

CURRICULUM GUIDE

Mathematics/Teaching, B.S. (Computer Science/Mathematics Teaching Concentration)
2017-2018

Website: www.math.eku.edu

Email Contact: daniel.mundfrom@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 100T	1	1	1
	♣ MAT 234 <i>or</i> 234H	4	4	4
	♠ STA 270 (fulfills Gen. Ed. 2)	4	4	4
	♣ Gen. Ed. 1A (ENG 101)	3	3	3
	Gen Ed. 3A (Humanities)	3	3	3
	TOTAL	15	TOTAL	16
Sophomore Year	CSC 190	3	3	3
	EDF 204	2	2	2
	MAT 301	3	3	3
	♣ Gen. Ed. 1C (Oral Comm.)	3	3	3
	Gen. Ed. 6 (Diversity)	3	3	3
	Free Elective	1	1	1
	♣ 30 hrs complete + apply to professional education program			
TOTAL	15	TOTAL	15	
Junior Year	CED 300	0.5	0.5	0.5
	CSC 195	3	3	3
	EDC 300	3	3	3
	EMS 300W	3	3	3
	MAT 308 (fall only)	3	3	3
	Gen. Ed. 4 (Nat. Sci.)	3	3	3
	TOTAL	15.5	TOTAL	15.5
Senior Year	CED 450 (fall only)	1	1	1
	CSC 250, 330, <i>or</i> 340	3	3	3
	ESE/MAT 550 (fall only)	3	3	3
	MAT 334 (fall only)	3	3	3
	MAE 475 (fall only)	3	3	3
	Gen. Ed. 5B (Soc. & Behav. Sci.)	3	3	3
	APPLY FOR STUDENT TEACHING			
TOTAL	16	TOTAL	12	
TOTAL HOURS TO DEGREE COMPLETION		120		

Course Number	Course Name
GENERAL EDUCATION & UNIVERSITY REQUIREMENTS (37)	
SCO 100T	Student Success Seminar in Mathematics and Statistics (1)
CORE COURSE REQUIREMENTS (29)	
MAT 234 <i>or</i> MAT 234H	Calculus I (4)
MAT 239	Honors Calculus I (4)
MAT 244 <i>or</i> MAT 244H	Linear Algebra and Matrices (3)
MAT 301	Calculus II (4)
MAT 306	Honors Calculus II (4)
MAT 308	Logic and Set Theory (3)
MAT 334	Discrete Mathematics (3)
MAT 380	Modern Algebra I (3)
MAE 475	Modern College Geometry (3)
COMPUTER SCIENCE/MATHEMATICS TEACHING CONCENTRATION REQUIREMENTS (15)	
CSC 190	Object-Oriented Programming I (3)
CSC 191	Object-Oriented Programming II (3)
CSC 195	Intro to Discrete Structures (3)
CSC 310	Data Structure (3)
CSC 250 <i>or</i> CSC 330 <i>or</i> CSC 340	Intro to Interactive Games/App. (3)
	System Environments & Networks (3)
	Ethics & Software Engineering (3)
All courses must be completed with a grade of at least "C." At least five upper-division courses which satisfy the major requirements must be completed at EKU.	
SUPPORTING COURSE REQUIREMENTS (COMPUTER SCIENCE/MATHEMATICS TEACHING CONCENTRATION) (1) ♠	
♠ 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)
♠ ESE 550 and MAT 550 are cross listed.	

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

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 Teaching majors will fulfill ACCT with CED 499. (Credit hours may be incorporated into program requirements.)