ABOUT THE MAJOR

This degree has as its core a number of fundamental courses in chemistry and allows for students with interests in additional fields to build a broad based curriculum. Combining this degree with a minor or second major prepares students for a variety of career opportunities in addition to laboratory positions and include the following: with business – technical sales; with biology or geology – environmental studies, industrial hygiene; with political science followed by law school – patent law; with education – middle school or high school teaching.

ABOUT THIS MAP

This program map is intended ONLY as a guide for students to plan their course of study. It does NOT replace any information in the Undergraduate Catalog, which is the official guide for completing degree requirements. Use this map to help plan and guide your experience at UWG, including academic, co-curricular, and discovery opportunities. Everyone's experience is different and activities in this map are suggestions. Always consult with your advisors whenever possible for new opportunities and updates.

Visit westga.edu/program-maps for the latest version of this major map.

VISIT WOLFWATCH FOR MORE INFORMATION.

HAVE A QUESTION? CHECK IN WITH YOUR ADVISOR!

WHERE CAN YOU GO WITH THIS DEGREE?

- Analytical Chemist
- Chemical Engineer
- Geochemist
- Hazardous Waste Chemist
- Organic Chemist
- Pharmacologist
- Quality Control Chemist
- Synthetic Chemist
- Toxicologist
- Water Chemist

ADD A CERTIFICATE

- Atmospheric Science
- Data Analytics
- Forensic Sciences
- Stream Restoration
- Sustainable Business
- Wildlife Ecology

HONORS COLLEGE

Consider joining if you have an Overall GPA of 3.2 and earned 15 college credit hours!

CHEMISTRY

NON-ACS BUSINESS TRACK / ALGEBRA START

Bachelor of Science

60 CORE CREDIT HOURS

45 MAJOR CREDIT HOURS

15 ELECTIVE CREDIT HOURS

UNIVERSITY OF WEST GEORGIA

2024-2025

YEAR 1

TERM 1: FALL

C1: ENGL 1101 — 3 CREDIT HOURS
English Composition I

MATH 1111 — 3 CREDIT HOURS
College Algebra

I2: XIDS 2002 — 2 CREDIT HOURS
First-Year Seminar

P3: POLS 1101 — 3 CREDIT HOURS
American Government

I1 OR A — 3 CREDIT HOURS

MILESTONES:
- COMPLETE ENGL 1101 WITH C OR BETTER
- COMPLETE MATH 1111 TO BE ABLE TO PROGRESS TO MATH 1113 AND CHEM 1211/1211L

TERM 2: SPRING

C1: ENGL 1102 — 3 CREDIT HOURS
English Composition II

M: MATH 1113 — 4 CREDIT HOURS
Precalculus

F: CHEM 1211 + LAB — 4 CREDIT HOURS
Principles of Chemistry I

S2: ECON 2105 OR 2106 — 3 CREDIT HOURS
Principles of Macroeconomics or Principles of Microeconomics

MILESTONES:
- COMPLETE ENGL 1102 WITH C OR BETTER
- COMPLETE CHEM 1212/1212L WITH B OR BETTER OVER THE SUMMER TO REMAIN ON TRACK

TERM 3: SUMMER

F: CHEM 1212 + LAB — 4 CREDIT HOURS
Principles of Chemistry I

S1 OR P1 — 3 CREDIT HOURS

MILESTONE:
- COMPLETE CHEM 1212/1212L WITH B OR BETTER OVER THE SUMMER TO REMAIN ON TRACK

14 FALL CREDIT HOURS + 14 SPRING CREDIT HOURS + 7 SUMMER CREDIT HOURS = 35 CREDIT HOURS

CRUSH YOUR COURSEWORK
- Choose Concentration (ACS track recommended).

FIND YOUR PLACE
- Connect with your faculty mentor.
- Join clubs (Chemistry Association or Emerging Healthcare Leaders recommended).

BROADEN YOUR PERSPECTIVES
- Look at the Chemistry Careers page on the American Chemical Society's webpage.

CONNECT OFF-CAMPUS
- Sign up for Handshake through Career Services.

TAKE CARE OF YOURSELF
- Look into on-campus self-care and stress resources especially Campus Center, Health Services, and Counseling Center.
- Find study buddies.
- Go to events, have fun (balance time between study, work, and fun).

PAVE YOUR PATH
- Look at the Careers page on the American Chemical Society's webpage.

YEAR 2

TERM 1: FALL

F: CHEM 2411 + LAB — 4 CREDIT HOURS
Organic Chemistry I

T1: PHYS 1111 OR 2211 + LAB — 4 CREDIT HOURS
Intro Physics I or Principles of Physics I

CHEM 2130 — 1 CREDIT HOUR
Organic Chemistry I

T3: MATH 1634 — 4 CREDIT HOURS
Calculus I

BUSINESS COURSE — 3 CREDIT HOURS

MILESTONES:
- COMPLETE CHEMISTRY SOPHOMORE SEMINAR
- COMPLETE 2411/2411L WITH C OR BETTER

TERM 2: SPRING

CHEM 3422 + LAB — 4 CREDIT HOURS
Organic Chemistry II

T2: PHYS 1112 OR 2212 + LAB — 4 CREDIT HOURS
Intro Physics II or Principles of Physics II

F: MATH 1401 — 3 CREDIT HOURS
Elementary Statistics

BUSINESS COURSE — 3 CREDIT HOURS

MILESTONE:
- COMPLETE ORGANIC CHEMISTRY I AND II AND PHYSICS I AND II WITH C OR BETTER

16 FALL CREDIT HOURS + 14 SPRING CREDIT HOURS = 30 CREDIT HOURS

CRUSH YOUR COURSEWORK
- Take Sophomore Seminar.
- Complete Organic Chemistry sequence.
- Complete Analytical Chemistry.
- Complete other supporting courses (see Advisor to have a clear roadmap).

