

| | | I | H | Course # | Course Title | Min. Grade | GEC | Prerequisite | Additional Notes | |
|--------------------------------|--------|-----------|-----------------------------------|-----------|--|------------|----------------------------------|--|--|--|
| FIRST YEAR | FALL | | 3 | Choose 1 | Communication (Core) | C | 010 | For all 010 courses: Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301. For ENGL 1302, a grade of "C" or better in ENGL 1301. | See General Education Core for more details Options: ENGL 1301 | |
| | | | 4 | MATH 2413 | Calculus I | C | 020 | MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics. | | |
| | | | 1 | CSCI 1101 | Introduction to Computer Science | C | | | | |
| | | | 4 | CSCI 1470 | Computer Science I | C | | Grade of 'C' or better in any of the following: MATH 1314, MATH 1414 or placement in a higher level Math course (MATH 2412, MATH 2413) and credit for or concurrent enrollment in CSCI 1101 or CMPE 1101 or EECE 1101. | | |
| | | | | UNIV | 1301 Learning Framework and Career Success 1101 Academic and Career Success 1001 Living and Working by Design | | | | As required, based on credit hours earned. TSI status, High School rank, major declaration. | |
| 12 Semester Total Hours | | | | | | | | | | |
| FIRST YEAR | SPRING | | 3 | Choose 1 | Communication (Core) | C | 010 | For all 010 courses: Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301. For ENGL 1302, a grade of "C" or better in ENGL 1301. | See General Education Core for more details Options: ENGL 1301 or ENGL 1305 | |
| | | | 4 | MATH 2414 | Calculus II | | | MATH 2413 with a grade of 'C' or better | | |
| | | | 3 | Choose 1 | American History (Core) | | | 060 | | HIST 1301 OR HIST/MASC 2327 |
| | | | 3 | CSCI 2380 | Computer Science II | C | | | Grade of C or better in: [[CSCI 1370 or CMPE 1370] and [CSCI 1170 or CMPE 1170]] or CSCI 1470 or CSCI 1390. | |
| 13 Semester Total Hours | | | | | | | | | | |
| | | I | H | Course # | Course Title | Min. Grade | GEC | Prerequisite | Additional Notes | |
| SECOND YEAR | FALL | | 3 | COMM 1315 | Public Speaking | | | 090 | | |
| | | | 4 | Choose 1 | Life and Physical Sciences (Core) | | | 030 | MUST BIOL 1406 or BIOL 2401 or CHEM 1311 or CHEM 1309 or PHYS 1401 or PHYS 2425 | |
| | | | 3 | CSCI 2344 | Programming in Unix/ Linux Environmen | C | | | Grade of C or better in: [[CSCI 1370 or CMPE 1370] and [CSCI 1170 or CMPE 1170]] or CSCI 1470 or CSCI 1390. | |
| | | | 3 | Choose 1 | Object Oriented Programming in Java or Object-Oriented Programming or Object Oriented Programming in C# or Object Oriented Programming in Python | C | | | Grade of C or better in: CSCI 2380. | CSCI 3326 OR CSCI 3327 OR CSCI 3328 OR CSCI 3329 |
| | | | 3 | CSCI 2333 | Computer Organization and Assembly Language | C | | | Grade of C or better in: [[CSCI 1370 or CMPE 1370] and [CSCI 1170 or CMPE 1170]] or CSCI 1470 or CSCI 1390. | |
| 16 Semester Total Hours | | | | | | | | | | |
| SECOND YEAR | SPRING | | 3 | PHIL 2326 | Ethics, Technology and Society (Core) | | | 040 | | |
| | | | 3 | CSCI 3310 | Mathematical Foundations of Computer Science | C | | | MATH 2413 or MATH 2487 with grade of 'C' or better; and [[CSCI 1370 or CMPE 1370 or CSCI 1378 or CMPE 1378] and [CSCI 1170 or CSCI 1178 or CMPE 1170 or CMPE 1178]] or CSCI 1470 or CSCI 1390. | |
| | | | 4 | Choose 1 | Life and Physical Sciences (Core) | | | 030 | MUST choose from BIOL, CHEM, or PHYS. See degree plan for options. Prerequisite may apply. | |
| | | | 3 | Choose 1 | Free Elective - Any Level | | | | | |
| | | | 3 | EECE 2306 | Digital Systems Engineering I | | | | Credit/registration in CMPE 1101, ELEE 1101, or CSCI 1101 or EECE 1101. | MATH 2413 recommended (not required) |
| | 1 | EECE 2106 | Digital Systems Engineering I Lab | | | | Credit/registration in EECE 2306 | MATH 2413 recommended (not required) | | |
| 17 Semester Total Hours | | | | | | | | | | |

