

Choose 1	Communication (Core)
MATH 2413	Calculus I
CSCI 1101	Introduction to Computer Science
CSCI 1370	Engineering Computer Science I
CSCI 1170	Engineering Computer Science I Laboratory
UNIV 1301	Learning Framework
Choose 1	Communication (Core)
MATH 2414	Calculus II
Choose 1	Life and Physical Sciences (Core)
Choose 1	American History (Core)
CSCI 2380	Computer Science II

## FIRST YEAR

Choose 1	Life and Physical Sciences
CSCI 2344	Programming in Unix/Linux Environment
CSCI 2333	Computer Organization and Assembly Language
CSCI 3334	Systems Programming and Mathematical Foundations of Basic Science (Support Course)
Choose 1	Object Oriented Programming, Java or Visual Basic or Object Oriented Programming in C#
ELEE 2330	Digital Systems
ELEE 2130	Digital Systems Engineering I Lab

## SECOND YEAR

PHIL 2326	Ethics, Technology and Society
CSCI 3333	Algorithms and Data Structures
Choose 1	Advanced Elective
ENGL 3342	Technical Communication
POLS 2305 or POLS 2385 (H)	U.S. Federal Government & Politics or (H)
CSCI 3340	Software Engineering I
Choose 1	CS Electives - Databases, Networks, Operating Systems and Computer Architecture
MATH 2318	Linear Algebra
POLS 2306 or POLS 2386 (H)	Texas Government & Politics or (H)
CSCI 3336	Organization of Programming Languages

## THIRD YEAR

Choose 1	CS Electives - Databases, Networking, Operating Systems and Computer Architecture
CSCI 4325	Automata, Formal Languages, and Computability
CSCI X3XX	CSCI Advanced Technical Elective - Any Level
Choose 1	Support Courses - Probability
Choose 1	Creative Arts
CSCI X3XX	CSCI Advanced Technical Elective
Choose 1	Advanced Elective
Choose 1	American History (Core)
Choose 1	Social and Behavioral Sciences (Core)
Choose 1	Elective - Any Level
CSCI 4390	Senior Project

## FOURTH YEAR

### Additional Info

Total credit hours for graduation are 125 (2018-2019 Catalog). Total advanced hours are 48. All Computer Science courses in the degree plan except the Technical Electives must be completed with a grade 'C' or better.

Calculus I is a pre-requisite for many major courses. Always schedule Math first until you through Calculus I.

### Contact Info

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UTRio Grande Valley

**BLUE  
PRINT**

**COMPUTER SCIENCE (BSCS)**  
**Catalog: 2017-18**  
**COLLEGE OF ENGINEERING AND  
COMPUTER SCIENCE**

### Degree Info

Computer Science is the study of the structure, function and application of computers and is central to the rapidly expanding use of information technology. Computers have traditionally been used in business, engineering and scientific applications, and now applications are found in almost all human activities from art to zoology. Computer science is both an applied and theoretical discipline, supported by the principles of science, engineering, and mathematics that has a direct and profound impact on the quality of life and society at large.



# BLUEPRINT EXPERIENCES

## FIRST YEAR

## SECOND YEAR

## THIRD YEAR

## FOURTH YEAR AND BEYOND

### 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.
- Take MATH 2413 in your first year.

- Shoot for a GPA of 3.5.
- Complete major foundation classes, such as CSCI 2380, CSCI 2333, CSCI 3334, CSCI 3310, ELEE 2330, CSCI 3326 or CSCI 3327 or CSCI 3328.
- Complete 30 credit hours.

- Shoot for a GPA of 3.5.
- 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.
- "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: CSCI 4390
- 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 the 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 ACM or IEEE.
- 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. Independent study follows from involvement with faculty research in and out of class. If you secure an internship, you can receive Technical Elective credit under CSCI 3300.
- 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 and speak to your Professors about how to get involved.
- 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! Take an intensive writing course such as ENGL 3342 or become the secretary for your organization.

- Continue to present research or creative works at the Engaged Scholar Symposium or at Computer Science Student Research Day (CSSRD).
- 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 program such as HESTEC Engineering and Computer Science Poster Symposium Competition.
- Join a student organization! Consider looking into ACM or ACM-W or visit VLink (utrgv.edu/vlink) for options.

- Check out a cultural campus or community event such as HESTEC or FESTIBA.
- Join another student organization. Perhaps Hack&&Make or visit VLink for options.
- 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? You may be interested in applying Computer Science to Math, Biology, Economics, Education or any number of other domains.
- Explain to someone how your academic program aligns with your strengths and interests.

- Check out the 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.

## CAREERS

- Information protection
- Communications and wireless networks
- Computational science
- Operating systems
- Computer networks
- Computer systems
- Embedded systems
- Computer vision and robotics
- Circuit design
- Signal, image, and speech processing
- VLSI
- Bioinformatics

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)