

## 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.

### 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

# CHEMISTRY

**NON-ACS GENERAL TRACK / PHARMACY FOCUS / PRECALCULUS START**

*Bachelor of Science*

# 60

CORE CREDIT HOURS

# 47

MAJOR CREDIT HOURS

# 13

ELECTIVE CREDIT HOURS

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!



UNIVERSITY OF WEST GEORGIA

2023-2024

**TERM 1: FALL**

**A1: ENGL 1101** 3 CREDIT HOURS  
English Composition I

**A2: MATH 1113** 4 CREDIT HOURS  
Precalculus

**B2: XIDS 2002** 2 CREDIT HOURS  
First-Year Seminar

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

**C OR E** 3 CREDIT HOURS  
Humanities, Fine Arts, or Social Sciences

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

**TERM 2: SPRING**

**A1: ENGL 1102** 3 CREDIT HOURS  
English Composition II

**D2: MATH 1634** 4 CREDIT HOURS  
Calculus I

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

**D1: BIOL 1107 + LAB** 4 CREDIT HOURS  
Principles of Biology I

**MILESTONES:**  
• OVERALL B OR BETTER GRADES HIGHLY DESIRABLE TO BE COMPETITIVE FOR PHARMACY SCHOOL  
• COMPLETE CHEM 1212 WITH B OR BETTER

**16 FALL CREDIT HOURS + 15 SPRING CREDIT HOURS = 31 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

**D1: BIOL 1108 + LAB** 4 CREDIT HOURS  
Principles of Biology II

**CHEM 2130** 1 CREDIT HOUR  
Sophomore Chemistry Seminar

**F: MATH 1401** 3 CREDIT HOURS  
Elementary Statistics

**B1: COMM 1110** 3 CREDIT HOURS  
Public Speaking

**MILESTONES:**  
• OVERALL B OR BETTER GRADES HIGHLY DESIRABLE TO BE COMPETITIVE FOR PHARMACY SCHOOL  
• PUBLIC SPEAKING (COMM 1110) IS REQUIRED FOR MANY PHARMACY SCHOOLS

**TERM 2: SPRING**

**CHEM 3422 + LAB** 4 CREDIT HOURS  
Organic Chemistry II

**BIOL 2251 + LAB** 4 CREDIT HOURS  
Human Anatomy and Physiology I

**E4: ECON 2105 OR 2106** 3 CREDIT HOURS  
Principles of Macroeconomics or Microeconomics

**C OR E** 3 CREDIT HOURS  
Humanities, Fine Arts, or Social Sciences

**MILESTONES:**  
• OVERALL B OR BETTER GRADES HIGHLY DESIRABLE TO BE COMPETITIVE FOR PHARMACY SCHOOL  
• ECON 2105 OR 2106 ARE REQUIRED FOR MANY PHARMACY SCHOOLS  
• COMPLETE CHEM 3422 WITH C OR BETTER

**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

**BIOL 2260/2260L OR 3310** 4 CREDIT HOURS  
Foundations of Microbiology/Lab or Microbiology

**BIOL 2252 + LAB** 4 CREDIT HOURS  
Human Anatomy and Physiology II

**C OR E** 3 CREDIT HOURS  
Humanities, Fine Arts, or Social Sciences

- MILESTONES:**
- OVERALL B OR BETTER GRADES HIGHLY DESIRABLE TO BE COMPETITIVE FOR PHARMACY SCHOOL
  - CHEM 3310K MAY BE TAKEN SUMMER AFTER YEAR 2

**TERM 2: SPRING**

**CHEM 4711** 3 CREDIT HOURS  
Biochemistry

**PHYS 1111 + LAB** 4 CREDIT HOURS  
Introductory Physics I

**C OR E** 3 CREDIT HOURS  
Humanities, Fine Arts, or Social Sciences

**C OR E** 3 CREDIT HOURS  
Humanities, Fine Arts, or Social Sciences

**ELECTIVE** 3 CREDIT HOURS  
3000 or 4000 level course

- MILESTONES:**
- COMPLETE 70-90 HOURS BASED ON DESIRED PHARMACY SCHOOL
  - TAKE PCAT

**15 FALL CREDIT HOURS + 16 SPRING CREDIT HOURS = 31 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 4610** 3 CREDIT HOURS  
Inorganic Chemistry

**CHEM 3510** 3 CREDIT HOURS  
Survey of Physical Chemistry

**PHYS 1112 + LAB** 4 CREDIT HOURS  
Introductory Physics II

**ELECTIVE** 3 CREDIT HOURS  
3000 or 4000 level course

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

**TERM 2: SPRING**

**CHEM ELECTIVE** 3 CREDIT HOURS  
3000/4000 Level Course

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

**ELECTIVE** 4 CREDIT HOURS  
3000/4000 Level Course

**ELECTIVE** 3 CREDIT HOURS  
3000/4000 Level Course

**16 FALL CREDIT HOURS + 13 SPRING CREDIT HOURS = 29 CREDIT HOURS**

**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.