

4-Year Plan

BSc. In Chemistry with Concentration in Forensic Chemistry

- Each semester a minimum of 12 credit hours are required to be a full-time student. Please select University Core/Electives courses from [here](#).
- For a list of chemistry research courses, click [here](#). Be mindful that most research advisors require more than one semester of commitment.
- For a list of electives offered by semester, click [here](#).
- If you are interested in ACS certification, please click [here](#) to see the required courses.
- For a **Chemistry Minor**, please click [here](#)

Freshman Year

Freshman Fall Semester

- **CHEM 1211K Principles of Chemistry I** (4 credits)
- **Math 1113 Pre-Calculus** (3 credits)

Chem & Math Total: 7 credits

Freshman Spring Semester

- **CHEM 1212K Principles of Chemistry II** (4 credits)
- **Math 2211 Calculus of One Variable I** (4 credits) or **Math 2201 Calculus for the Life Science I** (4 credits)

Chem & Math Total: 8 credits

Sophomore Year

Sophomore Fall Semester

- CHEM 2400 Organic Chemistry I (3 credits)
- CHEM 2100 Intermediate Organic Chemistry Lab I (2 credits)
- Math 2212 Calculus of One Variable II (4 credits) or Math 2202 Calculus for the Life Science II (4 credits)
- PHYS 2211K Principles of Physics I (4 credits)

Chem, Math & Phys Total: 13 credits

Sophomore Spring Semester

- CHEM 2410 Organic Chemistry I (3 credits)
- CHEM 3110 Intermediate Organic Chemistry Lab II (2 credits)
- PHYS 2212K Principles of Physics II (4 credits)

Chem & Phys Total: 9 credits

Junior Year

Junior Fall Semester

- CHEM 4000 Fundamentals of Chemical Analysis-CTW (3 credits)
- CHEM 4150 Introduction to Biophysical Chemistry (3 credits) or CHEM 4110 Chemical Thermodynamics & Kinetics (3 credits)

Chem Total: 6 credits

Junior Spring Semester

- CHEM 4010 Instrumental Analysis (3 credits)
- CHEM 4700 Forensic Chemistry I (3 credits)
- CHEM 4710 Forensic Chemistry Lab (2 credits)

Chem Total: 8 credits

Senior Year

Senior Fall Semester

- CHEM 4190 Absorption and Fluorescence Spectroscopy (3 credits)
- CHEM 4600 Biochemistry I (5 credits)
- CRJU 4110 Criminal Investigations (3 credits)
- CRJU 4415 Evidence-Based Cybersecurity (3 credits)

Chem & CRJU Total: 14 credits

Senior Spring Semester

- CRJU 4760 Criminal Procedure (3 credits)
- CRJU 4770 Criminal Evidence (3 credits)
- CRJU 4425 Cybercrime Investigations (3 credits)
- ANTH 2010 Forensic Anthropology (3 credits)

CRJU & ANTH Total: 12 credits

Complete outstanding requirements for your major/degree

Chemistry Research Courses

All research courses are offered throughout the semester. Students are encouraged to look at the chemistry research brochure at <https://chemistry.gsu.edu/research/> and see all research opportunities that faculty have; then directly contact potential research advisors for CHEM 2950, 3950, 4950, 4160, 4170 , 4870 & 4880.

Once the faculty advisor agrees to mentor the student, the faculty advisor will request for the course to be added to GoSolar/PAWS. The student will then email the Director of Undergraduate Studies to receive an override to register for the course.

Electives Offered by Semester

Fall Semester

- CHEM 3400 Structure and Reactivity of Biomolecules (3 credits)
- CHEM 4050 Introduction to Fourier-Transform NMR Spectroscopy (2 credits)
- CHEM 4330 Advanced Synthesis (3 credits)
- CHEM 4400 Mechanistic Organic Chemistry (3 credits)
- CHEM 4410 Spectrometric Identification of Organic Compounds (3 credits)
- ANTH 4370 Forensic Anthropology (3 credits)
- CRJU 4170 Victimology (3 credits)
- CRJU 4110 Criminal Investigations (3 credits)
- CRJU 3020 Research Methods in Criminal Justice (3 credits)
- CRJU 3405 Digital Crime Problem (3 credits)
- CRJU 3410 Criminology Theory (3 credits)
- CRJU 3610 Statistical Analysis in Criminal Justice (3 credits)
- CRJU 4405 Cybercrime (3 credits)
- CRJU 4460 Serial Killers (3 credits)
- CRJU 4470 Mass Murders (3 credits)
- CRJU Criminal Law (3 credits)
- CRJU 4900 Selected Topics in Criminal Justice: Forensic Science (3 credits)
- SOCI 4350 Social Justice I (3 credits)

Summer Semester

Spring Semester

- CHEM 3200 College to Career and Research (3 credits)
- CHEM 4050 Introduction to Fourier-Transform NMR Spectroscopy (2 credits)
- CHEM 4210 Inorganic Chemistry I (3 credits)
- SOCI 4351 Social Justice II: Praxis (3 credits)

*Check the schedule each semester to see if the course is being offered

Courses Required for ACS Certification

- CHEM 4160 Chemistry Laboratory IVA-CTW (3 credits)
- CHEM 4170 Chemistry Laboratory IVA-CTW (4 credits)
- CHEM 4210 Inorganic Chemistry I (3 credits)
- CHEM 4330 Advanced Synthesis (3 credits)