

Experience.
Explore.
Discover.
Achieve.

Departments
and Programs
in the College
of Science

Biochemistry &
Biophysics

Biology

Botany & Plant
Pathology

Chemistry

Environmental
Sciences

Geosciences

Mathematics

Microbiology

Molecular &
Cellular Biology*

Physics

Pre-professional
Programs in the
Health Sciences

Professional
Science Masters*

Science &
Mathematics
Education*

Statistics*

Zoology

*graduate program only

Chemistry

...the science of molecules and materials. The study of chemistry leads to career opportunities in many different areas. The insights gained by discovering new materials and methods of characterization can be applied to improving and understanding the role of chemistry in many aspects of daily life.

Career Opportunities

Graduates from chemistry can enter the work force directly or go on to post-graduate work for advanced degrees in, for example, science, education, medicine, dentistry or law. Recent chemistry graduates are working as:

Environmental chemists

Laboratory managers

Quality control chemists

Ink chemists

Process engineers

Chemists in electronics industry

Research assistants

Instrumentation managers

High school and college teachers

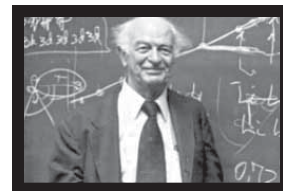
Chemists in biotechnology labs

Health professionals (doctors, dentists)

Chemists in pharmaceutical labs

The Department of Chemistry at Oregon State University offers the B.A. degree and the B.S. degree with ten options: biochemistry, business, chemical engineering, chemistry education, environmental chemistry, forensic science, materials science, pre-med, advanced chemistry and advanced biochemistry. The last two options include sufficient course work for certification by the American Chemical Society. The Department of Chemistry ranks high nationally and internationally in many research areas and its faculty members are recognized for their commitment to teaching and advising.

A distinctive feature of the undergraduate experience is the experimental chemistry laboratory, which is organized around integrated projects. More than \$750,000 has been invested to provide modern labs, instrumentation and computers in the Gilbert Addition teaching laboratory.



Chemistry

What to know about Oregon State University

Head Advisor

College of Science
128 Kidder Hall
541-737-4811

OSU Admissions

104 Kerr Administration
541-737-4411
800-291-4192

OSU Financial Aid

Student Employment
Loans & Scholarships
College Work Study
218 Kerr Administration
541-737-2241

OSU Registrar

102 Kerr Administration
541-737-4331

OSU Housing

102 Buxton Hall
541-737-4771

OSU Website

<http://oregonstate.edu>

For more information, please contact:

Kevin Gable, Chair
Department of Chemistry
College of Science
Oregon State University
153A Gilbert Hall
Corvallis, Oregon 97331-4003
phone: 541-737-2081
fax: 541-737-0501

email: kevin.gable@oregonstate.edu

<http://www.chemistry.oregonstate.edu>

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Section 504 of the Rehabilitation Act of 1973.

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Course of Study

The Chemistry B.S. core curricula consist of sequences in general, organic, analytical, physical, and inorganic chemistry, as well as math and physics (76–81 credits). Students must select one or more of ten possible options (30–38 additional credits). For specific course requirements for options, see the undergraduate/advising link on the Chemistry home page (www.chemistry.oregonstate.edu). Requirements for graduation include fulfilling the OSU baccalaureate core (BC) (48 credits) plus a writing intensive course in chemistry. Participation in undergraduate research is strongly encouraged.

Sample Curriculum

The ACS certified B.S. degree with the advanced chemistry option:

See “undergraduate/advising” on www.chemistry.oregonstate.edu for curricula for other options.

Freshman Year			credits			credits		
General Chemistry	CH 221, 222, 223*	15	Calculus	MTH 251, 252	8			
Vector Calculus	MTH 254	4	BC: Writing I	WR 121	3			
BC: Fitness		3	General Physics	PH 211 & 221	5			
Biology	BI 212 or BI 102	4	Other BC courses and electives		6			

Sophomore Year			credits			credits		
Organic Chemistry	CH 334, 335, 336	9	Experimental Chemistry I	CH 361†, 362†	6			
Infinite Series & Sequences or Power Series & Matrix Methods	MTH 253 or MTH 306	4 or 4	Applied Differential Equations or Linear Algebra	MTH 256 or MTH 341	3 or 3			
General Physics	PH 212 & 222, 213 & 223	10	BC: Writing II		3			
Other BC courses and electives		9 or 10						

Junior Year			credits			credits		
Analytical Chemistry	CH 421, 422	6	Physical Chemistry	CH 440, 441, 442	9			
Experimental Chemistry II	CH 461, 462§, 463§	9	BC: Writing III		3			
Other BC courses and electives		18						

Senior Year			credits			credits		
Inorganic Chemistry	CH 411, 412	6	Experimental Chemistry II	CH 464§	3			
Biochemistry	BB 490 & 491 or BB 450	6 or 4	Approved career-supportive electives#		12			
BC courses and electives		18–20						

*CH 224H, 225H, 226H for students enrolled in Honors College.

†CH 361H, 362H for students enrolled in Honors College.

§Writing intensive course (WIC); CH 462H, CH 463H, CH 464H for students enrolled in Honors College..

#Must be approved by departmental academic advisor by end of winter quarter Junior year.

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