



# CHEMISTRY

Bachelor of Science

School of Mathematics, Science & Engineering

## Program Overview

The Bachelor of Science in Chemistry degree is designed to give students a strong foundation in the chemical sciences providing for employment or future study in a variety of specialized areas. This degree is the recommended for students pursuing a career in chemical research, industry, or the health professions.

## Career Opportunities

The chemistry degree prepares students for a variety of career and professional opportunities including:

- Chemical Research
- Energy Resources
- Biotechnology
- Environmental Science
- Intellectual Property Law
- Education
- Polymer and Organic Synthesis
- Forensics
- Quality Assurance
- Material Science
- Health Professions including:
  - Medicine
  - Pharmacy
  - Dentistry

## Faculty

Faculty members in the Department of Chemistry have a strong commitment to undergraduate education. Faculty teach a full range of courses in their specialty areas including analytical, organic, inorganic, physical chemistry, and biochemistry. They are dedicated to developing students with a strong foundation in chemistry through coursework and research.

Rafael Adrian - Baylor University, Ph.D., Associate Professor  
Alakananda Chaudhuri - Jadvpur University, Ph.D., Professor  
Julian Davis - University of Texas at Austin, Ph.D., Associate Professor  
Robert Garner - Ohio State University, Ph.D., Assistant Professor  
Edward Gonzalez - University of Texas at Austin, Ph.D., Associate Professor  
S. Bin Kong - University of Florida, Ph.D., Professor  
Betsy Leverett - Purdue University, Ph.D., Assistant Professor  
Brian McBurnett - University of Texas at Austin, Ph.D., Professor  
John Stankus - Stanford University, Ph.D., Associate Professor  
Dr. Rachell Booth, Associate Professor

## Contact

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## Website

[www.uiw.edu/chemistry](http://www.uiw.edu/chemistry)

**Bachelor of Science in Chemistry**  
**SCHOOL OF MATH, SCIENCE & ENGINEERING**  
**2015-2017**

<b>Freshman Year: Fall</b>		Hrs.
CHEM 1301 Chemical Principles I	3	
BIOL 1402 Unity of Life and lab	4	
DWHP 1200 Dimensions of Wellness	2	
ENGL 1311 Composition I	3	
Fine Arts Core	3	
<b>Total hours</b>	<b>15</b>	
<b>Sophomore Year: Fall</b>		
CHEM 2311 Organic Chemistry I	3	
CHEM 2111 Organic Chemistry I Lab	1	
MATH 2312 Calculus I	3	
ENGL 2310 World Literature Studies	3	
PHIL 1381 Introduction to Philosophy	3	
Modern Language I	3	
<b>Total hours</b>	<b>16</b>	
<b>Junior Year: Fall</b>		
CHEM 3421/L Quant. Analysis & Lab	4	
PHYS 2305 Physics I	3	
PHYS 2105 Physics I Lab	1	
Elective (upper division)	4	
Social Science Core	3	
<b>Total hours</b>	<b>15</b>	
<b>Senior Year: Fall</b>		
CHEM 4431/L Physical Chem. I & Lab	4	
CHEM 4351 Biochemistry I	3	
CHEM 4151 Biochemistry I Lab	1	
CHEM 33XX or 43XX	3	
Elective	3	
<b>Total hours</b>	<b>14</b>	

<b>Freshman Year: Spring</b>		Hrs.
CHEM 1302 Chemical Principles II	3	
CHEM 1203L General Chemistry Lab	2	
MATH 1311 Pre-Calculus	3	
ENGL 1312 Composition II	3	
RELS 1305, 1315, 1325, 1335 or 1327H	3	
<b>Total hours</b>	<b>14</b>	
<b>Sophomore Year: Spring</b>		
CHEM 2312 Organic Chemistry II	3	
CHEM 2112 Organic Chemistry II Lab	1	
MATH 2313 Calculus II	3	
RELS/PHIL 33XX	3	
Modern Language II	3	
PEHP 11XX	1	
<b>Total hours</b>	<b>14</b>	
<b>Junior Year: Spring</b>		
CHEM3441/L Inorganic Chemistry and Lab	4	
CHEM4260 Chemistry Research	2	
PHYS 2306 Physics II	3	
PHYS 2106 Physics II Lab	1	
Elective	3	
HIST 13XX	3	
<b>Total hours</b>	<b>16</b>	
<b>Senior Year: Spring</b>		
CHEM 4422/L Instrument Analysis & Lab	4	
CHEM 4432/L Physical Chem. II & Lab	4	
Elective	3	
Elective	3	
Elective	3	
<b>Total hours</b>	<b>17</b>	

**Core Curriculum - Total Hours 43**  
**Major - Total Hours 78**  
**Degree - Total Hours 121**