

| | 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 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 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 | | | | | | | | | |
| SECOND YEAR | FALL | 3 | COMM 1315 | Public Speaking | | 090 | | | |
| | | 4 | Choose 1 | Life and Physical Sciences (Core) | | 030 | Pre-requisites vary | Choose one from: BIOL 1406, BIOL 1407, BIOL 2401, BIOL 2402, only one from either CHEM 1311 or CHEM 1309, CHEM 1312, only one from either PHYS 1401 or PHYS 2425, only one from either PHYS 1402 or PHYS 2426 | |
| | | 3 | CSCI 2344 | Programming in Unix/ Linux Environment | 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 in C# or Object Oriented Programming in Python | C | | Grade of C or better in: CSCI 2380 | CSCI 3326 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 with grade of 'C' or better; and [[CSCI 1370 or CMPE 1370] and [CSCI 1170 or CMPE 1170]] or CSCI 1470 or CSCI 1390. | |
| | | | 4 | Choose 1 | Life and Physical Sciences (Core) | | 030 | Pre-requisites vary | Choose second course from: BIOL 1406, BIOL 1407, BIOL 2401, BIOL 2402, only one from either CHEM 1311 or CHEM 1309, CHEM 1312, only one from either PHYS 1401 or PHYS 2425, only one from either PHYS 1402 or PHYS 2426 |
| | | | 3 | Choose 1 | Free Elective - Any Level | | | | |
| 3 | | | EECE 2306 | Digital Systems Engineering I | | | Credit/registration in CSCI 1101, CMPE 1101, ELEE 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 | | | | | | | | | |

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|-------------|--------|--------------------------------|--------------------------------|---------------------------------------|---|------------|--|---|--|--|
| THIRD YEAR | FALL | 3 | | CSCI 33XX or CSCI 43XX | Computer Science Advanced Elective | | | Pre-requisites vary | 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 | | CSCI 3336 | Organization of Programming Languages | 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]. | | |
| | | 3 | | ENGL 3342 | Technical Communication | | | 6 hours of ENGL coursework | | |
| | | 3 | | POLS 2305 | U.S. Federal Govt & Politics | | 070 | | | |
| | | | 15 Semester Total Hours | | | | | | | |
| | 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 | Computer Science Prescribed Elective - Databases, Architecture, Networking, and Operating Systems | 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 Architecture, Networking, and Operating Systems | Choose from: CSCI 4333 Database Design and Implementation or CSCI 4334 Operating Systems or CSCI 4335 Computer Architecture or CSCI 4345 Computer Networks | |
| | | 3 | | MATH 2318 | Linear Algebra | | | MATH 2413 with a grade of 'C' or better | | |
| | | 3 | | POLS 2306 | Texas Government & Politics | | 070 | | | |
| 3 | | | Choose 1 | Free Elective - Any Level | | | | | | |
| | | 15 Semester Total Hours | | | | | | | | |
| FOURTH YEAR | FALL | 3 | | Choose 1 | Computer Science Prescribed Elective - Databases, Architecture, Networking, and Operating Systems | 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 Architecture, Networking, and Operating Systems | Choose from: CSCI 4333 Database Design and Implementation or CSCI 4334 Operating Systems or CSCI 4335 Computer Architecture or CSCI 4345 Computer Networks | |
| | | 3 | | CSCI 4325 | Automata, Formal Languages, and Computability | C | | Grade of C or better in: CSCI 3333 or CMPE 3333. | | |
| | | 3 | | CSCI 33XX or CSCI 43XX | Computer Science Advanced Elective | | | Pre-requisites vary | See degree plan for options. | |
| | | 1 | | Choose 1 | Integrative/Experiential 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 Course - Statistics | | | | STAT 3337 or STAT 3301 or EECE 3340 | |
| | | 3 | | Choose 1 | Creative Arts (Core) | | 050 | | See General Education Core for course options. | |
| | | | 17 Semester Total Hours | | | | | | | |
| | SPRING | 3 | | CSCI 33XX or CSCI 43XX | Computer Science Advanced Elective | | | Pre-requisites vary | See degree plan for options. | |
| | | 3 | | Choose 1 | Free Elective - Any Level | | | | | |
| 3 | | | Choose 1 | American History (Core) | | 060 | | HIST 1302 or HIST 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 of 'C' or better. All courses in sections Programming Language and 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 in the 2023-2024 Undergraduate Catalog > www.utrgv.edu/catalog > See 'Core Curriculum'

Symbols Key

Critical (!): sequence sensitive course.

Minimum Grade: A - Excellent; B - Good; C - Satisfactory; D - Below Average;

CR - Credit; P - Passing; S - Satisfactory.

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.

120 TOTAL HOURS (42 advanced minimum credit hours)

Approved: Tuesday, March 28, 2023

Revised: Tuesday, March 28, 2023