

Choose 1	Communication (Core)
CHEM 1311	General Chemistry I
CHEM 1111	General Chemistry I Lab
MATH 2413	Calculus I
Choose 1	Social and Behavioral Sciences (Core)
UNIV 1301	Learning Framework
Choose 1	Communication (Core)
CHEM 1312	General Chemistry II
CHEM 1112	General Chemistry II
MATH 2414	Calculus II
Choose 1	American History (Core)
Choose 1	Integrative/Experiential Learning Option (Core)

## FIRST YEAR

CHEM 2323	Organic Chemistry I
CHEM 2123	Organic Chemistry I Lab
PHYS 1401	General Physics I
Choose 1	Language, Philosophy
Choose 1	American History (Core)
CHEM 2325	Organic Chemistry II
CHEM 2125	Organic Chemistry II Lab
PHYS 1402	General Physics II
Choose 1	Integrative/Experiential Learning Option (Core)
Choose 1	Creative Arts (Core)

## SECOND YEAR

CHEM 3303	Biochemistry I
CHEM 3103	Biochemistry I Lab
CHEM 2301	Analytical Chemistry
CHEM 2101	Analytical Chemistry
Choose 1	Government/Political Science (Core)
34XX-44XX	Advanced Elective
CHEM 3301	Inorganic Chemistry
CHEM 3101	Inorganic Chemistry Lab
CHEM 4304	Instrumental Analysis
CHEM 4104	Instrumental Analysis
Choose 1	Government/Political Science (Core)
34XX-44XX	Advanced Elective

## THIRD YEAR

CHEM 3304	Physical Chemistry I
CHEM 3104	Physical Chemistry I Lab
MATH 3341	Differential Equations
CHEM 4105	Chemistry Capstone
CHEM	Major Advanced
33XX-43XX	Advanced Elective
CHEM 3305	Physical Chemistry II
CHEM 3105	Physical Chemistry II
CHEM 4201	Chemistry Problems I
CHEM	Major Advanced
33XX-43XX	Advanced Elective
12XX-42XX	Free Elective
13XX-43XX	Free Elective

## FOURTH YEAR

## Additional Info

- Students must pay close attention to prerequisite course requirements of all chemistry courses
- Students must receive a grade of "C" or better in calculus-1 and calculus-2 prior to enrolling in Physical Chemistry courses.
- Students must complete 45 advanced hours from major requirements and technical elective categories prior to graduation.

## Contact Info

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UTRío Grande Valley

# BLUE PRINT

**CHEMISTRY (BS)**  
Catalog: 2017-18  
**COLLEGE OF SCIENCES**

## Degree Info

Students receiving the BS Degree in Chemistry (Broadfield Major) can continue their academic studies into masters or doctoral programs in Chemistry or can use the degree to find employment as a chemist. This degree can also be combined with teacher certification work to enter a career as a secondary school teacher of chemistry. The Chemistry (Broadfield Major) degree is certified by the American Chemical Society

# BLUEPRINT EXPERIENCES

## FIRST YEAR

## SECOND YEAR

## THIRD YEAR

## FOURTH YEAR AND BEYOND

## CAREERS

### MILESTONES

- UTRGV has a Writing Center and a Learning Center. Make it a point to visit them!
- Complete your core English classes (section 010) during your first year.
- Complete 30 credit hours every year in order to graduate in 4 years.
- Shoot for a GPA of 4.0
- Take MATH 2413 and MATH 2414 in your first year.

- Shoot for a GPA of 4.0.
- Complete major foundation classes, such as CHEM 1111/1311; 1112/1312; 2123/2323; 2125/2325
- Complete 30 credit hours.

- Shoot for a GPA of 4.0.
- Complete 30 credit hours.
- Have you landed an internship or acquired research experience? This is the year to make it happen.

- Shoot for a GPA of 4.0.
- "I have a plan for after graduation." If this describes you, great! If not, visit your Faculty Advisor or Career Center!
- Register for your Capstone/senior/portfolio project: CHEM 4305.
- Complete at least 30 credit hours to graduate.
- Submit your application(s) for graduate school, an apprenticeship, or for fulltime employment.

### ADVICE & SUPPORT

- Meet with your academic advisor and bring your orientation folder with you to every session!
- Choose a major with confidence- Visit my.UTRGV.edu and check out the Kuder Journey.
- Visit a faculty member during their office hours and ask a question about class.
- Classes fill up fast. When registration opens, be sure to register on the first day for your group.
- Cold or flu getting you down? We have Student Health Services on campus with free office visits.

