

# Roadmap: Mathematics - Bachelor of Science

[AS-BS-MATH]
College of Arts and Science
Department of Mathematical Sciences

Catalog Year: 2009-2010

Critical requirements are boldface in shaded areas

Course Subject and Title	Credit Hours	Upper Division	Min. Grade	Important Notes		
Semester One: [16 Credit Hours]						
CS 10051 Introduction to Computer Science	4			Fulfills LER Mathematics and Critical Reasoning		
MATH 12002 Analytic Geometry and Calculus I	5					
ENG 11011 College Writing I	3			Fulfills LER Composition		
US 10097 Destination Kent State: FYE	1			Not required for transfer students with 25 credits		
LER Humanities or Fine Arts	3			Should fulfill diversity requirement; visit www.kent.edu/catalog and search "LER" and "diversity" for course lists		
Semester Two: [16 Credit Hours]						
MATH 12003 Analytic Geometry and Calculus II	5					
PHY 23101 General University Physics	5			Fulfills LER Basic Sciences		
LER Humanities	3			Should fulfill diversity requirement; visit www.kent.edu/catalog and search "LER" and		
LER Social Sciences	3			"diversity" for course lists		
Semester Three: [16-17 Credit Hours]						
MATH 21001 Linear Algebra with Applications	3					
MATH 22005 Analytic Geometry and Calculus III	3					
ENG 21011 College Writing II	3			Fulfills LER Composition		
Foreign Language Elementary I	4-5					
LER Social Sciences	3			Should fulfill diversity requirement if not satisfied earlier; visit <a href="https://www.kent.edu/catalog">www.kent.edu/catalog</a> and search "LER" and "diversity" for course lists		
Semester Four: [16-17 Credit Hours]						
Foreign Language Elementary II	4-5					
LER Additional	3			Should fulfill diversity requirement if not satisfied earlier; visit www.kent.edu/catalog and		
LER Fine Arts	3			search "LER" and "diversity" for course lists		
Allied Area Electives	6			See note 1 on page 2		
Semester Five: [15 Credit Hours]						
MATH 41001 Introduction to Modern Algebra I	3	•	С	Fulfills writing-intensive course requirement; see note 1 on page 2		
LER Additional	3			Should fulfill diversity requirement if not satisfied earlier; visit www.kent.edu/catalog and		
LER Basic Sciences	3			search "LER" and "diversity" for course lists		
Allied Area Electives	3			See note 1 on page 2		
General Elective (lower or upper division)	3					
Semester Six: [15 Credit Hours]						
MATH 41002 Introduction to Modern Algebra II	3	•	С	Fulfills writing-intensive course requirement; see note 1 on page 2		
MATH 41021 Theory of Matrices	3			Offered in spring only		
Allied Area Electives	6	-		See note 2 on page 2		
General Elective (lower or upper division)	3					
Semester Seven: [15 Credit Hours]						
Semester Seven: [15 Credit Hours]  MATH 42001 Introduction to Analysis I	3	•		Fulfills writing-intensive course requirement; see note 1 on page 2		
	<b>3</b>	•		Fulfills writing-intensive course requirement; see note 1 on page 2 See note 2 on page 2		
MATH 42001 Introduction to Analysis I				see note 1 on page 2		



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Semester Eight: [12 Credit Hours]				
MATH 42002 Introduction to Analysis II	3	•		Fulfills writing-intensive course requirement; see note 1 below
CS or MATH Electives (40000 level)	6			
General Elective (lower or upper division)	3			

**Graduation Requirements Summary** 

Total Hours	Upper-Division	Liberal Education	Diversity Course	Writing-Intensive	Minimum	
	Hours Requ	Requirements Hours	Global / Domestic	vviiting-intensive	Major GPA	Overall GPA
121	42	45	LER or General Electives	MATH 41001, 41002, 42001 or 42002	2.0	2.0

Note 1: To satisfy the writing-intensive course requirement (see description below), one of these courses must be earned with minimum C grade.

Note 2: Allied area electives (18 credit hours), selected in consultation with the major advisor from approved courses in the following:

1-18

BSCI upper-division courses 1-18 MIS upper-division courses 1-18 CHEM upper-division courses 1-18 PHY upper-division courses 1-18 PHIL 31045 Formal Logic CS upper-division courses 1-18 3 ECON upper-division courses 1-18 PHIL 41035 Philosophy of Science 3 GEOL upper-division courses 1-18 PHIL 41045 Metalogic 3

### Liberal Education Requirements (LER)

MATH upper-division courses

Students must complete a minimum 36 credit hours of Liberal Education Requirements. Colleges or degree programs may specify certain courses to fulfill the requirements. Courses in the students' major field will not count toward the completion of any LER. Honors equivalents shall satisfy the LER. None of the courses on the LER list may be taken with a pass/fail grade.

### **Diversity Course Requirement**

Students must complete a two-course diversity requirement, consisting of one with a domestic focus and one with a global focus. One course must be come from the LER and cannot be in the student's major. The second course may be taken as a second LER; or within a major or minor; or as a general elective; or, with dean's approval, by completing one semester of study in another country.

### Writing-Intensive Course Requirement

Students must complete a one-course writing-intensive requirement in their major and earn minimum C (2.00) grade.

## **Upper-Division Requirement**

In general, baccalaureate programs require the successful completion of at least 39 upper-division (numbered 30000 to 49999) credit hours of coursework. Programs in the College of Arts and Sciences require a minimum of 42 hours of upper-division coursework.