

## ABOUT THE MAJOR

The B.S. in Chemistry degree offers greater concentration in chemistry than the B.A. degree option and is recommended for those students planning careers in chemical industry or engineering or for those who plan to pursue graduate study. A senior research thesis and seminar is required and designed to introduce students to modern advanced techniques and approaches to chemical research in conjunction with a faculty advisor. This option prepares chemistry majors to become a secondary education chemistry teacher. The undergraduate curriculum equips students with the content knowledge of chemistry as well as leadership skills, scientific communication skills, and literacy in diversity and technology applicable to educational settings. The curriculum prepares students for the GACE (Georgia Assessments for the Certification of Educators) exam.

## 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?

- Chemical Industry
- Educator
- Environmental Studies
- Industrial Hygiene
- Patent Law
- Technical Sales

## 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 TRACK / SECONDARY EDUCATION OPTION / ALGEBRA START**

*Bachelor of Science*

# 60

CORE CREDIT HOURS

# 45

MAJOR CREDIT HOURS

# 15

ELECTIVE CREDIT HOURS



UNIVERSITY OF WEST GEORGIA

2026-2027

**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

**INTRO SCIENCE + LAB** **4** CREDIT HOURS  
Students should take either BIOL1107/L, GEOL 1121/L or GEOL 1122/L

**CORE IMPACTS I, A, S, OR P** **3** CREDIT HOURS

- MILESTONES:**
- COMPLETE ENGL 1101 WITH C OR BETTER.
  - COMPLETE MATH 1111 WITH C OR BETTER

**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

**CORE IMPACTS I, A, S, OR P** **3** CREDIT HOURS

- MILESTONES:**
- COMPLETE ENGL 1102 WITH C OR BETTER
  - COMPLETE MATH 1113 AND CHEM 1211/1211L B OR BETTER FOR CHEM 2086

**15 FALL CREDIT HOURS + 14 SPRING CREDIT HOURS = 29 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 1212 + LAB** **4** CREDIT HOURS  
Principles of Chemistry II

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

**CHEM 2086** **1** CREDIT HOUR  
Chemistry Leadership Practicum\*

**CORE IMPACTS I, A, S, OR P** **3** CREDIT HOURS

**CORE IMPACTS I, A, S, OR P** **3** CREDIT HOURS

- MILESTONES:**
- COMPLETE CHEM 1212/1212L B OR BETTER
  - COMPLETE MATH 1634 C OR BETTER
  - \* CHEM 2086 - MUST BE HIRED AS A WORKSHOP LEADER OR LABORATORY ASSISTANT TO TAKE THIS COURSE. CAN BE TAKEN IN A LATER SEMESTER.

**TERM 2: SPRING**

**CHEM 3410K** **4** CREDIT HOURS  
Analytical Chemistry

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

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

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

**CORE IMPACTS I, A, S, OR P** **3** CREDIT HOURS

- MILESTONE:**
- COMPLETE CHEM 3310K AND PHYS C OR BETTER
  - \* IF STUDENTS TAKE MATH 2644, THEY CAN TAKE PHYS 2212+L

**15 FALL CREDIT HOURS + 15 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).

**TERM 1: FALL**

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

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

**MEDT 2501** **3** CREDIT HOURS  
Multiple Literacies for Ed (10 hours field experience)

**ELECTIVE** **3** CREDIT HOURS

**MILESTONE:**  
• COMPLETE CHEM 2411/2411L AND PHYS C OR BETTER

**TERM 2: SPRING**

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

**CHEM COURSE** **3** CREDIT HOURS  
CHEM 3000 or 4000 level Elective

**EDUC 2120** **3** CREDIT HOURS  
Exper. Sociocult. Perspect. Diversity in Edc Contexts (10 hours field experience)

**CORE IMPACTS I, A, S, OR P** **3** CREDIT HOURS

**CORE IMPACTS I, A, S, OR P** **3** CREDIT HOURS

**MILESTONE:**  
• 3.20 GPA IS REQUIRED FOR ACCELERATED MAT PROGRAM

**14 FALL CREDIT HOURS + 16 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).

**TERM 1: FALL**

**CHEM 4610** **3** CREDIT HOURS  
Inorganic Chemistry

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

**CHEM 4908L** **2** CREDIT HOUR  
Tools in Chemical Research

**CHEM COURSE** **3** CREDIT HOURS  
CHEM 3000 or 4000 level Elective

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

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

**MILESTONES:**  
• MUST HAVE COMPLETED AT LEAST 24 CREDIT HOURS AT A 3XXX/4XXX LEVEL  
• SUBMIT APPLICATION FOR GRAD SCHOOL; PASS OR EXEMPT GACE PROGRAM ADMISSION & ETHICS EXAM

**TERM 2: SPRING**

**CHEM 4711** **3** CREDIT HOURS  
Biochemistry

**CHEM 4084** **1** CREDIT HOUR  
Senior Seminar

**CHEM 4909L** **1** CREDIT HOUR  
Chemistry Senior Capstone Project

**CHEM 4411/5411\*** **3** CREDIT HOURS  
Scientific Communication (cross-listed)

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

**ELECTIVE** **3** CREDIT HOURS

**MILESTONES:**  
• SUBMIT APPLICATION FOR TEACHER EDUCATION ADMISSION, PASS GACE CONTENT EXAM, PASS GACE BROAD FIELD SCIENCE EXAM  
\* FOR ACCELERATED MAT CHEM 5411 SHOULD BE TAKEN

**17 FALL CREDIT HOURS + 14 SPRING CREDIT HOURS = 31 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.