- Want to explore different careers? Check out Kuder Journey!
- Come ready with course suggestions and questions when you visit your academic advisor.
- Visit the Communication Hauser Lab for help with your speeches.
- Trouble making your tuition payment? The Financial Aid Office can help. Payment plans and emergency loans are also available

- Seek out research opportunities within your major and join a professional organization such as American Chemical Society.
- Check DegreeWorks to make sure you are on track for graduation next year.
- Apply for internship and/or job shadowing opportunities. Discuss this with your advisor, faculty mentor, or Career Center.

- Engage in an independent study project or an academic internship to complement your major, such as Dow Chemicals, Proctor and Gamble etc.
- Discuss future plans with your faculty mentor or advisor that includes employment, finances, and other life goals.
- Apply for graduation one semester prior to your anticipated date. Visit the Academic Advising Center to ensure you are on track.

### APPLY WHAT YOU LEARN

- Look for a service-learning course! For guidance, visit Engaged Scholarship & Learning Office.
- Participate in a campus-sponsored community service project.
- Ask a student in class to study with you.

- To find undergraduate research opportunities, visit the Engaged Scholarship & Learning Office.
- Consider attending the LeaderShape Institute or attend the Engaged Scholar Symposium.

- Go show off your research, service-learning or creative works at the Engaged Scholar Symposium!
- Sharpen your writing skills! Take an intensive writing course such as ENGL -3351 Creative Writing I or become the secretary for your organization.

- Continue to present research or creative works at the Engaged Scholar Symposium or at regional ACS meetings and other undergraduate symposia
- Set up an informational interview with an individual (especially an alumnus) currently in the field you aspire to work in.

### GLOBAL, CAMPUS & COMMUNITY ENGAGEMENT

- Set up your profile on the Engagement Zone through My.UTRGV.edu.
- Attend a diversity based campus or community event (e.g. MLK Day of Service).
- Attend a departmental program such as Chemistry Major Get Together.
- Join a student organization! Consider looking into Elliott Chemical Society or visit VLink (utrgv.edu/vlink) for options.

- Look at study abroad opportunities! Consider going to South America, Europe, Africa or Asia
- Check out a cultural campus or community event such as HESTEC or FESTIBA.
- Join another student organization. Perhaps an organization that aligns with your interest or visit VLink for options.
- Check out a campus event that offers free lunch- bring a friend!

- Consider serving on a campus life/community committee or become a student leader and make a difference. Visit VLink or speak with your Student Government Association for more information!
- Travel the world! Look into study abroad opportunities at Office for International Programs & Partnerships.

- Identify employers of interest and seek them out at job fairs, online, at on-campus information sessions, staffing agencies, etc. The Career Center can help.
- Before a job interview, schedule a mock interview with the Career Center or speech coaching with the Communication Hauser Lab.

### LIFE AFTER GRADUATION

- Create a résumé and set up your profile on the Career Connection icon: (My.UTRGV.edu).
- Got summer plans? Visit Career Center and ask about places to do some job shadowing.
- Research shows that students who work on campus perform better than those who work off campus. Look for a job on the Career Center portal!
- Check your UTRGV email for the daily Messenger- locate and attend one student workshop.

- Update your resume in Career Connection and have it reviewed.
- Visit the Career Center site to find a job fair to attend. At the event, approach a recruiter and discuss internships.
- Will a minor expand your career options? We recommend minor that would help in your career plans or meet a chemistry advisor for guidance.
- Explain to someone how your academic program aligns with your strengths and interests.

- Check out the Chemistry department website for postings on career/graduate school.
- Think about three people you can ask for letters of recommendation (professors, mentors, advisors, supervisors, etc.). Give them at least two weeks' advance notice!
- When is the deadline for your graduate school application? Visiting the program admissions webpage. Most do not accept late applicants!

- Have you received your acceptance for graduate school or an employment offer? If not, network: talk to faculty, the Career Center, and get on LinkedIn.
- Formulate and implement a strategy for life after graduation: attend career fairs, graduate fairs, apply to fellowships, etc.
- Update your information with Alumni Relations. Enjoy alumni mixers, events and continued access to Career Center services!
- Remember to do your exit loan counseling on studentloans.gov.

- Product development
- Process development
- Analysis
- Testing
- Biotechnology (using living organisms or cell processes to make useful products)
- Consulting
- Quality assurance/Quality control
- Management
- Environmental analyses
- Forensics
- Universities and colleges
- Medical and other professional schools
- Public and private schools, K-12

For additional info, visit the Career Center website and check out "What Can I Do With This Major?" [www.utrgv.edu/careercenter](http://www.utrgv.edu/careercenter)