

CURRICULUM GUIDE

Statistics, B.S.

2017-2018

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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	
Freshman Year	SCO 100T	1	STA 340	3
	STA 270	4	MAT 239	3
	⁶ MAT 234 <i>or</i> 234H (fulfills Gen. Ed. 2)	4	MAT 244 <i>or</i> 244H	4
	Gen. Ed. 1A (ENG 101)	3	Gen. Ed. 1B (ENG 102)	3
	Gen. Ed. 5B (Soc. & Behav. Sci.)	3	Gen. Ed. 3A (Arts)	3
	TOTAL	15	TOTAL	16
Sophomore Year	† STA Restricted Elective	3	† STA Restricted Elective	3
	MAT 254 <i>or</i> 254H	4	Gen. Ed. 3B (Humanities)	3
	Gen. Ed. 1C (Oral Comm.)	3	Gen. Ed. 4 (Nat. Sci.)	3
	Gen. Ed. 4 (Nat. Sci.)	3	Gen. Ed. 5A (History)	3
	Gen. Ed. 6 (Diversity)	3	Gen. Ed. 6 (Diversity)	3
	TOTAL	16	TOTAL	15
Junior Year	STA 585	3	‡ CSC/MAT/STA Elective (upper division)	3
	CSC 160, 177, <i>or</i> 190	3	Free Elective (Writing Intensive Course recommended)	3
	Free Elective (upper division)	3	Free Elective (upper division)	3
	Free Elective	3	Free Elective (upper division)	3
	Free Elective	3	Free Elective	3
	TOTAL	15	TOTAL	15
Senior Year	ACCT (Tutoring)	0	STA 521 (spring only)	3
	STA 520 (fall only)	3	STA 498 (spring only)	1
	‡ CSC/MAT/STA Elective (upper division)	3	Free Elective (ACCT) (upper division)	3
	Free Elective (upper division)	3	Free Elective (upper division)	3
	Free Elective (upper division)	3	Free Elective	3
	Free Elective	3		
TOTAL	15	TOTAL	13	
TOTAL HOURS TO DEGREE COMPLETION		120		

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

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. If 300 level classes are taken for Gen. Ed., they can be used to fulfill the 42 hours instead of upper division free electives.

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: Statistics majors will fulfill ACCT with any of the following: a 349 Co-op experience in any subject area, a program-approved service-learning course, a program-approved undergraduate scholarly or creative activity, HON 420 with a program approved thesis topic, a program-approved leadership experience, or a program-approved study abroad experience. (Credit hours are incorporated into program requirements).

Course Number	Course Name
GENERAL EDUCATION & UNIVERSITY REQUIREMENTS (37)	
SCO 100T	Student Success Seminar in Mathematics and Statistics (1)
CORE COURSE REQUIREMENTS (40)	
MAT 239	Linear Algebra and Matrices (3)
MAT 244 <i>or</i> MAT 244H	Calculus II (4)
MAT 254 <i>or</i> MAT 254H	Honors Calculus II (4)
STA 270	Calculus III (4)
STA 340	Honors Calculus III (4)
STA 498	Applied Statistics I (4)
STA 520	Statistics Capstone (1)
STA 521	Applied Regression Analysis (3)
STA 585	Mathematical Statistics I (3)
	Mathematical Statistics II (3)
	Experimental Design (3)
† PLUS SIX (6) HOURS selected from (STA Restricted Elective):	
STA 470	Applied Probability (3)
STA 375	Sampling Methods (3)
STA 380	Nonparametric Statistics (3)
STA 570	Quality Control and Reliability (3)
STA 575	Statistical Methods Using SAS (3)
STA 580	R and Introductory Data Mining (3)
Must achieve a cumulative GPA of 2.0 in these STA courses.	
‡ PLUS SIX (6) HOURS of CSC/MAT/STA courses numbered 300 or above (excluding any 349 course, CSC 305, 306, MAT 303, 475, 501, 502, STA 500 and 503).	
SUPPORTING COURSE REQUIREMENTS (4)	
CSC 160 <i>or</i> CSC 177 <i>or</i> CSC 190	Introduction to Programming (3)
	Introduction to Visual Basic (3)
	Object-Oriented Programming I (3)
⁶ MAT 234 <i>or</i> ⁶ MAT 234H	Calculus I (4)
	Honors Calculus I (4)
FREE ELECTIVES (39)	

⁶ Denotes that 3 credit hours from this course are/can be applied to fulfill a Gen. Ed. requirement if a lower level MAT class is not taken prior to MAT 234.