FIND YOUR PLACE
- Join a research group or seek for student employment (workshop leader, laboratory assistant).
- Attend program/department/college events.
- Attend senior research presentations and on-campus conferences.
- Study and hang out in the student lounge (TLC 2116).

BROADEN YOUR PERSPECTIVES
- Explore internships or part-time jobs in career-related areas (industry, pharmacy, etc).
- Explore summer internships or REU programs.
- Explore volunteer opportunities with a club or in career-related areas.

CONNECT OFF-CAMPUS
- Sign up for Handshake through Career Services.
- Create an account in LinkedIn.
- Talk to alumni guest speakers and make connections.

TAKE CARE OF YOURSELF
- Talk to your faculty mentor.
- Look into on-campus self-care and stress resources especially Campus Center, Health Services, and Counseling Center.
- Find study buddies.
- Go to events, have fun (balance time between study, work, and fun).

PAVE YOUR PATH
- Write preliminary resume.
- Seek for resume-building opportunities related to your career goal (employment, research, activities, volunteering).

YEAR 3

TERM 1: FALL

CHEM 3310K — 4 CREDIT HOURS
Analytical Chemistry

CHEM 3510 — 3 CREDIT HOURS
Survey of Physical Chemistry

BUSINESS COURSE — 3 CREDIT HOURS

ELECTIVE — 3 CREDIT HOURS

MILESTONE:
- COMPLETE ANALYTICAL CHEMISTRY AND PHYSICAL CHEMISTRY WITH C OR BETTER

TERM 2: SPRING

CHEM 4711 — 3 CREDIT HOURS
Biochemistry

S1 OR P1 — 3 CREDIT HOURS

CHEM ELECTIVE — 3 CREDIT HOURS

BUSINESS COURSE — 3 CREDIT HOURS

ELECTIVE — 3 CREDIT HOURS

MILESTONE:
- COMPLETE INORGANIC CHEMISTRY AND ONE CHEMISTRY ELECTIVE (3000-4000) WITH C OR BETTER

13 FALL CREDIT HOURS + 15 SPRING CREDIT HOURS = 28 CREDIT HOURS

CRUSH YOUR COURSEWORK
- Take Sophomore Seminar.
- Complete Organic Chemistry sequence.
- Complete Analytical Chemistry.
- Complete other supporting courses (see Advisor to have a clear roadmap).

FIND YOUR PLACE
- Join a research group or seek for student employment (workshop leader, laboratory assistant).
- Attend program/department/college events.
- Attend senior research presentations and on-campus conferences.
- Study and hang out in the student lounge (TLC 2116).

BROADEN YOUR PERSPECTIVES
- Explore internships or part-time jobs in career-related areas (industry, pharmacy, etc).
- Explore summer internships or REU programs.
- Explore volunteer opportunities with a club or in career-related areas.

CONNECT OFF-CAMPUS
- Sign up for Handshake through Career Services.
- Create an account in LinkedIn.
- Talk to alumni guest speakers and make connections.

TAKE CARE OF YOURSELF
- Talk to your faculty mentor.
- Look into on-campus self-care and stress resources especially Campus Center, Health Services, and Counseling Center.
- Find study buddies.
- Go to events, have fun (balance time between study, work, and fun).

PAVE YOUR PATH
- Write preliminary resume.
- Seek for resume-building opportunities related to your career goal (employment, research, activities, volunteering).

YEAR 4

TERM 1: FALL

CHEM 4610 — 3 CREDIT HOURS
Inorganic Chemistry

I1 OR A — 3 CREDIT HOURS

CHEM ELECTIVE — 3 CREDIT HOURS

BUSINESS COURSE — 3 CREDIT HOURS

ELECTIVE — 3 CREDIT HOURS

MILESTONE:
- COMPLETE BIOCHEMISTRY AND ONE CHEMISTRY ELECTIVE (3000-4000) WITH C OR BETTER

TERM 2: SPRING

CHEM 4910L — 3 CREDIT HOURS
Tools and Applications in Chemical Research and Practice

I1 OR A — 3 CREDIT HOURS

BUSINESS COURSE — 3 CREDIT HOURS

ELECTIVE — 3 CREDIT HOURS

ELECTIVE — 3 CREDIT HOURS

MILESTONE:
- COMPLETE TOOLS AND APPS WITH C OR BETTER

15 FALL CREDIT HOURS + 15 SPRING CREDIT HOURS = 30 CREDIT HOURS

Additional Information:
- Business Course: Students must choose a Business Minor. The number of Business courses could vary depending on which minor.

CRUSH YOUR COURSEWORK
- Take Senior Seminar.
- Take senior capstone course(s) and complete a senior project.
- Complete all required courses for a degree.

FIND YOUR PLACE
- Attend program/department/college events.
- Attend on-campus conferences.
- Study and hang out in the student lounge (TLC 2116).

BROADEN YOUR PERSPECTIVES
- Re-examine career paths with a chemistry degree (ACS Career page, alumni connections, your own aptitude and interest).

CONNECT OFF-CAMPUS
- Talk to alumni in a career field of interest, matched by your faculty mentor.

TAKE CARE OF YOURSELF
- Talk to your faculty mentor.
- Look into on-campus self-care and stress resources especially Campus Center, Health Services, and Counseling Center.
- Find study buddies.
- Go to events, have fun (balance time between study, work, and fun).

PAVE YOUR PATH
- Build hands-on experience through research and/or internships.
- Update your resume or CV.
- Apply for graduate schools, professional school, or jobs.
- Make sure to get help from Career Services for cover letters, resume, application, and interviews.