## MATHEMATICS (BS) APPLIED MATHEMATICAL SCIENCES

## Program Map

Course Title

Credit
Hours
First Year
Fall

\left.| MATH 1113 | Pre-Calculus (minimum grade of C) | 4 |
| :--- | :--- | ---: |
| (Apply 3 credits to Area A and 1 credit to Area G.) |  |  |$\right)$


| Spring |  |  |
| :---: | :---: | :---: |
| MATH 1131 | Calculus with Analytic Geometry I (minimum grade of C) | 4 |
| 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) | 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 5125 U | Discrete Mathematics | 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 |

## Third Year

Fall

| POLS 1101 | American Government | 3 |
| :--- | :--- | ---: |
| AREA H | Program Elective (minimum grade of C) | 3 |
| MATH 5175U | Mathematical Statistics (minimum grade of <br> C) | 3 |
| AREA D | Lab Science | 4 |
| KINS 1106 <br> or PHED 1205 | Lifetime Wellness <br> or Concepts of Fitness | 2 |
| PEDS | Credit Hours | 1 |
|  | Mathematical Preparation for Business,  <br> Spring Industrial, and Government Careers <br> (minimum grade of C)  | $\mathbf{1 6}$ |
| MATH 3139 | Program Elective (minimum grade of C) | 3 |
| AREA H | Program Elective (minimum grade of C) | 3 |
| AREA I | General Elective 3 |  |

Fourth Year
Fall

| AREA H | Program Elective (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 |

## Footnotes

${ }^{1}$ If MATH 1132 Calculus with Analytic Geometry II 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 is 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.

## Additional Notes

This program map illustrates appropriate coursework for completing a degree within four years, provided that course grades allow for earned credit. Please consult with your advisor to determine when courses can be switched out with others and taken in a different semester or sequence than illustrated since not all courses are taught every semester.

This map is for illustrative purposes only and does not consittute a legal contract on the part of CSU since degree requirements or course offerings could change. As always, check with your advisor.

Students must complete "Area A" (ENGL 1101 English Composition I, ENGL 1102 English Composition II, and MATH 1113 Pre-Calculusor MATH 1131 Calculus with Analytic Geometry I) prior to reaching 30 hours and earn a "C" or higher in ENGL 1101 and 1102.

As of Fall 2013, all undergraduate students are required each semester to meet the 2.0 institutional GPA standard for satisfactory academic progress.

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).

