- Any additional course of 1 credit or more that satisfies General Education Core "Integrative/Experiential Learning Option" Requirements.
- (one-hour lab)
  PHYS 2426 Physics for Scientists and Engineers II (one-hour lab)
- CSCI 1380 Computer Science I
  PHYS 2425 Physics for Scientists and Engineers I
- Integrative/Experiential Learning Option 6 hours
- MATH 2413 Calculus I (three hour lecture)
- (three-hour lecture) Mathematics – 3 hours
- (three-hour lecture)PHYS 2426 Physics for Scientists and Engineers II
- Life and Physical Sciences 6 hours • PHYS 2425 Physics for Scientists and Engineers I

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

You must apply to the UTeach program.

## Additional Info

ЯАЗҮ НТЯ ООЗ

UTCH 4601 Apprentice Teaching

PHYS 4392 Research Methods

PHYS 3304 Optics

PHYS 4300 Undergraduate Research

PHYS 3301 Electromagnetic Theory I PHYS 4303 Quantum Mechanics I

TCH 4101 Apprentice Teaching Seminar

Brownsville BLHSB 2.226 Phone: (956) 882-6679

Department Locations: Edinburg EPHYS 1.128 Phone: 956-665-2531

Department Chair Dr. Soma Mukherjee <u>soma.mukherjee@utrgv.edu</u>

**Contact Info** 

UTCH 3303 Project-Based Instruction

PHYS 4101 Senior Laboratory Research

Free Elective

Free Elective

PHYS 3411 Math Methods for Physicist I

UTCH 3302 Classroom Interactions

PHYS 3303 Thermodynamics

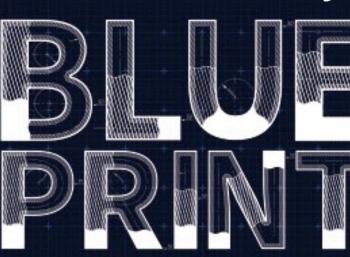
PHYS 3305 Classical Mechanics

**ΑΑΑΥ ΟΑΙΗΤ** 

READ 4305 Content Area Literacy

PHYS 4305 Statistical Mechanics

# PHYSICS (BS) \*7<sup>th</sup>-12<sup>th</sup> UTeach Certification Catalog: 2018-19 COLLEGE OF SCIENCES



# UTRio Grande Valley

## **2018-2019 ACADEMIC PLAN**

XXEX

XXEX

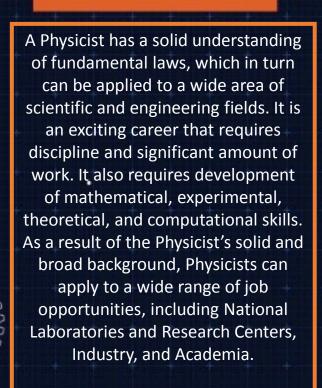
# **SECOND YEAR**

YTH 2415 Calculus III oose 1 Language, Philosophy & Culture YS 2426 Physics for Scientists & Engr. II oose 1 Government/Political Science YS 3330 Functions and Modeling

ATH 3341 Differential Equations ATE 3317 Perspective in Math & Science YS 3402 Modern Physics CH 3301 Knowing & Learning in Math & Science CH 3301 Knowing & Learning in Math & Science

Integrative/Experiential Learning

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## **Degree Info**

**AAAY TZAIA** 

	Computer Science I	CSCI 1380
τ əsooyጋ	American History (Core)	τ
τ əsooyጋ	Physics for Scientists & Engr. I	PHYS 2425
UTCH 330	II sulusies	MATH 2414
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155 JTAM		
255 HTAM	Learning Framework	τοετ λινη
	gnidse9T of sedseorqqA γriupnl	ОТСН 1101
РНУS 333	Creative Arts	τ
τ əsooyጋ	Social and Behavioral Sciences	τ
PHYS 242	American History	τ əsooqጋ
τ əsooyጋ	l sulusies	MATH 2413
142 HTAM	noiteoinummoO	τ

#### Courses in red are part of the General Education Core Curriculum (GEC).

UTCH 1102 Inquiry-Based Lesson Design

"Choose 1" Indicates course options. If options are not listed, please review the 2018-19 General Education Core or the degree plan for this major: www.utrgv.edu/degreeplans.

