

## FOURTH YEAR

## THIRD YEAR

## SECOND YEAR

## FIRST YEAR

### 2018-2019 ACADEMIC PLAN

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 2018-19 General Education Core or the degree plan for this major: [www.utrgv.edu/degreeplans](http://www.utrgv.edu/degreeplans).

Choose 1 Communication  
 MATH 2413 Calculus I (Core)  
 CIVE 1101 Introduction to Civil Engineering  
 CIVE 2220 Civil Engineering Measurements  
 CHEM 1307 Chemistry for Engineers  
 CHEM 1107 Chemistry for Engineers Lab  
 Choose 1 American History  
 UNIV 1301 Learning Framework  
 Choose 1 Communication  
 MATH 2414 Calculus II  
 PHYS 2425 Physics for Scientists & Engineers I  
 MANE 2332 Engineering Statistics  
 CIVE 2440 Civil Engineering Materials

MATH 2415 Calculus III  
 MECE 2301 Statics  
 MECE 2350 Numerical Methods for Engineers  
 PHYS 2426 Physics for Scientists and Engineers II  
 POLS 2305 U.S. & Texas Government & Politics I  
 Choose 1 American History  
 MECE 2302 Dynamics  
 MECE 3321 Mechanics of Solids  
 MATH 3341 Differential Equations  
 CIVE 3315 Fluid Mechanics and Hydraulics  
 CIVE 3115 Fluid Mechanics and Hydraulics Lab

MANE 3337 Engineering Economics  
 CIVE 3324 Structural Analysis  
 CIVE 3331 Environmental Engineering  
 CIVE 3475 Geotechnical, Engr. & Applications  
 CIVE 3341 Structural Steel Design  
 CIVE 3345 Transportation Engineering  
 CIVE 4335 Water Resources Engineering  
 CIVE 4346 Reinforced Concrete Design  
 Choose 1 Social and Behavioral Sciences

CIVE 4349 Construction Planning & Mgmt.  
 CIVE 43XX Technical Elective I  
 CIVE 4347 Foundation Design  
 CIVE 4391 CE Senior Fundamentals  
 PHIL 2326 Ethics, Technology, & Society  
 POLS 2306 U.S. & Texas Government & Politics II  
 CIVE 43XX Technical Elective II  
 Choose 1 Creative Arts  
 CIVE 4392 CE Senior Project  
 Choose 1 Basic Science Elective  
 Choose 1 Integrative & Experiential Learning

### Additional Info

- Follow Mathematics sequence- Math courses must be taken in order.
- Students must complete at least 24 credit hours of math and science coursework in order to graduate.
- Students must receive a grade of “C” or better in all courses that are prerequisites for civil engineering courses.
- Students must receive a grade of “C” or better in all civil engineering courses.

### Contact Info

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### UTRio Grande Valley

# BLUE PRINT

**CIVIL ENGINEERING (BS)**  
**Catalog: 2018-19**  
**COLLEGE OF ENGINEERING**  
**AND COMPUTER SCIENCE**

### Degree Info

The Civil Engineering Program prepares graduates for local, regional or worldwide employment in the engineering profession or placement in a graduate school. The program affords students opportunities to meet and interact with practicing engineers, businesses and government agencies; to participate in professional engineering organizations and in research. The faculty endeavor to be accessible, maintain state of the art instruction and facilities, and to provide liberal access to laboratories and academic support.

# BLUEPRINT EXPERIENCES

## FIRST YEAR

## SECOND YEAR

## THIRD YEAR

## FOURTH YEAR AND BEYOND

## CAREERS

### MILESTONES

- UTRGV has a Writing Center and a Learning Center which can help you if you are struggling with a particular class, particularly Math. Make it a point to visit them!
- Complete your core English classes (section 010) and **MATH 2414 Calculus II** during your first year.
- Complete 30 credit hours every year in order to graduate in 4 years.
- Establish a solid GPA of at least 3.0.
- Complete major foundation classes, such as CIVE 1101 and CIVE 2220 in your first year.**

### 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 MyMajors!
- If you are struggling or have questions about a class, make sure to visit the instructor during office hours; they can help you!
- Classes fill up fast. When registration opens, be sure to register on the first day for your group. **Be sure to get on waitlist if your course is full.**
- 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 Engaged Scholarship & Learning Office.
- Participate in a campus-sponsored community service project.
- Ask a student in class to study with you.

### 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 Engineering Convocation.
- Join a student organization! Consider looking into ESAC or visit VLink (utrgv.edu/vlink) for options.

### 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.

- Maintain a GPA of at least 3.0.
- Complete major foundation classes, such as CIVE 2440, CIVE 3315/3115, and MECE 3321.**
- Complete MATH sequence courses, such as MATH 2415 and MATH 3341.**
- Complete 30 credit hours.
- Apply to the Civil Engineering program.

- Want to explore different careers? Check out MyMajors!
- 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

- 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 going to Peru!
- Check out a cultural campus or community event such as HESTEC or FESTIBA.
- Join another student organization. Perhaps Student Government Association or visit VLink for options.
- Check out a campus event that offers free lunch-bring a friend!

- 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 do not have a recommendation for a minor.
- Explain to someone how your academic program aligns with your strengths and interests.

- Maintain a GPA of at least 3.0.
- Complete 30 credit hours.
- Have you landed an internship or acquired research experience? This is the year to make it happen.

- Seek out research opportunities within your major and join a professional organization such as American Society of Civil Engineers.
- Check Degree Works 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.

- 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 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.

- Check out the Civil 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!

- Maintain a GPA of at least 3.0.
- "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: CIVE 4391 & 4392 CE Senior Design Project I & II.
- 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 Texas Department of Transportation.
- 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.

- Continue to present research or creative works 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 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.

- 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.

- Structural
- Urban Planning
- Construction
- Environmental
- Water Resources
- Transportation
- Geotechnical
- Construction industry
- Utility companies
- Oil companies
- Telecommunications businesses
- Manufacturing companies
- Railroads
- Airports
- Road construction companies
- Engineering and architectural companies
- Consulting companies
- City, state, and federal government:
  - Department of Transportation
  - Army Corps of Engineers
  - Federal Aviation Administration
  - Department of Energy

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)