

B.S. in MATHEMATICS
(Teaching Concentration)
Suggested 4-Year Academic Flowchart

Updated 3/10/2020

FRESHMAN			SOPHOMORE			JUNIOR			SENIOR		
Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring
Calculus I MATH 141 (4) * [B4]	Calculus II MATH 142 (4) (MATH 141 w/min C- or Instr. Consent) [GE Elective]	Calculus III MATH 143 (4) (MATH 142 w/min C- or Instr. Consent)	Calculus IV MATH 241 (4) (MATH 143)	Linear Algebra I MATH 206 (4) (MATH 143)	Differential Equations I MATH 242 (4) (MATH 206 & 241)	Combinatorial Math MATH 336 (4) (MATH 248 or Jr Standing)	Euclidean Geometry MATH 442 (4) (MATH 248 w/min C or Instr Cons; Rec: MATH 300)	Modern Geometries MATH 443 (4) (MATH 442)	Introduction to Analysis I MATH 412 (4) (MATH 306)	Senior Project I MATH 461 (2) (Sr Standing)	Senior Project II MATH 462 (2) (MATH 461)
		Fundamentals of Computer Science I CSC/CPE 101 (4)¹ *	Orientation to Mathematics Major MATH 202 (1) (MATH 143)	Methods of Proof in Mathematics MATH 248 (4) (MATH 143)	Linear Algebra II MATH 306 (4) (MATH 206 or 244; 241; 248 w/min C-; or Instr. Consent)	Theory of Numbers MATH 341 (4) (MATH 248 w/min C- or Instr. consent)	Introduction to the History of Mathematics MATH 419 (4) (MATH 248 w/min C-, & 1 Upper Div MATH course, or Instr Cons)	Concentration Elective (4)³ *	Concentration Elective (4)³ *	Abstract Algebra I MATH 481 (4) (MATH 306 or MATH 341)	Abstract Algebra II MATH 482 (4) (MATH 481)
Expository Writing ENGL 133/134 (4)** [A2]			General Physics IA PHYS 141 (4)¹ (MATH 141 w/min C-; MATH 142 or 182. Recom: HS physics)	General Physics II or III PHYS 132 or 133 (4)¹ * [B1 & B3]		Technology in Mathematics Education MATH 300 (4) (MATH 248)	Statistics I STAT 301 (4) (Coreq: MATH 141)	Upper Division Statistics STAT 302 or 305 or 425 (4) *			Advanced Mathematics for Teaching MATH 423 (4) (MATH 442 and 481)
Oral Communication COMS 101/102 (4)** [A1]			Early Field Experience SCM 300 (4)² (Soph Standing)							GE (4) **	
GE (4) **											
GE (4) **	GE (4) **			GE (4) **	GE (4) **	GE (4) **	GE (4) **	GE (4) **	GE (4) **	GE (4) **	GE (4) **
Reasoning, Argumentation, & Writing [A3] COMS 126; COMS / ENGL 145; ENGL 148; PHIL 126 (4)** (Completion of GE A2 with a C- or better) Can be taken anytime between Winter of Freshman and Winter of Sophomore Years.											
	Free Elective (2)	Free Elective (4)	Free Elective (3)		Free Elective (2)	Graduation Writing Requirement GWR* (Students can attempt to fulfill the requirement after 90 earned units; students should complete the requirement before senior year)					
16	14	16	16	16	14	16	16	16	12	14	14
										TOTAL:	180

Notes:

MOST GENERAL EDUCATION COURSES CAN BE TAKEN IN ANY ORDER AS LONG AS PREREQUISITES ARE MET

* Refer to current catalog for prerequisites.

** One course from each of the following GE areas must be completed: A1, A2, A3, B2, Upper-Division B, C1, C2, Lower-Division C Elective, Upper-Division C, D1, D2 (8), Upper-Division D, E, and GE Electives. Upper-Division B, Upper-Division C, and Upper-Division D should be taken only after Junior standing is reached (90 units).

Refer to online catalog for GE course selection, United States Cultural Pluralism (USCP) and Graduation Writing Requirement.

USCP requirement can be satisfied by some (but not all) courses within GE categories: Upper-Division B, C1, Upper-Division C, D1, D2, Upp

¹ The PHYS/CSC course sequences may be taken in either order depending on your interests.

² SCM requires 45 hours of observations at local schools. Students should plan their schedules to have a 4-hr block free during elementary school hours each v

³ Select 8 units from the following: CSC/CPE 202, MATH 304, 335, 344, 406, 408, 413, 416, 435, 437, 440, 451, 459 or 460, 461 and 462, 470, PHYS 132

Legend:

Course Title		Major (61)
Course # (Units)		Concentration (48)
(Prerequisite)		General Ed. (60)
[GE Area]		Free Electives (11)