#### **FIRST YEAR**

### **SECOND YEAR**

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		ICAL	

				AND
MILESTONES	<ul> <li>UTRGV has a Writing Center and a Learning Center. Make it a point to visit them!</li> <li>Complete your core English classes (section 010) during your first year.</li> <li>Complete 30 credit hours every year in order to graduate in 4 years.</li> <li>Shoot for a GPA of 3.5 or higher.</li> <li>Take MATH 2413 in your first year.</li> </ul>	<ul> <li>Shoot for a GPA of 3.5 or higher.</li> <li>Complete major foundation classes, such as PHYS 3402, UTCH 3301, PHYS 3330, and MATE 3317.</li> <li>Complete 30 credit hours.</li> <li>Apply to the UTeach program. For more information visit <u>www.utrgv.edu/cep</u>.</li> </ul>	<ul> <li>Shoot for a GPA of 3.5 or higher.</li> <li>Complete 30 credit hours.</li> <li>Have you landed an internship or acquired research experience? This is the year to make it happen.</li> </ul>	<ul> <li>Shoot for a GPA of 3.</li> <li>"I have a plan for aft great! If not, visit you</li> <li>Register for your Cap 4300.</li> <li>Complete at least 30</li> <li>Submit your applicat apprenticeship, or for</li> </ul>
ADVICE & SUPPORT	<ul> <li>Meet with your academic advisor and bring your orientation folder with you to every session!</li> <li>Choose a major with confidence- Visit my.UTRGV.edu and check out MyMajors.</li> <li>Visit a faculty member during their office hours and ask a question about class.</li> <li>Classes fill up fast. When registration opens, be sure to register on the first day for your group.</li> <li>Cold or flu getting you down? We have Student Health Services on campus with free office visits.</li> </ul>	<ul> <li>Want to explore different careers? Check out MyMajors!</li> <li>Come ready with course suggestions and questions when you visit your academic advisor.</li> <li>Visit the Communication Hauser Lab for help with your speeches.</li> <li>Trouble making your tuition payment? The Financial Aid Office can help. Payment plans and emergency loans are also available</li> </ul>	<ul> <li>Seek out research opportunities within <u>your major</u> and join a professional organization such as the APS (American Physical Society) or the AAS (American Astronomical Society).</li> <li>Check DegreeWorks to make sure you are on track for graduation next year.</li> <li>Apply for internship and/or job shadowing opportunities. Discuss this with your advisor, faculty mentor, or Career Center.</li> </ul>	<ul> <li>Engage in an indeper internship to comple Educational Physics r</li> <li>Discuss future plans that includes employ</li> <li>Apply for graduation anticipated date. Vis ensure you are on training</li> </ul>
APPLY WHAT YOU LEARN	<ul> <li>Look for a service-learning course! For guidance, visit Engaged Scholarship &amp; Learning Office.</li> <li>Participate in a campus-sponsored community service project.</li> <li>Ask a student in class to study with you.</li> <li>Set up your profile on the Engagement Zone through</li> </ul>	<ul> <li>To find undergraduate research opportunities, visit the Engaged Scholarship &amp; Learning Office.</li> <li>Consider attending the LeaderShape Institute or attend the Engaged Scholar Symposium.</li> <li>Look at study abroad opportunities!</li> </ul>	<ul> <li>Go show off your research, service-learning or creative works at the Engaged Scholar Symposium!</li> <li>Sharpen your writing skills!</li> <li>Consider serving on a campus life/community</li> </ul>	<ul> <li>Continue to present Engaged Scholar Sym Astronomy and/or End Set up an informatio (especially an alumn work in.</li> <li>Identify employers or</li> </ul>
GLOBAL, CAMPUS & COMMUNITY ENGAGEMENT	<ul> <li>My.UTRGV.edu.</li> <li>Attend a diversity based campus or community event (e.g. MLK Day of Service).</li> <li>Attend a departmental programs such as the weekly seminars.</li> <li>Join a student organization! Consider looking into the SPS (Society of Physics Students) and/or Astronomy Club.</li> </ul>	<ul> <li>Check out a cultural campus or community event such as HESTEC or FESTIBA.</li> <li>Join another student organization.</li> <li>Check out a campus event that offers free lunchbring a friend!</li> </ul>	<ul> <li>committee or become a student leader and make a difference. Visit VLink or speak with your Student Government Association for more information!</li> <li>Travel the world! Look into study abroad opportunities at Office for International Programs &amp; Partnerships.</li> </ul>	fairs, online, at on-ca agencies, etc. The Ca Before a job intervier Career Center or spe Hauser Lab.
LIFE AFTER GRADUATION	<ul> <li>Create a résumé and set up your profile on the Handshake icon: (My.UTRGV.edu).</li> <li>Got summer plans? Visit Career Center and ask about places to do some job shadowing.</li> <li>Research shows that students who work on campus perform better than those who work off campus. Look for a job on Handshake!</li> <li>Check your UTRGV email for the daily Messenger- locate and attend one student workshop.</li> </ul>	<ul> <li>Update your resume in Handshake and have it reviewed.</li> <li>Visit the Career Center site to find a job fair to attend. At the event, approach a recruiter and discuss internships.</li> <li>Will a minor expand your career options? We recommend the Astronomy Minor.</li> <li>Explain to someone how your academic program aligns with your strengths and interests.</li> </ul>	<ul> <li>Check out the Physics &amp; Astronomy department website for postings on career/graduate school.</li> <li>Think about three people you can ask for letters of recommendation (professors, mentors, advisors, supervisors, etc.). Give them at least two weeks' advance notice!</li> <li>When is the deadline for your graduate school application? Visiting the program admissions webpage. Most do not accept late applicants!</li> </ul>	<ul> <li>Have you received you an employment offe Career Center, and g</li> <li>Formulate and imple graduation: attend content of the fellowships, etc.</li> <li>Update your information alumni mixers, event Center services!</li> <li>Remember to do you studentloans.gov.</li> </ul>

# UTRio Grande Valley



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### **FOURTH YEAR** AND BEYOND

f 3.5 or higher.

- after graduation." If this describes you, your Faculty Advisor or Career Center!
- Capstone/senior/portfolio project: PHYS
- t 30 credit hours to graduate.
- ication(s) for graduate school, an for fulltime employment.
- pendent study project or an academic plement your major, such as an cs research project.
- ns with your faculty mentor or advisor loyment, finances, and other life goals.
- tion one semester prior to your Visit the Academic Advising Center to track.
- ent research or creative works at the Symposium or at Physics and/or r Educational conferences.
- ational interview with an individual mnus) currently in the field you aspire to
- rs of interest and seek them out at job -campus information sessions, staffing Career Center can help.
- view, schedule a mock interview with the speech coaching with the Communication
- your acceptance for graduate school or offer? If not, network: talk to faculty, the nd get on LinkedIn.
- plement a strategy for life after nd career fairs, graduate fairs, apply to
- rmation with Alumni Relations. Enjoy ents and continued access to Career
- your exit loan counseling on

### CAREERS

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

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