

Roadmap B.S. in Mathematics: Applied Mathematics option

YEAR 1: FALL			YEAR 1: SPRING		
COURSE	UNITS	PREREQ	COURSE	UNITS	PREREQ
MATH 75 (GE Area 2) ⁰	4	ALEKS PPL	MATH 76	4	MATH 75/(75A & B)
CSM 10 (GE Area 1B)	3		CSCI 40	4	MATH 75 (Conc. OK)
GE Area 1A	3		PHYS 4A+4AL (GE 5A+5C) ⁰	4	MATH 76 (Conc. OK)
GE Area 1C	3		Univ. Req. S/L	3	
TOTAL UNITS	13		TOTAL UNITS	15	

YEAR 2: FALL			YEAR 2: SPRING		
COURSE	UNITS	PREREQ	COURSE	UNITS	PREREQ
MATH 77	4	MATH 76	MATH 81	3	MATH 77
MATH 111	4	MATH 76	MATH Elective ²	3	See table below
MATH 120 (Fall only)	3/4	MATH 76 and CSCI 40	GE Area 5B	3	
GE Area 3A	3		GE Area 3B	3	
			HIST 11 or 12 (GE Area 4A)	3	
TOTAL UNITS	14/15		TOTAL UNITS	15	

YEAR 3: FALL			YEAR 3: SPRING		
COURSE	UNITS	PREREQ	COURSE	UNITS	PREREQ
MATH 152 ¹	4	MATH 77	MATH 171	4	MATH 111
MATH Elective ²	3	See table below	MATH 193A (Spring only)	1	MATH 111 & 81 and one of MATH 109, 121, 122, 123, 152, 181, 182.
MATH 107 (Fall only) or MATH 101	3/4	MATH 77 or MATH 75	MATH Elective ²	3	
PL SI 2 (US & CA Govt)	3		GE Area 4B	3	
Univ. Req. A/H	3		GE Area 6	3	
TOTAL UNITS	16/17		TOTAL UNITS	14	

YEAR 4: FALL			YEAR 4: SPRING		
COURSE	UNITS	PREREQ	COURSE	UNITS	PREREQ
MATH 151	4	MATH 111 & MATH 152	MATH Elective ²	3	See table below
MATH 198 or MATH 190 (as free elective)	3	MATH 151 & 171 (or permission)	UD GE Area 2 / Area 5	3	
Free Elective	3		UD GE Area 3	3	
UD GE Area 4 ⁰	3		Free Elect. or MATH 198	3	
Univ. Req. M/I ⁰	3		Writing course (if writing requirement is not satisfied yet)	3	
TOTAL UNITS	16		TOTAL UNITS	15	

⁰3 units of MATH 75 (or MATH 75A) also will satisfy the G.E. Foundation Area 2 requirement.

⁰PHYS 4AL is not required for this option in the math major. If students wish to include PHYS 4A as a GE Area 5A, they must also take PHYS 4AL.

⁰Consider taking ANTH 105W (Univ. Req. M/I) or ANTH 116W (UD GE Area 4) to satisfy your upper division Writing Skills Requirement.

¹ It is suggested to take MATH 81 before taking MATH 152.

² The following table summarizes the MATH ELECTIVES for the APPLIED MATH option. Choose four courses from the following list. You must also take MATH 193A and MATH 198 (in Applied Mathematics).

You should meet with your advisor from the Department of Mathematics every semester, to choose your MATH Electives.

Course Number	Course Title	Prereq	Semester
MATH 109	Applied and Computational Probability	MATH 101 (MATH 107 recommended)	Fall only
MATH 121	Numerical Analysis I	MATH 77 and CSCI 40	Spring only
MATH 122	Numerical Analysis and Scientific Computing II	MATH 81 and CSCI 40 (MATH 120 recommended)	Fall only
MATH 123	Mathematical Modeling	MATH 77	Fall and Spring
MATH 128	Applied Complex Analysis	MATH 77	Fall only
MATH 181	Differential Equations	MATH 81	Fall only
MATH 182	Partial Differential Equations	MATH 81	Spring only