Office: (956) 665-2609

EENGR 3.214 - Edinburg

CSCI 1380 Computer Science I has a prerequisite of College Algebra or qualification for a higher level math class. If you qualify for Precalculus or Calculus I you can take CSCI 1380.

ELEE 3435, and should have finished or be enrolled in at

you to start with an earlier course, for example MATH

4. Preregs for Senior Design

3. Computer Science Prerequisite

To enroll in Senior Design I, students

should have finished ELEE 3230 and

least 9 credits of 4000-level ELEE coursework.

1314 College Algebra or MATH 2412 Precalculus.

I. Depending on your incoming test scores and high school preparation, the math department may require

The first math course in the plan is MATH 2413 Calculus

2. Mathematics Prerequisites

another course must be passed with a grade of C or higher.

Any course that is a prerequisite or co-requisite for

1. Minimum Grade Rule

Contact Info

Dr. Hasina Huq

Department Chair

hasina.huq@utrgv.edu

Mr. Andres Medina

Undergraduate Program Coordinator

andres.medina@utrgv.edu

Department Office

Ms. Abby Tovar

SECOND YEAR

FIRST YEAR

UTRio Grande Valley

ELECTRICAL ENGINEERING (BSEE)

COLLEGE OF ENGINEERING AND

Catalog: 2019-20

COMPUTER SCIENCE

Electric Circuits I

Electric Circuits I Lab

Numerical Computation

& Data Visualization

III sulusias Calculus III

Choose 1 MECE 2301 or CHEM 1311

<u>or</u> CHEW 1309

Signals and Systems ELEE 3321

Electronics I Lab ELEE 3101 Electronics I **EFEE 3301**

American History Choose 1

Degree Info

Electrical engineering is a broad field with

applications in almost all areas of industry

including computer systems, control systems,

telecommunications, semiconductors,

electronics, and electric power. The Department

of Electrical Engineering offers a Bachelor of

Science in Electrical Engineering (BSEE) degree

that is accredited by the Engineering

Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).

This degree provides a broad, solid education in

engineering fundamentals as well as the

opportunity for in-depth study in specialized

topics. Students completing the program will

have rigorous foundation for engineering

practice in industry as well as for graduate

studies in engineering and other disciplines. The

program has well-equipped, accessible

laboratories and extensive computing facilities.

Communication

FOURTH YEAR

Communication Theory

Integrative/Experiential Learning

Government/Political Science

Ethics, Technology, and Society

Solid State Electronic Devices

Senior Design II

ELEE 4321 Automatic Control Systems

ELEE X3XX Technical Elective

ELEE X3XX Technical Elective

ELEE 4361 Senior Design I

ELEE 2105 ELEE 1101 Intro to Electrical Engineering **EFEE 7302** Computer Science I or CSCI 1370 PHYS 2426 Physics for Scientists & Engineers II MATH 3341 Differential Equations

EFEE 7319

UNIV 1301 Learning Framework

II Sulus II 2414 Calculus II

MATH 2413 Calculus I

Choose 1

C2CI 1380

Choose 1

PHYS 2425 Physics for Scientists & Engr. I MATH 2346 Math for Electrical & Comp. Engr.

Digital Systems Engr. I Lab **EFEE 5130** Digital Systems Engr. I EFEE 7330

Choose 1 Communication Choose 1

Creative Arts

Social and Behavioral Sciences

Additional Info

2019-2020 ACADEMIC PLAN

THIRD YEAR

ELEE 3225 Electrical Engineering Lab I

Microprocessor Systems ELEE 3315 Electromagnetics Engineering

Digital Systems Engineering II EFEE 4303 **EFEE 3432**

American History Choose 1

Probability & Stats for EFEE 3340 Electrical Engineering II Lab **EFEE 3730**

Electronics II Electrical Engr.

ELEE X3XX Technical Elective **EFEE 3305**

Government/Political Science Choose 1

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

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

Choose 1

Choose 1

EFEE 4395

PHIL 2326

EFEE 4321

EFEE 4328

BLUEPRINT EXPERIENCES

	FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR AND BEYOND	
MILESTONES	Complete your core English classes (section 010) during your first year.	 □ Aim for a GPA of 3.2 or higher. □ Complete major foundation classes, such as ELEE 1101, ELEE 2330, ELEE 2305, MATH 2346, ELEE 2319, and PHYS 2426. □ Complete 30 credit hours. □ Apply to the Electrical Engineering program, and find and consult with your electrical academic advisor every semester. 	☐ Aim for a GPA of 3.0 or higher. ☐ Complete 30 credit hours. ☐ Have you landed an internship or acquired research experience? This is the year to make it happen.	 □ Aim for a GPA of 3.0 or higher. □ "I have a plan after graduation." If this describes you, great! If not, visit your Faculty Advisor or Career Center! □ Register for your senior design courses: ELEE 4361/ELEE 4362. □ Complete at least 30 credit hours to graduate. □ Submit your application(s) for graduate school, an apprenticeship, or for fulltime employment. 	•Auto •Rob •Bioo •Digi •Elec
ADVICE & SUPPORT	advisor and bring your orientation folder with you to	 □ Want to explore different careers? Check out MyMajors! □ Come ready with course suggestions and questions when you visit with 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 Electrical Engineering and join a professional organization such as IEEE professional societies. Check out your options at ieee.org □ 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 internship to complement your major, such as NASA, electrical REU program, 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. 	•Ana •Pow syste •Com signa
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. □ Set up your profile on the Engagement Zone through 	□ To find undergraduate research opportunities, visit the Engaged Scholarship & Learning Office. □ Consider attending the LeaderShape Institute or attend the Engaged Scholar Symposium. □ Look at study abroad opportunities! Consider	☐ 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 3342 or become the secretary for your organization. ☐ Consider serving on a campus life/community	☐ Continue to present research or creative works at the Engaged Scholar Symposium at the Engaged Scholar Symposium. ☐ 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	
GLOBAL, CAMPUS & COMMUNITY ENGAGEMENT	 My.UTRGV.edu. Attend a diversity based campus or community event (e.g. MLK Day of Service). Attend a departmental program such as fall convocation or IEEE student organization. Join a student organization! Consider looking into IEEE- 	going to Europe or Asia! Check out a cultural campus or community event such as HESTEC or FESTIBA. Join another student organization, such as IEEE-HKN, SHPE, Student Government, or visit VLink for options. Check out a campus event that offers free lunch-bring a friend!	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.	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 Handshake 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 Handshake! □ Check your UTRGV email for the daily Messenger- locate and attend one student workshop. 	 □ Update your resume in 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 suggest that you might consider a minor ONLY if you are achieving satisfactory performance in your electrical engineering major. 	 □ Check out the Electrical Engineering 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! 	For a Care chec

└□ Explain to someone how your academic program

aligns with your strengths and interests.

CAREERS

- Automatic controls
- Robotics
- Bioelectronics
- Digital systems
- •Electromagnetics
- Analog electronics
- Power and energy systems
- •Communications and signal processing

For additional info, visit the Career Center website and check out "What Can I Do With This Major?"

www.utrgv.edu/careercenter

Remember to do your exit loan counseling on

studentloans.gov.