# BACHELOR OF SCIENCE IN CHEMISTRY

The School of Chemistry and Biochemistry has a vibrant program of study leading to a Bachelor of Science in Chemistry. The flexibility of the curriculum allows students to study fundamental areas of chemistry while tailoring their degree with technical and free electives to produce a well-rounded experience in preparation for a variety of career opportunities. Students may pursue tailored tracks towards the B.S. in Chemistry, including those allowing specialization in: pre-health science, biochemistry, business, and a polymers and materials option. There are also many opportunities to gain research experience while working with world class research groups. In addition to coursework, students in the program often participate in a variety of experiential programs, including: undergraduate research, cooperative work, study abroad, summer internships, and serving as an undergraduate teaching assistant.

Faculty in the school are committed to undergraduate education and several have won awards for excellence in teaching. With a faculty to undergraduate student ratio of approximately 1:9, the School prides itself on the close contact that it maintains with its undergraduate students. The high quality of the curriculum and faculty is part of the reason chemistry graduates receive job offers at the highest salary levels for B.S. chemists. Graduates with a B.S. in Chemistry pursue careers such diverse field as forensics, environmental science, biotechnology, and pharmaceuticals in industry or governmental organizations; or they may continue their education in the chemical or biological sciences, or in medicine, pharmacy, dentistry, and law. Chemistry, especially with the biochemistry option (or the stand-alone Bachelor of Science in Biochemistry degree), is a superb preparation for medical school.

#### **Chemistry Website**

- Bachelor of Science in Chemistry General
- · Bachelor of Science in Chemistry Biochemistry Option
- · Bachelor of Science in Chemistry Business Option
- · Bachelor of Science in Chemistry Polymers and Materials Option
- · Bachelor of Science in Chemistry Pre-health Option

### **International Plan**

The BS in Chemistry (International Plan) and BS in Biochemistry (International Plan) are offered to undergraduate students seeking to understand their majors in a global perspective. Students in this program must demonstrate proficiency in a foreign language; complete coursework in a country/regional elective, international relations, and global economics; and participate in a study or research abroad experience (usually in the junior year). If a student is pursuing a research abroad experience, they are required to complete a supervised research experience with a faculty member in chemistry or biochemistry at the host institution. Upon successful completion of degree requirements for the International Plan, a "International Plan" designator is indicated on the diploma. If interested in participating in the International Plan as part of the BS in Chemistry or BS in Biochemistry, students should visit: www.internationalplan.gatech.edu.

**Chemistry Website** 

### **Research Option**

The BS in Chemistry (Research Option) and BS in Biochemistry (Research Option) are offered for students who wish to participate in a research project under the supervision of one of the fifty members of faculty and adjunct faculty in the School. Participants in the Research Option learn how to address a research problem from experiment design and execution to interpretation of results. There is an expectation that undergraduates who contribute to completed studies will be co-authors on submissions to high-quality scholarly journals. Research projects are available in the traditional areas of chemistry (analytical, biological, inorganic, organic, and physical chemistry) as well as highly interdisciplinary research areas, such as nanochemistry, polymer and materials chemistry, environmental chemistry and sensors, medicinal chemistry, molecular biophysics, and computational chemistry.

To pursue the Research Option in the School of Chemistry and Biochemistry, students should obtain a research project with a faculty member in the department and apply online via www.undergradresearch.gatech.edu. Successful completion of the Research Option requires the following:

Code	Title	Credit Hours
Select one of the following research options: <sup>1</sup>		9
CHEM 4698/4699	Undergraduate Research Assistantship	
LMC 4701	Undergraduate Research Proposal Writing (complete during the first or second semester of research) $^2$	1
LMC 4702	Undergraduate Research Thesis Writing (take during the term in which students complete their thesis) $^3$	1
Total Credit Hours		11

<sup>1</sup> supervised research with faculty over three or more semesters

approval of proposal on project by a committee of two or more faculty

<sup>3</sup> submission of an approved thesis

Successful completion of the Research Option is noted on the student's transcript. Students completing this option often pursue graduate studies in the chemical or biological sciences or research careers in industrial or governmental laboratories.

**Chemistry Website** 

## **BSMS Option**

The BSMS Option allows eligible students to double count a maximum of 6 credit hours toward undergraduate and graduate requirements while still completing all other program requirements to earn both degrees. The credit must be approved coursework (4000-level or higher; not seminar or research credit) completed with a grade of 'B' or higher. The allowable courses are: CHEM 4113, CHEM 4311, CHEM 4341, CHEM 4401, CHEM 4452, CHEM 4485, CHEM 4521, CHEM 4740, CHEM 4759, CHEM 4760, CHEM 4762, CHEM 4765, CHEM Special Topics will be considered on a case by case basis.

To apply for the option, undergraduate Chemistry students must have at least 30 credit hours earned at Georgia Tech with an undergraduate

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GPA of 3.3 or higher, and fewer than 90 credits overall (including transfer credit).

The minimum GPA to graduate with an undergraduate degree in Chemistry to continue to the MS in Chemistry program is 3.0. The minimum GPA for graduation with the MS in 2.7.

Students will need to consult with an advisor to indicate which courses are sharing with the graduate degree in DegreeWorks.