**Discover Chemistry at SF State**

**Master of Science in Chemistry**

**Master of Science in Chemistry, concentration in Biochemistry**

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**Why should you consider a Master’s in Chemistry at SF State?**
Combating many of the issues facing our environment and society today, such as climate change and the COVID-19 pandemic, will require a new generation of scientists who can understand and think critically about the chemical and biochemical aspects and impacts of these phenomena. The graduate program in Chemistry & Biochemistry at SF State will provide you with the focused knowledge, training, and skills to face these and other problems with confidence and direction.

**Department Mission**
The mission of the Department of Chemistry & Biochemistry is to educate and inspire students to reach their personal and professional goals. We are committed to providing access to scientific careers to students from all backgrounds. We strive in all interactions between students, instructors, and staff to promote our core values: scholarship, independence, scientific curiosity, ethics, collaboration, diversity, and inclusiveness.

**Research Opportunities**
Research is increasingly interdisciplinary and our faculty frequently establish collaborations to address research questions. For example, various faculty from the Departments of Chemistry & Biochemistry, Biology, and Computer Science at SF State and the University of California, San Francisco developed the NSF funded Graduate Opportunities to Learn Data science (GOLD) and the Center for Cellular Construction programs. You may find information about these and other ongoing research projects by clicking here.

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**M.S. Curriculum**
The Master of Science curriculum in Chemistry & Biochemistry focuses on original student research to advance independence and technical skills and coursework to enhance knowledge. Students engage in stimulating research that culminates in a written thesis or manuscript. Students develop technical and effective communication skills, which are key outcomes of the MS graduate program.

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<tr>
<th>Core requirements include</th>
<th>Units</th>
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<tbody>
<tr>
<td>CHEM 879 and 880 Research Methods I and II</td>
<td>3 + 3</td>
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<tr>
<td>CHEM 897 Research</td>
<td>9-12</td>
</tr>
<tr>
<td>CHEM 898 or 895 Thesis or manuscript</td>
<td>3</td>
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<tr>
<td>CHEM 800-level Elective coursework</td>
<td>9-12</td>
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<td><strong>Total</strong></td>
<td><strong>30</strong></td>
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Research topic and elective courses define the area of study. Our MS curriculum is flexible to accommodate student interests and research training.

**New Certificate Program in Data Science!**
A NSF funded Data Science Certificate Program (GOLD program) begins Fall 2020. Enhance your research through coding and data science and gain valuable skills that will help your career path. [https://goldsfsu.weebly.com/](https://goldsfsu.weebly.com/)

“Besides research experience, I gained invaluable skills in presenting, writing, and communicating my science.”

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**Essential Links**
http://www.chemistry.sfsu.edu/0home/0layout.php
https://www2.calstate.edu/apply

Department of Chemistry & Biochemistry
1600 Holloway Avenue, Thornton Hall 806
San Francisco, CA 94132

Fanning pyrite crystal for photovoltaic research. Image credit, Diana Mars.
Resources and Facilities
As a graduate student, you will use state of the art equipment in your research. Department resources include two 500 MHz NMRs, an X-ray diffractometer, a computational chemistry visualization facility, and a suite of spectroscopic and chromatography instrumentation. You will also have access to the Atomic Force Microscopy, Electron Microscopy, Protein Crystallography, Cell & Molecular Imaging Center, and Mass Spectrometry core facilities. For more information about the resources located in the Department and College of Science and Engineering click here.

Funding Opportunities
SF State has a number of resources to help you fund your graduate education. For Chemistry and Biochemistry students, the two main resources are the Student Enrichment Opportunities (SEO) office and College of Science & Engineering (CoSE). The SEO office manages scholarship and fellowship programs in biochemical and chemical sciences for graduate students from historically underrepresented groups including those with disabilities. The graduate fellowships provide academic support and student research and professional development experiences. One application covers all SEO graduate programs including RISE, Bridge to the Doctorate, Genentech Fellows, and the Center for Cellular Construction.

CoSE hosts a number of graduate scholarship opportunities. Please visit the website for applications and deadlines. Finally, some faculty have research grants that fund students during the summer and academic year.

Graduate Teaching Assistant (GTA) Positions and Graduate Scholarships are also available through the department of Chemistry & Biochemistry. Incoming and continuing graduate students are eligible for a GTA position based on availability of teaching assignments, experience, and academic record. Eligibility requirements for the various scholarships can be found on our website.

Graduate Student Life and Organizations
There are several organizations within CoSE that promote involvement, inclusivity and outreach in STEM. The Chemistry & Biochemistry Student Association (CBSA), Black Excellence in STEM (BE-STEM) and the SF State chapter of the Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) are all student-run and serve to provide supportive communities for SF State students in STEM.

After Graduation
Chemistry & Biochemistry M.S. graduates go on to Ph.D. programs, professional schools such as medicine, pharmacy, and dentistry, move up the career ladder in industry, and become educators.

Apply now!
Requirements include a B.S. or B.A. in chemistry, biochemistry, or related field with a GPA of 3.0 or higher. Visit the Cal State Apply Web Portal to begin your application for Fall 2021.

Questions?
Contact the Department’s Graduate Coordinator, Professor Andrew Ichimura, to set up an appointment for questions about the application process, graduate program, or advising based on your unique academic or work situation.