

Chemistry

2017-2018
Academic Year



School of Science and Engineering

Chemistry Department

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GENERAL REQUIREMENTS FOR STUDENTS MATRICULATING IN ACADEMIC YEAR: 2017-2018

DEGREE: **BACHELOR OF SCIENCE**

TOTAL CREDITS: 120

MAJOR: **CHEMISTRY**

MINIMUM CUMULATIVE GRADE POINT AVERAGE: 2.0

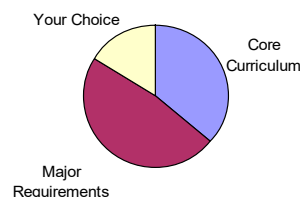
MINIMUM MAJOR GRADE POINT AVERAGE: 2.0

| CORE CURRICULUM REQUIREMENTS | | | MAJOR REQUIREMENTS | 61 CREDITS |
|--|---------|---|--|------------|
| Area | Credits | To Be Selected From | | |
| First Year Writing | 4 | ENGL 1010 or Equivalent | Chemistry Required Courses | |
| TIDES – 1 course in fall semester | 1-1.5 | | CHEM 1070, 1075 CHEM 1080, 1085 CHEM 2410, 2415 CHEM 2420, 2425 CHEM 3110, 3115 CHEM 3120, 3125 | |
| Foreign Language – Competence at 1020-Level (1-2 courses depending on placement and language) | 3-8 | Arabic, Chinese, French, German, Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, or Spanish | CHEM 2310, 2315; or 3210, 3215; or 3310, 3315 | |
| Cultural Knowledge – 1 Humanities 1 Fine Arts | 6 | Courses designated Humanities and Fine Arts | Mathematics Required Courses | |
| Cultural Knowledge – Social Science | 6 | Courses designated Social Science | MATH 1210 MATH 1220 ¹ MATH 2210 MATH 2240 | |
| Quantitative Reasoning 2 Math courses | 8 | MATH 1210 and 1220 or equivalent | Math 1310 can be taken in lieu of 1210 and 1220 | |
| Scientific Inquiry – 1 Lab Science 1 Science or Math | 7-8 | Courses from departments designated Science | Physics Required Courses | |
| Writing Intensive | 4 | Consult Major | PHYS 1310 PHYS 1320 | |
| Public Service – 1 st Tier 2 nd Tier | | 1000-3000-Level 3000-Level or above | Chemistry Electives ² – 3 courses | |
| Western Traditions | 3 | Refer to Undergraduate Core Curriculum Guide | May be chosen from courses above the 1000 level in chemistry, biology, geology, mathematics or physics, subject to departmental approval. A list of courses fulfilling this requirement is available from the chemistry department. CHEM 3050 may not be used to meet this requirement. | |
| Outside Western Traditions Or Comparative Cultures Intl. Perspectives | 3 | Refer to Undergraduate Core Curriculum Guide | Students must elect advance chemistry courses including CHEM 4010/4020 or Honors Thesis 4990/5000 to complete the major and also fulfill the capstone requirement. | |

NDA

To complete the required 120 hours, you may choose to take additional courses:

1. In your major
2. Of interest to you
3. To satisfy another major (32 hours)
4. To satisfy another minor (16 hours)



This information is for students pursuing a minor in CHEMISTRY – REQUIREMENTS:

- Required courses CHEM 1070/1075
- Required courses CHEM 1080/1085
- Electives, four additional courses in chemistry chosen in consultation with the chemistry department

Note: Prior approval in these courses is required as well as co-registration in appropriate laboratory courses. Only one semester of research may be counted towards the minor. If a student's major require CHEM 1070/1075 and CHEM 1080/1085, at least one of the additional four courses must be one not required by the major.

Biological Chemistry majors may not minor in Chemistry or Biology.

- The Degree Plan and other information provided in this booklet serve only as advising tools. Newcomb-Tulane College advisors will help advise you on the core-curriculum, decide on a major, and consult on any academic success issues.
- Your major advisors will advise you on major requirements.
- Students with multiple majors will have more than one advisor and will need to consult with the appropriate advisor.
- Minors are not assigned an advisor, but a faculty member in the department is designated to advise minors.
- Become familiar with your major! By declaring early, you have access to a major advisor, are able to enroll in "majors only" classes, and are included in list serves that allow you to receive information about events, internships, and other opportunities.
- Pre-med and Pre-law students should also consult with one of the Pre-Professional advisors.

