A Physicist has a solid understanding of fundamental laws, which in turn can be applied to a wide area of scientific and engineering fields. It is an exciting career that requires discipline and significant amount of work. It also requires development of mathematical, experimental, theoretical, and computational skills. As a result of the Physicist’s solid and broad background, Physicists can apply to a wide range of job opportunities, including National Laboratories and Research Centers, Industry, and Academia.

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**Physics (BS)**

*Pure and Applied Physics*

**Catalog: 2019-20**

**College of Sciences**

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**FIRST YEAR**

- A Physicist has a solid understanding of fundamental laws, which in turn can be applied to a wide area of scientific and engineering fields. It is an exciting career that requires discipline and significant amount of work. It also requires development of mathematical, experimental, theoretical, and computational skills. As a result of the Physicist’s solid and broad background, Physicists can apply to a wide range of job opportunities, including National Laboratories and Research Centers, Industry, and Academia.
GLOBAL, CAMPUS & COMMUNITY ENGAGEMENT

CAREERS
- Research
- Development
- Consulting
- Engineering (process and testing)
- Quality control
- Instrumentation

**MILESTONES**

- Meet with your advisor on the first day of class.
- Complete your core English classes (section 010) during your first year.
- Complete 30 credit hours each year in order to graduate on time.
- Shoot for a GPA of 3.5 or higher.
- Take MATH 2413 in your first year.

**ADVICE & SUPPORT**

- Meet with your advisor and bring your orientation folder with you to every session.
- Choose a major with confidence- visit my.UTRGV.edu and check out My Majors.
- 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.

**APPLY WHAT YOU LEARN**

- Look for a service-learning course! For guidance, visit the Engagement Office.
- Participate in a campus-sponsored community service project.
- Ask a student in class to study with you.
- Set up your profile on the Engagement Zone through Engagement Zone.
- Attend a diversity based campus or community event.
- Check out a cultural campus or community event.
- Attend the Engaged Scholar Symposium.
- Attend the LeaderShape Institute or a LeaderShape Partnerships.
- To find undergraduate research opportunities, visit the Engagement Scholar & Learning Office.
- Consider attending the LeaderShape Institute or the Engaged Scholar Symposium.
- 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 Festival.
- Join another student organization.
- Check out a campus event that offers free lunch!

**LIFE AFTER GRADUATION**

- Create a resume and set up your profile on the Handshake icon (MyUTRGV.edu).
- Get summer jobs? 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 Handshake!
- Check your UTRGV email for the daily Messenger locate and attend one student workshop.
- Update your resume on Handshake 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? Visit the program admissions webpage. Most do not accept late applicants!
- Apply for internship and/or job shadowing opportunities.
- Research shows that students who work on campus perform better than those who work off campus. Look for a job on Handshake!
- Visit the Communication Hauser Lab.
- Before a job interview, schedule a mock interview with the Career Center or speech coaching with the Communication Hauser Lab.
- 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.

**FIRST YEAR**

- Shoot for a GPA of 3.5 or higher.
- Complete your core English classes (section 010) during your first year.
- Complete 30 credit hours each year in order to graduate on time.
- Shoot for a GPA of 3.5 or higher.
- Take MATH 2413 in your first year.

**SECOND YEAR**

- Complete major foundation classes, such as PHYS 3305, PHYS 3303, PHYS 3304, PHYS 3402, and PHYS 3411.
- Complete 30 credit hours.
- Complete 30 credit hours.
- Complete 30 credit hours.
- Complete 30 credit hours.

**THIRD YEAR**

- 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.
- “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/thesis/portfolio project: PHYS 4300.
- Complete at least 30 credit hours to graduate.
- Submit your application(s) for graduate school, an apprenticeship, or for fulltime employment.

**FOURTH YEAR**

- “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/thesis/portfolio project: PHYS 4300.
- Complete at least 30 credit hours to graduate.
- Submit your application(s) for graduate school, an apprenticeship, or for fulltime employment.
- Engage in an independent study project or an academic internship to complement your major, such as a Physics or Astronomy 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.

**APPLICATIONS**

- Complete 30 credit hours.
- Complete 30 credit hours.
- Complete 30 credit hours.
- Complete 30 credit hours.
- Complete 30 credit hours.
- Complete 30 credit hours.
- Complete 30 credit hours.
- Complete 30 credit hours.

**FUTURE PLANS**

- “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/thesis/portfolio project: PHYS 4300.
- Complete at least 30 credit hours to graduate.
- Submit your application(s) for graduate school, an apprenticeship, or for fulltime employment.

**CAREERS AND BEYOND**

- Continue to present research or creative works at the Engaged Scholar Symposium or at Physics and/or Astronomy conferences.
- Set up an informational interview with an individual (especially an alumnus) currently in the field you aspire to work in.
- 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.
- Visit the Communication Hauser Lab.
- Before a job interview, schedule a mock interview with the Career Center or speech coaching with the Communication Hauser Lab.
- Engage in an independent study project or an academic internship to complement your major, such as a Physics or Astronomy 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.

**CAREERS**

- Research
- Development
- Consulting
- Engineering (process and testing)
- Quality control
- Instrumentation

**FOR ADDITIONAL INFO, VISIT**

- www.utrgv.edu/careercenter