



Department of Chemistry

University of Tennessee, Knoxville

Department Head, Craig E. Barnes
552 Buehler Hall
(865) 974-3141
chemistry@utk.edu
www.chem.utk.edu

Welcome!

The Department of Chemistry presents to the next generation of chemists an integrated program of teaching and research that will prepare them to become leaders in academia, industry, and government. To satisfy a diverse population our program included emphasis on classroom, research, and laboratory activities.

The Department currently has approximately thirty faculty representing all the traditional sub-disciplines (Organic, Inorganic, Physical, Analytical) as well as strengths in several new and exciting interdisciplinary areas of research such as polymer and materials chemistry, chemical physics, bioorganic chemistry and neutron science. We invite you to peruse the various links to our home page to learn more about the unique opportunities for our undergraduate students.

The Department also enjoys a strong collaborative research relationship with the scientific community at the Oak Ridge National Laboratory (ORNL). Please take a moment to look at some of the ongoing projects between faculty in the Department and scientists at ORNL.

Undergraduate Research in Chemistry

Chemistry 200 and Chemistry 400 are classes which give you the opportunity to do research in a working research lab under the supervision of a faculty member in the Chemistry Department. Chemistry 200 and 400 give you first hand experience in a research lab that can offer you a wide range of benefits. Undergraduate research allows you to use instrumentation and techniques far more sophisticated than those usually encountered in standard laboratory courses. In addition, research experience gives you the chance to apply the concepts you've learned in the classroom to actual research and "do" chemistry, helping to pioneer discoveries in the sciences.

What can I do with a degree in Chemistry?

Because chemists contribute to society in many ways, there have traditionally been many employment prospects. For example, chemists can work as technicians or researchers in industrial laboratories developing or improving products, analyzing materials, synthesizing compounds, and solving various chemical problems that arise. Some choose to get involved in technical sales or the management and administration of a business involving chemicals or applied chemistry. In government laboratories chemists are responsible for monitoring the environment, helping define standards for foods, drugs, and other consumable chemicals; they evaluate patents and help write laws and regulations to protect society.

Research Areas:

- Analytical Chemistry
- Chemical Physics
- Environmental Chemistry
- Inorganic Chemistry
- Chemistry & Life Sciences
- Materials Chemistry
- Neutron Sciences
- Organic Chemistry
- Physical Chemistry
- Polymer Chemistry
- Synthetic Chemistry
- Theoretical & Computational Chemistry

The Department of Chemistry offers three distinct BS degrees in chemistry: The regular BS in chemistry that satisfies all the requirements of the College of Art & Sciences, the regular BS with honors and the ACS certified BS degree in chemistry. A typical 4-year curriculum leading to the regular BS degree is the following:

4-Year Sample Curriculum B.S. in Chemistry

First Year (Freshman)

Chemistry 120-130 or 128-138	8
Math 141-142	8
English Composition	6
Foreign Language	6-10
Distribution	3

Second Year (Sophomore)

Chemistry 240	2
Chemistry 230	3
Chemistry 350-360 or 358-368	6
Chemistry 369	2
Math 241 and either 231 or 251	7
Physics 135-136 or 137-138	8-10
Distribution	3

Third Year (Junior)

Chemistry 310-320	6
Chemistry 319-329	3
Chemistry 473-483	6
Chemistry 479-489	4
Distribution	9
Electives	3

Fourth Year (Senior)

Chemistry 430	3
Chemistry 439	1
Chemistry 406	1
Chemistry 400	3
BCMB 401	4
Chemistry Electives	3
Distribution	9
Electives	9

On-Line Resources

Careers in Chemistry
www.acs.org/careers



Careers in Science & Engineering
www.nap.edu

Non-traditional careers in Chemistry
www.theaic.org



For more information visit
www.chem.utk.edu