

DEPARTMENT OF MATHEMATICS
Overview of Degree Requirements for all our Majors
For use with 2003-04 and 2004-06 Catalog

Effective Fall 2006, there are several course changes. The new course requirement is given inside the brackets []. If you have already satisfactorily passed a required course which has now been replaced (for example, 127A is now 25), you have still met the requirement. If you have any questions, ask your adviser. One copy of this sheet, after approval by your adviser, will be kept in your file. Afterwards, **deviations may be made only upon approval by your adviser.**

BS – Applied Mathematics 81-87 units

Preparatory Subject Matter

MAT 12 (or high school equivalent)	0 – 3
MAT 21A, 21B, 21C, 21D, 22A, 22B.....	22
ECS 30	4
One two-quarter sequence from PHY 9AB, BIS 1AB, CHE 2AB, ECN1AB, STA 32, 102, or other approved applied preparatory courses.....	7 - 10
	33 - 39

Depth Subject Matter

MAT 108.....	4
MAT 127A [25], 127B [125A]	8
Two courses from MAT 128A, 128B, 128C, 165	8
MAT 167.....	4
Two courses from MAT 118A, 118B, 118C, 119A, 119B, 131 [135A], 132A [135B], 145, 149A [146], 149B [148], 150A, 150B, 168.....	8
Additional upper division math units selected in consultation with and subject to the approval of your adviser.....	8
Two approved* upper division courses outside the Math Department with extensive use of Mathematics.....	8
	48

BS –Mathematics..... 77-81 units

Preparatory Subject Matter

MAT 12 (or high school equivalent)	0 – 3
MAT 21A, 21B, 21C, 21D, 22A, 22B.....	22
ECS 30 or ENG 6	4
PHY 9A (all plans) or PHY 7A (Plans 2, 3) or STA 13, 32, 100 or 102 (Plans 2, 3)	3 - 4
	29 - 33

Depth Subject Matter

MAT108.....	4
MAT127A [25], 127B [125A]	8
Choose one Plan from the following three	36
Up to 4 of these 36 units may be approved* upper division applied courses outside of Mathematics.	48

Plan 1: Preparation for Graduate Study in Mathematics

MAT 127C [125B].....	4
MAT150A, 150B, 150C.....	12
One course from MAT131 [135A], 147, 167, 185A	4
Additional upper division mathematics units selected in consultation with and subject to the approval of your adviser.....	16

* See individual planning sheets for list of courses out of Mathematics

Plan 2: Mathematics for Secondary Teaching

MAT 149AB [146, 148] or 150AB.....	8
MAT 111	4
MAT 115A	4
MAT 141	4
MAT131 [135A], 132A [135B] or STA 130A, 130B or STA 131A, 131B	8
Additional upper division mathematics units selected in consultation with and subject to the approval of your adviser, including courses required to satisfy the single subject matter waiver for the teaching credential. See the individual planning sheet for this major for a list of these courses.	8

Plan 3: General Mathematics

MAT 149A [146], 149B [148] or 150A, 150B	8
Additional upper division mathematics units selected in consultation with and subject to the approval of your adviser.....	28

BS –Mathematical and Scientific Computation..... 78-81 units

Preparatory Subject Matter

MAT 12 (or high school equivalent)	0 – 3
MAT 21ABC or MAT 17ABC, 21D, 22A, 22B	22
ECS 30	4
ECS 40	4
	<u>30 - 33</u>

Depth Subject Matter

MAT 108.....	4
MAT 127A [25], 127B [125A]	8
MAT 165	4
Choose one Emphasis from the following two.....	<u>32</u>
	48

Computational and Mathematical Biology Emphasis

MAT 128A or 128B	4
MAT 128C	4
MAT 124.....	4
One approved* upper division course in Statistics.....	4
One approved* upper division course in Biology	4
Additional upper division math units selected in consultation with and subject to the approval of your adviser. 4 of these 12 units may be additional approved* upper division course work in Biology.	12

Computational and Mathematical Emphasis

MAT 128A, 128B, 128C.....	12
MAT 167	4
Two approved* upper division courses involving extensive computation or theory of computation.	8
Additional upper division math units selected in consultation with and subject to the approval of your adviser.....	8

* See individual planning sheets for list of courses out of Mathematics