

ABOUT THE MAJOR

This degree option is frequently the choice of students interested in professional programs because it allows a wide range of elective courses to fulfill the degree requirements. It is designed specifically for those students planning to attend medical, dental, veterinary, physician’s assistant, or other professional programs. The general requirements include 2 years of Chemistry and 1 year each of Biology, Physics, and English, 1 semester Psychology/Sociology. Biochemistry is strongly recommended. Combining this degree with a minor or second major prepares students for a laboratory positions and a variety of career opportunities that include: with business - technical sales; with engineering - chemical industry; with biology or geology - environmental studies or 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.

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 PROFESSIONAL PREPARATION TRACK / ALGEBRA START

Bachelor of Science

60 CORE CREDIT HOURS

54 MAJOR CREDIT HOURS

9 ELECTIVE CREDIT HOURS

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!



UNIVERSITY OF WEST GEORGIA

2025-2026

TERM 1: FALL

C1: ENGL 1101 English Composition I	3 CREDIT HOURS
MATH 1111 College Algebra	3 CREDIT HOURS
I2: XIDS 2002 First-Year Seminar	2 CREDIT HOURS
P2: POLS 1101 American Government	3 CREDIT HOURS
T1: BIOL 1107 + LAB Principles of Biology I	4 CREDIT HOURS

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

TERM 2: SPRING

C2: ENGL 1102 English Composition II	3 CREDIT HOURS
M: MATH 1113 Precalculus	4 CREDIT HOURS
F: CHEM 1211 + LAB Principles of Chemistry I	4 CREDIT HOURS
T2: BIOL 1108 + LAB Principles of Biology II	4 CREDIT HOURS

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

TERM 3: SUMMER

F: CHEM 1212 + LAB Principles of Chemistry I	4 CREDIT HOURS
S1 OR P1	3 CREDIT HOURS

MILESTONE:
• CHEM 1212 GRADE OF B OR BETTER REQUIRED TO MOVE INTO ORGANIC CHEMISTRY

15 FALL CREDIT HOURS + 15 SPRING CREDIT HOURS + 7 SUMMER CREDIT HOURS = 37 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.

TERM 1: FALL

F: CHEM 2411 + LAB Organic Chemistry I	4 CREDIT HOURS
S2: PSYC 1101 OR SOCI 1101 Intro to Psychology or Intro Sociology	3 CREDIT HOURS
CHEM 2130 Organic Chemistry I	1 CREDIT HOUR
T3: MATH 1634 Calculus I	4 CREDIT HOURS
S1 OR P1	3 CREDIT HOURS

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

TERM 2: SPRING

CHEM 3422 + LAB Organic Chemistry II	4 CREDIT HOURS
I1: PHIL 2020 Critical Thinking	3 CREDIT HOURS
F: MATH 1401 OR 2644 Elementary Statistics or Calculus II	3 CREDIT HOURS
BIOL ELECTIVE 3000 or 4000 level course	4 CREDIT HOURS

MILESTONE:
• OVERALL B OR BETTER GRADES HIGHLY DESIRABLE TO BE COMPETITIVE FOR MEDICAL SCHOOL
• RECOMMENDED BIOLOGY ELECTIVES: CELL AND MOLECULAR BIOLOGY, HUMAN PHYSIOLOGY, GENETICS, MICROBIOLOGY.

15 FALL CREDIT HOURS + 14 SPRING CREDIT HOURS = 29 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).

TERM 1: FALL

CHEM 3310K 4 CREDIT HOURS
Analytical Chemistry

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

BIOL ELECTIVE 3 CREDIT HOURS
3000 or 4000 level course

PSYC OR SOCI ELECTIVE 4 CREDIT HOURS
3000 or 4000 level 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 C OR BETTER BEFORE TAKING CHEM 4711

TERM 2: SPRING

CHEM 4711 3 CREDIT HOURS
Biochemistry

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

BIOL ELECTIVE 4 CREDIT HOURS
3000 or 4000 level course

A2: 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

15 FALL CREDIT HOURS + 14 SPRING CREDIT HOURS = 29 CREDIT HOURS

- Additional Information:
- Recommended **Biology Electives**: Cell and Molecular Biology, Human Physiology, Genetics, Microbiology.
 - Recommended **Psychology Electives**: Human Growth & Development, Social Psychology, Abnormal Psychology.

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).

TERM 1: FALL

CHEM 4610 3 CREDIT HOURS
Inorganic Chemistry

CHEM 3510 3 CREDIT HOURS
Survey of Physical Chemistry

CHEM ELECTIVE 3 CREDIT HOURS
3000 or 4000 level course

ELECTIVE 3 CREDIT HOURS
3000 or 4000 level course

A1: HUMANITIES 3 CREDIT HOURS

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

TERM 2: SPRING

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

CHEM ELECTIVE 3 CREDIT HOURS
3000 or 4000 level course

ELECTIVE 3 CREDIT HOURS
Supporting Courses: CS 1300 OR MATH OR SPAN

ELECTIVE 3 CREDIT HOURS

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

15 FALL CREDIT HOURS + 12 SPRING CREDIT HOURS = 27 CREDIT HOURS

- Additional Information:
- 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.
 - This program map can be adapted for Dental, Vet, Physician's Assistant, Anesthesiology Assistant or Physical Therapy programs. Please see an advisor

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.