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

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

HAVE A QUESTION?
CHECK IN WITH YOUR ADVISOR!

VISIT WOLFWATCH FOR MORE INFORMATION.

CHEMISTRY
NON-ACS PROFESSIONAL PREPARATION TRACK / PRECALCULUS START
Bachelor of Science

60
CORE CREDIT HOURS

51
MAJOR CREDIT HOURS

9
ELECTIVE CREDIT HOURS
### YEAR 1

**TERM 1: FALL**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1: ENGL 1101</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>A2: MATH 1113</td>
<td>Precalculus</td>
<td>4</td>
</tr>
<tr>
<td>B2: XIDS 2002</td>
<td>First-Year Seminar</td>
<td>2</td>
</tr>
<tr>
<td>F: CHEM 1211 + LAB</td>
<td>Principles of Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>E3: POLS 1101</td>
<td>American Government</td>
<td>3</td>
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</table>

**TERM 2: SPRING**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1: ENGL 1102</td>
<td>English Composition II</td>
<td>3</td>
</tr>
<tr>
<td>D2: MATH 1634</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>F: CHEM 1212 + LAB</td>
<td>Principles of Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>D1: BIOL 1107 + LAB</td>
<td>Principles of Biology I</td>
<td>4</td>
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</tbody>
</table>

**MILESTONE:**
- Overall B or better grades highly desirable to be competitive for medical school

### YEAR 2

**TERM 1: FALL**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>F: CHEM 2411 + LAB</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>E4: SOCI 1101 OR PSYC 1101</td>
<td>Intro to Sociology or Intro to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 2130</td>
<td>Sophomore Chemistry Seminar</td>
<td>1</td>
</tr>
<tr>
<td>F: MATH 1401 OR 2644</td>
<td>Elementary Statistics or Calculus II</td>
<td>3</td>
</tr>
<tr>
<td>D1: BIOL 1108 + LAB</td>
<td>Principles of Biology II</td>
<td>4</td>
</tr>
</tbody>
</table>

**MILESTONE:**
- Overall B or better grades highly desirable to be competitive for medical school

**TERM 2: SPRING**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 3422 + LAB</td>
<td>Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>B1: PHIL 2020</td>
<td>Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td>B10: BIOL ELECTIVE</td>
<td>3000/4000 level course</td>
<td>4</td>
</tr>
<tr>
<td>ELECTIVE</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**MILESTONE:**
- Overall B or better grades highly desirable to be competitive for medical school

### Additional Information:
- Recommended Biology Electives: Cell and Molecular Biology, Human Physiology, Genetics, Microbiology.
TERM 1: FALL
CHEM 3310K
Analytical Chemistry
4 CREDIT HOURS

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

Biol Elective
3000/4000 Level Course
4 CREDIT HOURS

Boys or Soci Elective
3000/4000 Level Course
4 CREDIT HOURS

MILESTONES:
• CHEM 3310K MUST BE COMPLETED WITH C OR BETTER BEFORE TAKING CHEM 4711
• Biology Electives can be taken in any order but need to be taken before attempting the MCAT.

TERM 2: SPRING
CHEM 4711
Biochemistry
3 CREDIT HOURS

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

Biol Elective
3000 or 4000 Level course
3 CREDIT HOURS

C2: Literature Class
3 CREDIT HOURS

MILESTONES:
• Take MCAT
• Biology electives can be taken in any order but need to be taken before attempting the MCAT.

16 FALL CREDIT HOURS + 14 SPRING CREDIT HOURS = 30 CREDIT HOURS

TERM 4:
CHEM 4610
Inorganic Chemistry
3 CREDIT HOURS

CHEM 3510
Survey of Physical Chemistry
3 CREDIT HOURS

CheM ELECTIVE
3000 or 4000 level course
3 CREDIT HOURS

E1 OR E2
3 CREDIT HOURS

C1: Fine Arts
3 CREDIT HOURS

MILESTONES:
• Overall 8 or better grades highly desirable to be competitive for medical school.

TERM 2: SPRING
CHEM ELECTIVE
3000 or 4000 level course
3 CREDIT HOURS

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

ELECTIVE
3000 or 4000 level course
3 CREDIT HOURS

ELECTIVE
3 CREDIT HOURS

E1 OR E2
3 CREDIT HOURS

15 FALL CREDIT HOURS + 15 SPRING CREDIT HOURS = 30 CREDIT HOURS

Additional Information:
• Recommended Biology Electives: Cell and Molecular Biology, Human Physiology, Genetics, Microbiology.

• Recommended Science Electives: Introductory or Principles of Physics I, Biochemistry, Analytical Chemistry.

• 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 to make adjustments for those programs.

  • Make sure to get help from Career Services for finding internships, job opportunities, and graduate school options.

  • Consider taking part-time jobs in career-related areas.

  • Explore summer internships or REU programs.

  • Explore volunteer opportunities with a club or in a career-related area.

  • Complete other supporting courses (see Advisor to make adjustments for those programs).

  • Attend program, department, college events.

  • Attend senior research presentations and on-campus conferences.

  • Study and hang out in the student lounge (TLC 2116).

  • Re-examine career paths with a chemistry degree (ACS Career page, alumni connections, your own aptitude and interest).

  • Talk to alumni in a career field of interest, matched by your faculty mentor.

  • Talk to your faculty mentor.

  • Look into off-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).

  • Write preliminary resume. Seek for resume-building opportunities related to your career goal (employment, research, activities, volunteering).

  • Complete required courses for a degree.

  • Work 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.