

Choose 1	Communication (Core)
MATH 2413	Calculus I
CHEM 1311	General Chemistry I
CHEM 1111	General Chemistry I Lab
UTCH 1101	Inquiry Approaches to Teaching
Choose 1	Social and Behavioral Sciences (Core)
Choose 1	Creative Arts (Core)
UNIV 1301	Learning Framework
Choose 1	Communication (Core)
MATH 2414	Calculus II
CHEM 1312	General Chemistry II
CHEM 1112	General Chemistry II Lab
PHYS 2411	Physics for Teachers I
Choose 1	Integrative/Experiential Learning Option (Core)
UTCH 1102	Inquiry-Based Lesson Design

FIRST YEAR

MATH 2415	Calculus III
PHYS 2412	Physics for Teachers II
CHEM 2323	Organic Chemistry I
CHEM 2123	Organic Chemistry I Lab
Choose 1	American History (Core)
CHEM 2325	Organic Chemistry II
CHEM 2125	Organic Chemistry II Lab
PHYS 3402	Modern Physics
Choose 1	American History (Core)
Choose 1	Language, Philosophy & Culture (Core)
Choose 1	Government/Political Science (Core)

SECOND YEAR

PHYS 3301	Electromagnetic Theory I
PHYS 3101	Junior Laboratory Research I
PHIL 3317	Perspectives on Science and Mathematics
Choose 1	Government/Political Science (Core)
Choose 1	Integrative/Experiential Learning Option (Core)
UTCH 3301	Knowing and Learning in Mathematics and Science
CHEM 2301	Analytical Chemistry
PHYS 3330	Functions and Modeling
PHYS 3304	Optics
UTCH 3302	Classroom Interactions

THIRD YEAR

CHEM 3303	Biochemistry I
PHYS 4401	Physics Education
READ 4305	Content Area Literacy
PHYS 4392	Research Methods
UTCH 3303	Project-Based Instruction
CHEM 4401	Chemistry Education
UTCH 4101	Apprentice Teaching Seminar
UTCH 4601	Apprentice Teaching

FOURTH YEAR

Additional Info

Students must apply to the UTeach program. Students must fulfill the General Education Core requirements. Within the General Education Core the students are required to take:

Life and Physical Sciences – 6 hours

- CHEM 1301 General Chemistry I (three-hour lecture)
- CHEM 1302 General Chemistry II (three-hour lecture)

Mathematics – 3 hours

- MATH 2413 Calculus I (three hour lecture)

Integrative/Experiential Learning Option – 6 hours

- CHEM 1101 General Chemistry I (one-hour lab)
- CHEM 1102 General Chemistry II (one-hour lab)
- Any additional course(s) of 4 credits or more that satisfies General Education Core “Integrative/Experiential Learning Option” Requirements.

Contact Info

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UTRio Grande Valley

BLUE PRINT

PHYSICAL SCIENCE (BS)
 *6th-12th UTeach Certification
 Catalog: 2017-18
COLLEGE OF SCIENCES

Degree Info

A BS in Physical Science with teaching certification will enable future educators to gain solid training and education in the areas of chemistry and physics. Future graduates will have a leadership role in improving science education and in enabling the youth to become more interested in STEM careers.

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 3.5 or higher.
- Take MATH 2413 in your first year.

- Shoot for a GPA of 3.5 or higher.
- Complete major foundation classes, such as PHYS 3305, PHYS 3303, PHYS 3304, PHYS 3402, PHYS 3411, UTCH 1101, UTCH 1102, UTCH 3301, UTCH 3302, PHYS 3330, and MATE 3317.
- Complete 30 credit hours.
- Apply to the UTeach program. For more information visit www.utrgv.edu/cep.

- Shoot for a GPA of 3.5 or higher.
- 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 3.5 or higher.
- "I have a plan for after graduation." If this describes you, great! If not, visit your Faculty Advisor or Career Center!
- 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 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 the APS (American Physical Society) or the AAS (American Astronomical 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 an Educational Physics research project.
- 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!

- Continue to present research or creative works at the Engaged Scholar Symposium or at Physics and/or Astronomy and/or Educational conferences.
- 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 programs such as the weekly seminars.
- Join a student organization! Consider looking into the SPS (Society of Physics Students) and/or Astronomy Club.

- Look at study abroad opportunities!
- Check out a cultural campus or community event such as HESTEC or FESTIBA.
- Join another student organization.
- 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 the Astronomy Minor.
- Explain to someone how your academic program aligns with your strengths and interests.

- Check out the Physics & Astronomy 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.

- Teaching
- Computer software development
- Educational research
- Writing and editing
- Library and information Sciences
- Public school systems
- Private schools
- Publishing companies:
 - Books
 - Magazines
 - Videos
- Software developers
- Libraries

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