

4+1 Pathway
B.S. + M.S in Applied Mathematics

Freshman Year

FIRST SEMESTER		
Course Title	Catalog Number	Prerequisite(s)
Calculus I (4)	MAT161	MAT 124
Using Technology to Explore Calculus I (1)	MAT163	
Seminar (1)	MAT490	
Intellectual Foundations (IF) course(s)		
College Writing I	CWP 101	

SECOND SEMESTER		
Course Title	Catalog Number	Prerequisite(s)
Calculus II (4)	MAT162	MAT 161
Using Technology to Explore Calculus II (1)	MAT164	MAT 163
Introduction to Linear Algebra (3)	MAT202	MAT 161
Seminar (1)	MAT490	
College Writing II	CWP 102	

Notes: Each semester needs to have 18 credit hours

Sophomore Year

THIRD SEMESTER		
Course Title	Catalog Number	Prerequisite(s)
Calculus III (4)	MAT263	MAT 162
Using Technology to Explore Calculus III (1)	MAT264	MAT 164
Computer Mathematics I (3)	MAT241	MAT 161 & 163
Seminar (1)	MAT490	
IF course(s)		

FOURTH SEMESTER		
Course Title	Catalog Number	Prerequisite(s)
Discrete Mathematics (3)	MAT270	MAT 161
Differential Equations (3)	MAT315	MAT 263
Concentration Required/Elective (3)	MAT319	Check prereq.
IF course(s)		

Notes: Each semester needs to have 18 credit hours

Junior Year

FIFTH SEMESTER		
Course Title	Catalog Number	Prerequisite(s)
Probability Theory (3)	MAT381	MAT 162 & 270
Concentration elective/required (3)	MAT461/318	Check prereq
Concentration elective/required (3)	MAT461/318	Check prereq
Upper division Elective (3)		Check prereq
SIXTH SEMESTER		

Course Title	Catalog Number	Prerequisite(s)
Mathematical Statistics (3)	MAT382	MAT 263 & 381
Concentration required/elective (3)	MAT390	Check prereq
Concentration required/elective (3)	MAT316/486	Check prereq
Upper division Elective (3)		Check prereq
Graduate Course #1	PSM601/602	Check prereq

Notes: One Upper division elective must be taken either in Fall or Spring (or in both semesters, especially if MAT 461 is not offered in that academic year). Please pay close attention to the course offerings as there are conflicting information on the course catalog website.

Senior Year

SEVENTH SEMESTER		
Course Title	Catalog Number	Prerequisite(s)
Concentration Elective/required (3)	MAT383	MAT 382
Concentration Elective/required (3)	MAT481	Check prereq
Upper division Elective (3)		Check prereq
Graduate Course #2	PSM601/602	Check prereq

EIGHTH SEMESTER		
Course Title	Catalog Number	Prerequisite(s)
Special Project (3)	AMT495	Check prereq
Concentration Elective/required (3)	MAT484	Check prereq
Upper Division Math Elective (3)		Check prereq
Graduate Course #3	ACM600/1/2	Check prereq

Notes: To be able make this roadmap work, we need to offer MAT 383 in Fall semesters, rather than in Spring Semesters. SUMMER AFTER SENIOR YEAR - TAKE ACM 690 – PACM Internship