What Can I Do with a Major in... Chemistry

GENERAL INFORMATION

- As an undergraduate, seek laboratory experiences such as research projects, volunteering with professors, summer jobs or internships.
- Participate in research programs sponsored by organizations like the National Science Foundation and the National Institutes of Health.
- Learn to work independently and as part of a team.
- Develop the ability to communicate clearly.
- Gain competencies in computers and mathematics.
- Read scientific journals and join related professional organizations.

SKILLS

- Ability to conduct and explain scientific research
- Ability to organize, analyze, and interpret scientific data
- Ability to make critical observations & appropriate decisions
- Aptitude for accurate details
- Strong mathematical background
- Good vision, spatial and manual dexterity
- Proficiency in reading comprehension, writing and speaking
- Intellectual capacity to perform well

CAREER AREAS

RESEARCH

- Basic
- Applied
- Medical
- Grant Writing
- Administration
- Analysis and Testing
- Forensics

EDUCATION

- Teaching
- Research

HEALTHCARE

- Medicine
- Dentistry
- Pharmacy
- Allied Health
- Sales

EMPLOYERS

- University laboratories
- Federal government laboratories & agencies
- State and local laboratories & agencies
- Public health departments
- Hospital laboratories
- Commercial medical laboratories
- Forensics laboratories
- Independent research foundations
- Industry laboratories: pharmaceutical, biotechnology, food processors, cosmetics, chemical, petroleum, agriculture

- Public and private elementary, middle and high schools
- Two-year community colleges/technical institutes
- Four-year institutions
- Medical schools

- Hospitals
- Medical centers
- Nursing homes
- Clinics
- Private practice
- Public health organizations
- Medical supply companies

If you think you might be interested in this major, but you are not absolutely sure, an exploratory advisor can help you explore major and career options, please go to:



If you are interested in information about Law Professions, please go to:



If you are interested in information about Health Professions, please go to:



What Can I Do with a Major in...

Chemistry

GOVERNMENT

- Analysis/Testing
- Research
- Consumer Protection
- Environmental Protection

- Federal government laboratories & agencies
- State and local laboratories & agencies
- Public health departments

BUSINESS/INDUSTRY

- Sales/Marketing
- Technical Writing
- Scientific Journalism
- Scientific Illustration
- Regulatory Affairs
- Administration/Management
- Scientific/Technical Recruiting
- Intellectual Property/Patent Law

- Pharmaceutical and chemical companies
- Publishers: textbook, magazine, newspaper, book
- Beverage companies
- Regulatory agencies
- Consulting firms
- Cosmetic companies
- Distributors
- Utility companies

PROFESSIONAL ORGANIZATIONS

American Association for the Advancement of Science
www.aaas.org

American Chemical Society
www.acs.org

Materials Research Society
www.mrs.org

National Academy of Sciences
www.nasonline.org

The Association of Consulting Chemists & Chemical Engineers
www.chemconsult.org

The National Science Foundation
www.nsf.gov

Chemical Heritage Foundation
www.chemheritage.org

Royal Society of Chemistry
www.rsc.org

Council for Chemical Research
www.ccrhq.org

Society of Environmental Toxicology & Chemistry
www.setac.org

Drug, Chemical & Allied Trade Association
www.dcat.org

RELATED WEBSITES & ASSOCIATIONS

Chem Jobs
www.chemjobs.net

Chemical Week Magazine
www.chemweek.com

Environmental Career Opportunities
www.ecojobs.com

Science Careers
sciencecareers.sciencemag.org

Chemistry Jobs
www.chemistryjobs.com

Nature Jobs
www.nature.com/naturejobs

ACS Publications
pubs.acs.org

ChemWeb
www.chemweb.com

American Chemical Society Job Bank
chemistryjobs.acs.org/jobs

Science Jobs
www.sciencejobs.com

*For Jobs, internships, resume assistance,
interviews, and self-assessments, please
go to:*



*Tulane University is committed to your academic success
and provide several services to assist.*