

CURRICULUM GUIDE
Mathematics, B.S. (Mathematics Teaching Concentration)
2022-2023

Website: www.math.eku.edu
 Email Contact: shane.redmond@eku.edu

Department of Mathematics and Statistics
 521 Lancaster Ave.
 313 Wallace Bldg.
 Richmond, KY 40475
 859-622-5942

The schedule below is an **EXAMPLE** of how you can arrange your class schedule. You are strongly advised to meet with the Chair of the Department Mathematics & Statistics or with your academic advisor prior to registration for appropriate placement in MAT courses.

	Fall Semester	Spring Semester	Course Number	Course Name
Freshman Year	SCO 100M	1	CED 100	0
	⊕ MAT 234	4	EDF 203	3
	⊖ STA 270 (fulfills Gen. Ed. 2)	4	⊖ SED 104 (fulfills Gen. Ed. 6)	3
	⊕ Gen. Ed. 1A (ENG 101)	3	MAT 239	3
	Gen. Ed. 5B (Soc. & Behav. Sci.)	3	MAT 244	4
			⊕ Gen. Ed. 1B (ENG 102)	3
	TOTAL	15	TOTAL	16
Sophomore Year	MAT 254	4	CED 200	0
	MAT 301	3	EDF 204	2
	⊕ Gen. Ed. 1C (Oral Comm.)	3	EDF 219	3
	Gen. Ed. 4 (Nat. Sci.)	3	MAT 303 (spring only)	3
	Gen. Ed. 6 (Diversity)	3	CSC 160, 174, 177 or 190	3
			MAT 203 (spring only)	3
	⊕ 30 hrs complete + apply to professional education program		Gen. Ed. 4 (Nat. Sci.)	3
TOTAL	16	TOTAL	17	
Junior Year	CED 300	0.5	EDF 413	3
	EDC 300	3	EMS 490	3
	EMS 300W	3	CED 400	0.5
	MAT 308 (fall only)	3	MAT 315 (spring only)	3
	Gen. Ed. 5A (History)	3	MAT 305 (spring only)	3
	‡ Concentration Elective	3	‡ Concentration Elective	3
	TOTAL	15.5	TOTAL	15.5
Senior Year	ESE/MAT 550 (fall only)	3	CED 499 (ACCT)	9
	CED 450 (fall only)	1	EMS 474	3
	Gen. Ed. 3A (Arts)	3		
	Gen. Ed. 3B (Humanities)	3		
	APPLY FOR STUDENT TEACHING			
TOTAL	13	TOTAL	12	
TOTAL HOURS TO DEGREE COMPLETION		120		

Course Number	Course Name
GENERAL EDUCATION & UNIVERSITY REQUIREMENTS (37)	
SCO 100M	Student Success Seminar in Mathematics and Statistics (1)
CORE COURSE REQUIREMENTS (24)	
MAT 234	Calculus I (4)
MAT 239	Linear Algebra and Matrices (3)
MAT 244	Calculus II (4)
MAT 254	Calculus III (4)
MAT 301	Logic and Set Theory (3)
MAT 308	Modern Algebra I (3) (fall only)
MAT 315	Introduction to Analysis (3) (spring only)
MATHEMATICS TEACHING CONCENTRATION REQUIREMENTS (15)	
MAE 303	Mathematical Models and Applications (3) (spring only)
MAE 305	Problem Solving and Technology (3) (spring only)
MAT 203	Geometry for Middle and Elementary School Teachers (3) (spring only)
‡ PLUS SIX (6) HOURS selected from CSC 320; any MAT course numbered 300 or above (except for 301, 308, 315, and 349), or any STA course numbered 300 or above (except for STA 349). (Concentration Elective)	
SUPPORTING COURSE REQUIREMENTS (MATHEMATICS TEACHING) (4)	
CSC 170 or CSC 174 or CSC 177 or CSC 190	Intro to Game Programming (3) Introduction to Programming for Science & Engineering (3) Introduction to Visual Basic (3) Object-Oriented Programming I (3)
⊖ STA 270	Applied Statistics (4)
PROFESSIONAL EDUCATION REQUIREMENTS (37)	
EDC 300	Differentiation in Inclusive Classrooms (3)
EDF 203	Philosophical & Historical Found. of Ed. (3)
EDF 204	Emerging Instructional Technologies (2)
EDF 219	Human Development and Learning (3)
EDF 413	Assessment in Education (3)
EMS 300W	Curriculum & Instructional Design (3)
EMS 474	Teaching Content Reading (3)
EMS 490	Classroom & Behavior Management in P-12 (3)
⊕ ESE 550/MAT 550	Teaching Math. in the Secondary Schools (3)
⊖ SED 104	Introduction to Special Education (3)
PLUS ELEVEN (11) HOURS of Clinical Experiences to include:	
CED 100	Clinical I: Intro to the Education Prof. (0)
CED 200	Clinical II: Understanding the Learner (0)
CED 300	Clinical III: curriculum and Instruct. Des. (.5)
CED 400	Clinical IV: Diagnosis & Perception (.5)
CED 450	Clinical V: Practicing Teaching (1)
CED 499	Supervised Student Teaching P-12 (9)
FREE ELECTIVES (0-3)	

* **PREREQUISITES:** Consult with your advisor and/or the University catalog regarding prerequisites for upper division MAT courses.

⊕ Student must have completed 30 hours by the end of the second semester and apply for admission to Professional Education Program.

⊖ Must be completed before enrolling in CED 300 and applying to the Teacher Ed. program.

⊕ ESE 550 and MAT 550 are cross listed.

⊖ Denotes that 3 credit hours from this course are/can be applied to fulfill a Gen. Ed. requirement.

Upper division courses: All students are required to have a minimum of 42 hrs. upper division (300-level or above) courses distributed throughout Major/Supporting/Gen Ed/Free Electives categories.

Refer to the University Catalog at <http://www.catalogs.eku.edu/> regarding University and General Education Requirements. All baccalaureate degree seeking students who enter the University are required to successfully complete one writing intensive course following completion of the ENG 102, ENG 105, or HON 102/103. Writing intensive courses are designated with the suffix "W" following the course prefix and number (e.g. HUM 300W).

Applied Critical & Creative Thinking (ACCT) Requirement: Mathematics majors with a Mathematics Teaching Concentration will fulfill ACCT with-CED 499. (Credit hours may be incorporated into program requirements.)