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. The Bachelor of Science with a Major in Chemistry degree (ACS Track) is approved by the Committee on Professional Training of the American Chemical Society (ACS). This formal recognition means that the department has the faculty, curriculum and the instrumentation necessary to provide a quality education for undergraduate students. Graduates of this approved program are certified by the American Chemical Society.

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

Visit westga.edu/program-maps for the latest version of this major map.

HONORS COLLEGE

Consider joining if you have an Overall GPA of 3.2 and earned 15 college credit hours!
**TERM 1: FALL**

**C1**: ENGL 1101  
English Composition I  
3 CREDIT HOURS

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

**I2**: CHEM 1211  
Principles of Chemistry I  
4 CREDIT HOURS

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

**I1**: ORAL COMMUNICATIONS  
3 CREDIT HOURS

**TERM 2: SPRING**

**C2**: ENGL 1102  
English Composition II  
3 CREDIT HOURS

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

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

**A**: HUMANITIES  
3 CREDIT HOURS

**CRUSH YOUR COURSEWORK**

- Choose Concentration (ADS track recommended).
- Connect with your faculty mentor.
- Join clubs (Chemistry Association or Emerging Healthcare Leaders recommended).
- Look at the Chemistry Careers page on the American Chemical Society’s webpage.
- Sign up for Handshake through Career Services.
- Take Sophomore Seminar.
- Complete Organic Chemistry sequence.
- Complete Analytical Chemistry.
- Complete other supporting courses (see Advisor to have a clear roadmap).

**FIND YOUR PLACE**

- Complete ENG 1101 with C or better.
- Complete MATH 1113 and CHEM 1211 with C or better.
- 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.
- Explore internships or part-time jobs in career-related areas (industry, pharmacy, etc).
- Create an account in LinkedIn.
- Talk to alumni guest speakers and make connections.

**BROADEN YOUR PERSPECTIVES**

- Complete Organic Chemistry sequence.
- Complete Analytical Chemistry.
- Complete other supporting courses (see Advisor to have a clear roadmap).
- Explore summer internships or REU programs.
- Explore volunteer opportunities with a club or in career-related areas.
- Explore internships or part-time jobs in career-related areas.
- Explore internships or part-time jobs in non-career-related areas.
- Explore summer internships or REU programs.
- Explore volunteer opportunities with a club or in career-related areas.

**CONNECT OFF-CAMPUS**

- Complete ENG 1102 with C or better.
- Complete Chemistry II with B or better.
- Attend program/department/college events.
- Attend senior research presentations and on-campus conferences.
- 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.
- Talk to your faculty mentor.
- Seek for resume-building opportunities related to your career goal (employment, research, activities, volunteering).

**TAKE CARE OF YOURSELF**

- Complete Chemistry II with B or better.
- Look at the American Chemical Society’s webpage.
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**PAVE YOUR PATH**

- Complete ENG 1102 with C or better.
- Complete Chemistry II with B or better.
- Complete Organic Chemistry sequence.
- Complete Analytical Chemistry.
- Complete other supporting courses (see Advisor to have a clear roadmap).

**TERM 1: FALL**

**F**: CHEM 2411  
Organic Chemistry I  
4 CREDIT HOURS

**F**: MATH 2644  
Calculus II  
4 CREDIT HOURS

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

**T1**: PHYS 2211  
Introductory Principles of Physics I  
4 CREDIT HOURS

**P**: CITIZENSHIP  
3 CREDIT HOURS

**TERM 2: SPRING**

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

**T2**: PHYS 2212  
Introductory Principles of Physics II  
4 CREDIT HOURS

**S**: SOCIAL SCIENCE  
3 CREDIT HOURS

**ELECTIVE**  
3 CREDIT HOURS

**PAVE YOUR PATH**

- Complete Organic II and Physics II by the end of Year 2.
- Write preliminary resume.
- Seek for resume-building opportunities related to your career goal (employment, research, activities, volunteering).
**TERM 1: FALL**

**CHEM 3310K**
Analytical Chemistry (4 CREDIT HOURS)

**CHEM 35XX**
Physical Chemistry (see note below) (3 CREDIT HOURS)

**CHEM 4083**
Faculty Directed Research (1 CREDIT HOUR)

**A: HUMANITIES**

**ELECTIVE** (3 CREDIT HOURS)

**MILESTONE:**
- CHEM 3310K MAY BE TAKEN IN YEAR 2 SUMMER

**TERM 2: SPRING**

**CHEM 4711**
Biochemistry (3 CREDIT HOURS)

**CHEM 4330K**
Instrumental Analysis (4 CREDIT HOURS)

**CHEM 35XX**
Physical Chemistry (see note below) (3 CREDIT HOURS)

**CHEM 4083**
Faculty Directed Research (1 CREDIT HOUR)

**ELECTIVE** (3 CREDIT HOURS)

**MILESTONE:**
- COMPLETE TWO SEMESTERS CHEM 4083

**TERM 1: FALL**

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

**CHEM 3550L**
Physical Chemistry Lab (2 CREDIT HOURS)

**CHEM 4083**
Faculty Directed Research (1 CREDIT HOUR)

**ELECTIVE** (4 CREDIT HOURS)

**ELECTIVE** (3 CREDIT HOURS)

**MILESTONE:**
- Take Senior Seminar.
- Complete all required courses for a degree.

**TERM 2: SPRING**

**CHEM 4913L**
Advanced Synthesis Laboratory (2 CREDIT HOURS)

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

**CHEM 4083**
Faculty Directed Research (1 CREDIT HOUR)

**S: SOCIAL SCIENCE**

**ELECTIVE** (3 CREDIT HOURS)

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