

Chemistry Coursework M.S.

Who enrolls in the Chemistry Coursework Masters Program?

The Coursework Master's program is designed to provide up-to-date expertise in chemistry, short of actual research experience. Teachers, technicians from industry, businesspeople, and recent chemistry graduates wishing to enhance their employability in industry will benefit. This degree program does not involve teaching experience, although Teaching Assistantships may occasionally be available.

What are the requirements to apply?

Applicants should have either a B.A. or B.S. degree in Chemistry or Biochemistry. Applicants with a Bachelor's degree in a related subject (such as Biology or Chemical Engineering) must have taken the same Chemistry, Physics and Math courses required for the Chemistry B.A. or B.S. degree at UC Santa Cruz. Besides an online application, we require three letters of recommendation, GRE scores, transcripts, and a minimum 3.0 GPA. International applicants must score at least 89 on the TOEFL test.



What can students expect when admitted?

New students take standardized American Chemical Society exams in four areas (organic, inorganic, physical chemistry and biochemistry) to confirm their undergraduate preparation. The standard course load, which includes lecture courses and seminars, is 15-20 units per quarter. Coursework M.S. students take seven lecture courses from at least three of the four chemistry sub-disciplines and a weekly departmental seminar. The Capstone requirement is a seminar on recently published cutting-edge research. The M.S. degree takes 3-4 quarters, but can be finished in one year if the student is well prepared.

Tuition and Fees

Because the Coursework Master's is a self-paying program, no financial aid can be expected from the department. Students may submit a FAFSA to apply for loans. Although Teaching Assistantships may occasionally be available, they are not guaranteed, so applicants should plan on covering education and living expenses using their own resources.

When are graduate applications due for your program?

December 15th

Who can I contact for more information?

Janet Jones, Graduate Program Coordinator
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Chemistry Coursework Master's Lecture Courses

- Chem 263** Quantum Mechanics*
- Chem 151B** Chemistry of the Main Group Elements*
- Chem 169** Chemistry and Biology of Drug Design and Discovery*
- Chem 200A** Advanced Biochemistry: Biophysical Methods*
- Chem 200B** Advanced Biochemistry: Macromolecular Structure and Function*
- Chem 200C** Advanced Biochemistry: Enzyme Mechanisms and Kinetics
- Chem 230** Grant Writing in Biomedical Research
- Chem 234** Bioinorganic Chemistry*
- Chem 238** Topics in Biophysical Chemistry
- Chem 242A** Modern Physical Organic Chemistry*
- Chem 242B** Modern Synthetic Methods in Organic Chemistry*
- Chem 242C** Spectroscopy and Applied Analytical Method*
- Chem 244** Organic Free Radical Chemistry
- Chem 255 (BME 255)** Biotechnology and Drug Development
- Chem 256A, B, C, D** Advanced Topics in Inorganic Chemistry (eg Nano materials, Solid State Chemistry, X-Ray Crystallography)*
- Chem 261** Foundations of Spectroscopy*
- Chem 262** Statistical Mechanics*
- Chem 263** Quantum Mechanics*
- Chem 265** Computer Simulation in Statistical Mechanics
- Chem 266A** Lasers and Their Chemical Applications
- Chem 268** Solid State and Materials Chemistry*
- Chem 269** Electrochemistry*
- Chem 270** Drug Action and Development

*Most courses are offered every year or every two years.
All courses are 5 units.



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