# MATHEMATICS (BS)

## Program Map

| Course | Title | Credit Hours |
|---|---|---|
| **First Year** | | |
| **Fall** | | |
| MATH 1113 | Pre-Calculus (minimum grade of C) | 4 |
| (Apply 3 credits to Area A and 1 credit to Area G.) | | |
| ENGL 1101 | English Composition I (minimum grade of C) | 3 |
| AREA D | Lab Science | 4 |
| Area B1 | COMM 1110 Public Speaking or Foreign Language | 3 |
| AREA E | Behavioral Science | 3 |
| | **Credit Hours** | **17** |
| **Spring** | | |
| MATH 1131 | Calculus with Analytic Geometry I (minimum grade of C) | 4 |
| (Apply 3 credits to Area D and 1 credit to Area F.) | | |
| ENGL 1102 | English Composition II (minimum grade of C) | 3 |
| STAT 1401 | Elementary Statistics (minimum grade of C) | 3 |
| CPSC 1301K | Computer Science I (minimum grade of C) | 4 |
| (Apply 3 credits to Area F and 1 credit to Area G.) | | |
| Area B2 | ITDS 1779 (2), LEAD 1705 (2), PERS 1506 (1; may be repeated with different topic), PERS 1507 (2) | 1 |
| | **Credit Hours** | **15** |
| **Second Year** | | |
| **Fall** | | |
| MATH 1132 | Calculus with Analytic Geometry II (minimum grade of C) [1] | 4 |
| MATH 2125 | Introduction to Discrete Mathematics (minimum grade of C) | 3 |
| MATH 2115 | Introduction to Linear Algebra (minimum grade of C) | 3 |
| AREA C | Humanities Course [2] | 3 |
| AREA E | World Cultures | 3 |
| | **Credit Hours** | **16** |
| **Spring** | | |
| MATH 3107 | Differential Equations (minimum grade of C) | 3 |
| MATH 3155 | Introduction to Mathematical Proofs (minimum grade of C) | 3 |
| MATH 3175 | Introduction to Probability (minimum grade of C) | 3 |
| AREA C | Fine Arts Course | 3 |
| MATH 2135 | Calculus with Analytic Geometry 3 (minimum grade of C) | 4 |
| | **Credit Hours** | **16** |
| **Third Year** | | |
| **Fall** | | |
| POLS 1101 | American Government | 3 |
| MATH 5151U | Introduction to Real Analysis I (minimum grade of C) | 3 |
| MATH 5175U | Mathematical Statistics (minimum grade of C) | 3 |
| AREA D | Lab Science | 4 |
| KINS 1106 or PHED 1205 | Lifetime Wellness or Concepts of Fitness | 2 |
| PEDS | | 1 |
| | **Credit Hours** | **16** |
| **Spring** | | |
| MATH 5111U | Introduction to Abstract Algebra I (minimum grade of C) | 3 |
| AREA H | Program Elective (minimum grade of C) | 3 |
| AREA H | Program Elective (minimum grade of C) | 3 |
| AREA I | General Elective [3] | 3 |
| AREA I | Upper Level General Elective [3] | 3 |
| | **Credit Hours** | **15** |
| **Fourth Year** | | |
| **Fall** | | |
| MATH 4795 | Senior Seminar in Mathematics (minimum grade of C) | 3 |
| AREA H | Program Elective (minimum grade of C) | 3 |
| AREA I | General Elective [3] | 1 |
| AREA I | General Elective [3] | 3 |
| AREA I | Upper Level General Elective [3] | 3 |
| | **Credit Hours** | **13** |
| **Spring** | | |
| AREA I | Upper Level General Elective [3] | 3 |
| AREA I | General Elective [3] | 3 |
| AREA I | General Elective [3] | 3 |
| AREA I | General Elective [3] | 3 |
| HIST 2111 or HIST 2112 | U. S. History to 1865 or U. S. History since 1865 | 3 |
| | **Credit Hours** | **15** |
| | **Total Credit Hours** | **123** |

[1] If MATH 1132 is used in Area D, the one extra hour will count in Area F.

[2] ITDS 2125 Historical Perspectives on the Philosophy of Science and Mathematics recommended for the UTeach program.

[3] If an elective course is taken to complete the UTeach program or minor, then a C or better is required.

**The student needs to work with his/her advisor to choose appropriate elective courses to make sure that he/she meets the total hours required for the program (123 or 125-128 with UTeach).**