

## 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.

Visit [westga.edu/program-maps](https://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 PROFESSIONAL PREPARATION TRACK / ALGEBRA START**

*Bachelor of Science*

# 60

CORE CREDIT HOURS

# 54

MAJOR CREDIT HOURS

# 9

ELECTIVE CREDIT HOURS



UNIVERSITY OF WEST GEORGIA

2024-2025

**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

**P2: POLS 1101** 3 CREDIT HOURS  
American Government

**T1: BIOL 1107 + LAB** 4 CREDIT HOURS  
Principles of Biology I

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

**T2: BIOL 1108 + LAB** 4 CREDIT HOURS  
Principles of Biology II

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

**TERM 3: SUMMER**

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

**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** 4 CREDIT HOURS  
Organic Chemistry I

**S2: PSYC 1101 OR SOCI 1101** 3 CREDIT HOURS  
Intro to Psychology or Intro Sociology

**CHEM 2130** 1 CREDIT HOUR  
Organic Chemistry I

**T3: MATH 1634** 4 CREDIT HOURS  
Calculus I

**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** 4 CREDIT HOURS  
Organic Chemistry II

**I1: PHIL 2020** 3 CREDIT HOURS  
Critical Thinking

**F: MATH 1401 OR 2644** 3 CREDIT HOURS  
Elementary Statistics or Calculus II

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

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.