The University of Texas Rio Grande Valley

# Bachelor of Science (BS)
# Statistics

**2020-2021**

| | | 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 ENGL portion of ACT test or TSI reading/writing exams 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** |
| | | 3 | Choose 1 | American History (Core) | | 060 | | See General Education Core for more details. **Options: HIST 1301 or HIST/MASC 2327** |
| | | 3 | POLS 2305 | Government/Political Science (Core) | | 070 | | See General Education Core for more details |
| | | 4 | MATH 2413 | Calculus I | C | | MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics. | |
| | | 3 | MATH 1342 or MATH 1343 | Elementary Statistical Methods or Introduction to Biostatistics | C | 020 | College Ready TSI status in Mathematics. | |
| | | | UNIV | 1301 Learning Framework 1101<br>Academic and Career Success 1001<br>Living and Working by Design | | | | As required, based on credit hours earned, TSI status, High school rank, major declaration |
| | | 16 | **Semester Total Hours** | | | | | |
| | SPRING | 3 | Choose 1 | Communication (Core) | C | 010 | For all 010 courses: Satisfactory scores on ENGL portion of ACT test or TSI reading/writing exams or ENGL 0301. For ENGL 1302, a grade of "C" or better in ENGL 1301. | See General Education Core for more details **Options: ENGL 1302 or ENGL 1305** |
| | | 3 | Choose 1 | American History (Core) | | 060 | | See General Education Core for more details. **Options: HIST 1302 or HIST/MASC 2328** |
| | | 3 | POLS 2306 | Government/Political Science (Core) | | 070 | | See General Education Core for more details |
| | | 3 | MATH 2318 | Linear Algebra | C | | MATH 2413 with a grade of 'C' or better. | |
| | | 4 | MATH 2414 | Calculus II | C | | MATH 2413 with a grade of 'C' or better. | |
| | | 16 | **Semester Total Hours** | | | | | |

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| SECOND YEAR | FALL | 4 | PHYS 2425 or BIOL 1406 | Physics for Scientists and Engineers I or General Biology I | | 030/090 | | |
| | | 3 | CSCI 1380 | Computer Science I | | 090 | Concurrent enrollment or credit for MATH 1314 or higher level mathematics course. | |
| | | 3 | STAT 3301 | Applied Statistics | C | | MATH 2413 with a grade of 'C' or better. | |
| | | 3 | STAT 3337 | Probability and Statistics | C | | MATH 2414 with a grade of 'C' or better. | |
| | | 4 | MATH 2415 | Calculus III | C | | MATH 2414 with a grade of 'C' or better. | |
| | | 17 | **Semester Total Hours** | | | | | |
| | SPRING | 4 | PHYS 2426 or BIOL 1407 | Physics for Scientists and Engineers II or General Biology II | | 030/090 | | |
| | | 3 | Choose 1 | Language, Philosophy & Culture (Core) | | 040 | | See General Education Core for course options. |
| | | 3 | STAT 2336 | Statistical Computing and Data Management | C | | CSCI 1380 or STAT 2331 | |
| | | 3 | STAT 3338 | Mathematical Statistics | C | | STAT 3337 with a grade of 'C' or better. | |
| | | 3 | ECON 1301 or ECON 2301 | Introduction to Economics or ECON 2301<br>Principles of Macroeconomics | | 080 | | |
| | | 16 | **Semester Total Hours** | | | | | |

**CORE: The 2020-2021 list of core courses can be found in the 2020-2021 Undergraduate Catalog: www.utrgv.edu > 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 - Computer Application; 090 - Interdisciplinary ;090 - Science Labs; 090 - Wellness.

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|---|---|---|---|---|---|---|---|---|
| THIRD YEAR | FALL | 3 | Choose 1 | Creative Arts (Core) | | 050 | | See General Education Core for course options. |
| | | 1 | Choose 1 | Integrative/Experiential Learning Option (Core) | | 090 | | See General Education Core for course options. |
| | | 3 | 3XXX-4XXX | Advanced Math Elective | | | | |
| | | 3 | 3XXX-4XXX | Advanced Statistics Elective | | | | STAT 3351 Multivariate Analysis or STAT 4399 Special Topics in Statistics |
| | | 3 | STAT 3335 | Applied Regression Analysis | C | | MATH 2318 and STAT 2331 both with grade of 'C' or better. | |
| | | 3 | XXXX X3XX | Free Elective | | | | |
| | | **16** | **Semester Total Hours** | | | | | |
| | SPRING | 3 | 3XXX-4XXX | Advanced Math Elective | | | | |
| | | 3 | 3XXX-4XXX | Advanced Statistics Elective | | | | STAT 3352 Introduction to Linear Models or STAT 4399 Special Topics in Statistics |
| | | 3 | STAT 3336 | Sampling | C | | STAT 2331 with a grade of 'C' or better. | |
| | | 3 | XXXX X3XX | Free Elective | | | | |
| | | **12** | **Semester Total Hours** | | | | | |

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|---|---|---|---|---|---|---|---|---|
| FOURTH YEAR | FALL | 3 | 3XXX-4XXX | Advanced Math Elective | | | | |
| | | 3 | 3XXX 43XX | Free Advanced Elective | | | | |
| | | 3 | 3XXX-4XXX | Advanced Statistics Elective | | | | Existing STAT Elective or STAT 4399 Special Topics in Statistics |
| | | 3 | STAT 4390 | Statistical Project (joint with Math Project) | C | | | |
| | | 3 | XXXX X3XX | Free Elective | | | | |
| | | **15** | **Semester Total Hours** | | | | | |
| | SPRING | 3 | XXXX X3XX | Free Elective | | | | |
| | | 3 | 3XXX-4XXX | Advanced Statistics Elective | | | | Existing STAT Elective or STAT 4399 Special Topics in Statistics |
| | | 3 | STAT 4332 | Experimental Design and Analysis | C | | STAT 2336, STAT 3335, and 9 advanced hours of statistics, all with a "C" or better. | |
| | | 3 | XXXX X3XX | Free Elective | | | | |
| | | **12** | **Semester Total Hours** | | | | | |

**Major Graduation Requirements:**
Major requirements must be completed with a minimum grade of 'C' and a minimum GPA of 2.5.

**120 TOTAL HOURS**
**(42) Advanced Institutional minimum credit hours**

Approved: Thursday, February 4, 2021
Revised: Tuesday, November 24, 2020