| | I | H | Course # | Course Title | Min. Grade | GEC | Prerequisite | Additional Notes |
|--------------------------------|--------|---|-----------|--|------------|-----|--|---|
| THIRD YEAR | FALL | 3 | CSCI X3XX | Advanced Computer Science Elective | | | | See degree plan for options. |
| | | 3 | CSCI 3333 | Algorithms and Data Structures | C | | Grade of C or better in: [CSCI 3310 or MATH 2346 or MATH 2305] and [CSCI 2380 or CMPE 2380]. | |
| | | 3 | Choose 1 | Free Elective - Any Level | | | | |
| | | 3 | ENGL 3342 | Technical Communication | | | 6 hours of English. | |
| | | 3 | POLS 2305 | U.S. Federal Govt & Politics | | 070 | | |
| 15 Semester Total Hours | | | | | | | | |
| THIRD YEAR | SPRING | 3 | CSCI 3340 | Software Engineering I | C | | Grade of C or better in: [3 advanced hours in CSCI or CMPE or EECE] and [CSCI 2380 or CMPE 2380]. | |
| | | 3 | Choose 1 | CS Electives - Databases, Networking, Operating Systems and Computer Architecture | C | | CSCI 3333 for Databases; [CSCI 2380 or CMPE 2380] and [CSCI 2333 or CMPE 2333 or ELEE 3435 or CMPE 3437 or EECE 3435] for Networking, Architecture, and OS | Choose from: CSCI 4333 Database Design and Implementation or [CSCI 4334 or CYBI 3345] or [CSCI 4335 or EECE 4380] or [CSCI 4345 or CYBI 4345] |
| | | 3 | MATH 2318 | Linear Algebra | | | MATH 2413 with a grade of 'C' or better | |
| | | 3 | POLS 2306 | Texas Government & Politics | | 070 | | |
| | | 3 | CSCI 3336 | Organization of Programming Language | C | | Grade of C or better in: [CSCI 2380 or CMPE 2380] and [CSCI 3326 or CMPE 3326 or CSCI 3327 or CMPE 3327 or CSCI 3328 or CMPE 3328]. | |
| 15 Semester Total Hours | | | | | | | | |
| | I | H | Course # | Course Title | Min. Grade | GEC | Prerequisite | Additional Notes |
| FOURTH YEAR | FALL | 3 | Choose 1 | CS Electives - Databases, Networking, Operating Systems, and Computer Architecture | C | | CSCI 3333 for Databases; [CSCI 2380 or CMPE 2380] and [CSCI 2333 or CMPE 2333 or ELEE 3435 or CMPE 3437 or EECE 3435] for Networking, Architecture, and OS | Choose from: CSCI 4333 Database Design and Implementation or [CSCI 4334 or CYBI 3345] or [CSCI 4335 or EECE 4380] or [CSCI 4345 or CYBI 4345] |
| | | 3 | CSCI 4325 | Automata, Formal Languages, and Computability | C | | Grade of C or better in: CSCI 3333 or CMPE 3333. | |
| | | 3 | CSCI X3XX | Advanced Computer Science Elective | | | | See degree plan for options. |
| | | 1 | Choose 1 | Integrative/Experimental Learning (Core) | | 090 | | Choose an additional 1-hour course from this category except PHIL 2326 |
| | | 1 | Choose 1 | Free Elective - Any Level | | | | |
| | | 3 | Choose 1 | Support Courses - Probability | | | | STAT 3337 OR ELEE 3340 OR STAT 3301 OR EECE 3340 |
| | | 3 | Choose 1 | Creative Arts (Core) | | 050 | | See General Education Core for course options. |
| 17 Semester Total Hours | | | | | | | | |
| FOURTH YEAR | SPRING | 3 | CSCI X3XX | Advanced Computer Science Elective | | | | See degree plan for options. |
| | | 3 | Choose 1 | Free Elective - Any Level | | | | |
| | | 3 | Choose 1 | American History (Core) | | 060 | | HIST 1302 OR HIST/MASC 2328 |
| | | 3 | Choose 1 | Social and Behavioral Sciences (Core) | | 080 | | See General Education Core for course options. |
| | | 3 | CSCI 4390 | Senior Project | | | Grade of C or better in CSCI 3340 or CMPE 3340 and consent of instructor | |
| 15 Semester Total Hours | | | | | | | | |

Graduation Requirements

All courses in the Computer Science Core must be completed with a grade 'C' or better. All courses in Section 2a-Programming Language and 2b-Databases, Architecture, Networking, and Operating Systems must be completed with a grade of 'C' or better.

CORE: The 2023-2024 list of core courses can be found at: www.utrgv.edu > Academics > Undergraduate > General Education Core www.utrgv.edu/core

| Symbols Key | |
|---|---|
| Critical (!): sequence sensitive course. | General Education Core (GEC) Sections: 010 - Communication; 020 - Mathematics; 030 - Life and Physical Sciences; 040 - Language, Philosophy & Culture; 050 - Creative Arts; 060 - American History; 070 - Government/Political Science; 080 - Social and Behavioral Sciences; 090 - Applied Communication and Literacies; 090 - Humanities; 090 - Leadership; 090 - Science Labs; 090 - Interdisciplinary; 090 - Technologies; 090 - Language Diversity & Writing. |
| Minimum Grade: A - Excellent; B - Good; C - Satisfactory; D - Below Average; CR - Credit; P - Passing; S - Satisfactory. | |

120 TOTAL HOURS

120

(42) TOTAL ADVANCED HOURS

42

Approved:

Revised: