## MATHEMATICS (BS) -APPLIED MATHEMATICAL SCIENCES

## **Program Map**

Course	Title	Credit Hours
First Year Fall		
MATH 1113	Pre-Calculus (minimum grade of C)	4
	s to Mathematics and Quantitative Skills and gram Requirements.)	
ENGL 1101	English Composition I (minimum grade of C)	3
Technology, Mathematics, and Sciences	Lab Science	4
Institutional Priorities	COMM 1110 Public Speaking or foreign language 1001, 1002, 2001, 2002	3
Social Sciences	Behavioral Science	3
Spring	Credit Hours	17
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
	s to Field of Study Requirements and 1 am Requirements.)	
Institutional Priorities	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
Arts, Humanities, and Ethics	Humanities Course <sup>2</sup>	3
Social Sciences	World Cultures	3
	Credit Hours	16
Spring	Differential Equations (minimum grade of	2
MATH 3107	Differential Equations (minimum grade of C)	3
MATH 5125U	Discrete Mathematics	3

MATH 3175	Introduction to Probability (minimum grade of C)	3
Arts, Humanities, and Ethics	Fine Arts Course	3
MATH 2135	Calculus with Analytic Geometry 3	4
	(minimum grade of C)	
	Credit Hours	16
Third Year Fall		
POLS 1101	American Government	3
Program Electives	Program Elective (minimum grade of C)	3
MATH 5175U	Mathematical Statistics (minimum grade of C)	3
Technology, Mathematics, and Sciences	Lab Science	4
KINS 1106 or PHED 1205	Lifetime Wellness or Concepts of Fitness	2
Health and Wellness	PEDS elective	1
	Credit Hours	16
Spring		
MATH 3139	Mathematical Preparation for Business, Industrial, and Government Careers (minimum grade of C)	3
Program Electives	Program Elective (minimum grade of C)	3
Program Electives	Program Elective (minimum grade of C)	3
General Electives	General Elective <sup>3</sup>	3
<b>General Electives</b>	Upper Level General Elective <sup>3</sup>	3
	Credit Hours	15
Fourth Year Fall		
Program Electives	Program Elective (minimum grade of C)	3
Program Electives	Program Elective (minimum grade of C)	3
	General Elective <sup>3</sup>	1
	General Elective <sup>3</sup>	3
<b>General Electives</b>	Upper Level General Elective <sup>3</sup>	3
	Credit Hours	13
Spring		
	Upper Level General Elective <sup>3</sup>	3
	General Elective <sup>3</sup>	3
	General Elective <sup>3</sup>	3
General Electives	General Elective <sup>3</sup>	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**

- If MATH 1132 Calculus with Analytic Geometry II is used in the area of Technology, Mathematics and Sciences, the one extra hour will count in Field of Study Requirements.
- ITDS 2125 Historical Perspectives on the Philosophy of Science and Mathematics is recommended for the UTeach program.
- 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 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).