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
- Forensic Sciences
- Stream Restoration
- Wildlife Ecology

HONORS COLLEGE

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

CHEMISTRY

NON-ACS PROFESSIONAL PREPARATION TRACK / ALGEBRA START

Bachelor of Science

60 CORE CREDIT HOURS

39 MAJOR CREDIT HOURS

21 ELECTIVE CREDIT HOURS

UNIVERSITY OF WEST GEORGIA

2026-2027

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

BIOL 1107/1107L — 4 CREDIT HOURS
Principles of Biology I + Lab

P: POLS 1101 — 3 CREDIT HOURS
American Government

MILESTONE:
- **OVERALL B OR BETTER GRADES HIGHLY DESIRABLE TO BE COMPETITIVE FOR MEDICAL SCHOOL**

TERM 2: SPRING

C2: 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

BIOL 1108/1108L — 4 CREDIT HOURS
Principles of Biology II + Lab

MILESTONE:
- **OVERALL B OR BETTER GRADES HIGHLY DESIRABLE TO BE COMPETITIVE FOR MEDICAL SCHOOL**

15 FALL CREDIT HOURS + 15 SPRING CREDIT HOURS = 30 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 1212 + LAB — 4 CREDIT HOURS
Principles of Chemistry II

I1: PHIL 2020 — 3 CREDIT HOURS
Critical Thinking

T2: MATH 1634 — 4 CREDIT HOURS
Calculus I

S2: PSYC 1101/SOCI 1101 — 3 CREDIT HOURS
Introduction to General Psychology or Introductory Sociology

TERM 2: SPRING

CHEM 2411 + LAB — 4 CREDIT HOURS
Organic Chemistry I

CHEM 2130 — 1 CREDIT HOUR
Sophomore Chemistry Seminar

PSYC OR SOCI ELECTIVE — 4 CREDIT HOURS
3000 or 4000 level course

BIOL ELECTIVE — 4 CREDIT HOURS
3000 or 4000 level course

TERM 3: SUMMER

CHEM 3422 + LAB — 4 CREDIT HOURS
Organic Chemistry II

CORE IMPACTS P1 OR S1 — 3 CREDIT HOURS
US or World History

14 FALL CREDIT HOURS + 13 SPRING CREDIT HOURS + 7 SUMMER CREDIT HOURS = 34 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

PHYS 1111/2211 + LAB — 4 CREDIT HOURS
Introductory Physics I or Principles of Physics I

MATH 1401 OR 2644 — 3 CREDIT HOURS
Structure & Bonding (Can be taken in Fall of Year 4)

BIOL ELECTIVE — 3 CREDIT HOURS
3000 or 4000 level BIOL course

MILESTONES:
- **BIOLOGY ELECTIVES CAN BE TAKEN IN ANY ORDER, BUT NEED TO BE TAKEN BEFORE ATTEMPTING THE MCAT.**
- **CHEM 3422+L AND CHEM 3310K MUST BE COMPLETED WITH A C OR BETTER BEFORE TAKING CHEM 4711**

TERM 2: SPRING

CHEM 4711 — 4 CREDIT HOURS
Biochemistry

PHYS 1112/2212 + LAB — 4 CREDIT HOURS
Introductory Physics II or Principles of Physics II

BIOL ELECTIVE — 4 CREDIT HOURS
3000 or 4000 level BIOL course

A: LITERATURE CLASS — 3 CREDIT HOURS

MILESTONES:
- **BIOLOGY ELECTIVES CAN BE TAKEN IN ANY ORDER, BUT NEED TO BE TAKEN BEFORE ATTEMPTING THE MCAT.**
- **TAKE MCAT IN SUMMER BETWEEN YEARS 3 & 4**

14 FALL CREDIT HOURS + 14 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 4908L — 2 CREDIT HOURS
Tools in Chemical Research

CHEM 3510 — 3 CREDIT HOURS
Survey of Physical Chemistry

CHEM 4610 — 3 CREDIT HOURS
Inorganic Chemistry

CHEM ELECTIVE — 3 CREDIT HOURS
3000 or 4000 level CHEM course

CORE IMPACTS S1 OR P1 — 3 CREDIT HOURS
World or US History

MILESTONE:
- **OVERALL B OR BETTER GRADES HIGHLY DESIRABLE TO BE COMPETITIVE FOR MEDICAL SCHOOL**

TERM 2: SPRING

CHEM 4909L — 1 CREDIT HOUR
CHEM Senior Capstone Research Project

CHEM 4084 — 1 CREDIT HOUR
Senior Seminar

CHEM ELECTIVE — 3 CREDIT HOURS
3000 or 4000 level CHEM course

CORE IMPACTS A — 3 CREDIT HOUR

ELECTIVE — 3 CREDIT HOURS

ELECTIVE — 3 CREDIT HOURS

MILESTONE:
- **OVERALL B OR BETTER GRADES HIGHLY DESIRABLE TO BE COMPETITIVE FOR MEDICAL SCHOOL**

14 FALL CREDIT HOURS + 14 SPRING CREDIT HOURS = 28 CREDIT HOURS

- **Recommended Biology Electives:** Cell and Molecular Biology, Human Physiology, Genetics, Microbiology. Recommended Psychology Electives: Human Growth & Development, Social Psychology, Abnormal Psychology.
- This program map was developed for Medical School. The courses in the first three years have been laid out to prepare students for the MCAT. The MCAT should be taken in the summer after Year 3.
- If a student plans to graduate in a fall semester, they will take Senior Seminar (CHEM 4084) in the fall semester. They would also have to join a research group and do research-for-credit (CHEM 4083) instead of taking CHEM 4909L. We recommend that they do at least 2 semesters of research to ensure they have enough material to write their capstone paper in Senior Seminar.
- This program map can be adapted for other professional programs (etc. Dental, Vet, Physician's Assistant, Anesthesiology Assistant or Physical Therapy programs). See an advisor to discuss changes.

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.