wishing to follow one of the major and/or minor programs in the college should meet with a faculty advisor in the appropriate department immediately after admission to the university. Science and engineering curricula are inherently sequential, so early advising and satisfaction of course prerequisites are essential to success in timely completion of program requirements.

The college operates three off-campus sites providing excellent field settings for instruction and research:

· Paul F. Romberg Tiburon Center for Environmental Studies (RTC), rtc.sfsu.edu (http://rtc.sfsu.edu).
· Sierra Nevada Field Campus, www.sfsu.edu/~sierra/ (http://www.sfsu.edu/~sierra), and
· Moss Landing Marine Laboratories (MLML), mlml.calstate.edu (https://www.mlml.calstate.edu).

Applications to the M.S. in Biology concentration in Marine Biology should be directed to SF State with the understanding that SF State or RTC (see below) will be the principal place of study. Applicants to the M.S. in Marine Science should submit applications to the graduate programs at San Jose State University or CSU Monterey Bay. All students can take courses at the SF State campus, RTC (see below) and at MLML.

The Romberg Tiburon Center for Environmental Studies
The Romberg Tiburon Center for Environmental Studies (RTC) is the marine research field station of the College of Science and Engineering, located approximately 25 miles north of the main campus in Marin County. The long-range vision for RTC is to be the leading estuarine and coastal academic institution on the West Coast of the United States of America, with a focus on the understanding of the San Francisco Bay and its surrounding environments. The designation of the S.F. Bay National Estuarine Research Reserve, headquartered at RTC, provides additional resources and coordination for Bay Area environmental science and policy.

RTC is an off-campus research and teaching facility operated year-round and is the only academic research facility on S.F. Bay, one of the largest estuaries in the U.S. The center is part of the College of Science and Engineering and has affiliations with the College of Behavioral and Social
Sciences. All degree programs and course offerings are administered through the university, with most students enrolled in the Master of Science in Biology: Concentration in Marine Biology. RTC’s educational mission is to provide undergraduate and graduate courses in biology, geography, and geology that promote learning in the fields of marine biology, estuarine ecology, and oceanography. Students from any degree program are welcome to attend classes at the center and to conduct research with faculty sponsorship. RTC is also involved in community outreach, offering teacher workshops biannually and a summer education program for the community that provides general interest environmental courses.

RTC is situated on a 34-acre waterfront parcel in Tiburon, California. The physical facilities are comprised of the main research laboratory, a smaller waterfront research laboratory, the administrative/teaching building, the marine/technical operations facilities, the Ohrenschall Guest Center, the Bay Conference Center, and numerous other storage and staging facilities. RTC also owns several boats used for research including a 38’ aluminum hulled vessel, the R/V Questuary. RTC is administered by a director, with the support of an on-site staff, and RTC’s scientific staff consists of tenured or tenure-track faculty with joint appointments in home departments on the main campus of SF State, senior research scientists, visiting scientists, post-doctoral fellows, and numerous research technicians.