



**Roadmap: Middle Childhood Education - Mathematics and Science –
Bachelor of Science in Education**

EH-BSE-MCED-MTSC
Education, Health and Human Services
School of Teaching, Learning and Curriculum Studies
Catalog Year: 2014-2015

This roadmap is a recommended semester-by-semester plan of study for this major. However, courses and milestones designed as critical (!) must be completed in the semester listed to ensure a timely graduation.

Critical	Course Subject and Title	Credit Hours	Upper Div.	Min. Grade	Major GPA	Type	Term Taken
Semester One [17 Credits]							
!	MATH 14001 Basic Mathematics Concepts I	4		C		KMC	
	GEOG 17063 World Geography	3				DG/KSS	
	PHY 11030 Seven Ideas that Shook the Universe	3		C		KBS	
	US 10097 Destination Kent State: First Year Experience	1					
	Kent Core Requirement	3					
	Kent Core Requirement	3					
Semester Two [19 Credits]							
Requirement: successful completion of Praxis Core Reading (156 score), Writing (162 score) and Mathematics (150 score)							
	CULT 29535 Education in a Democratic Society	3		C			
	ANTH 18630 Human Evolution or BSCI 10002 Life on Planet Earth	3		C		KBS	
	CHEM 10030 Chemistry in Our World	3		C		KAD	
	HIST 11050 World History: Ancient and Medieval or HIST 12070 History of the United States: The Formative Period or PAS 23001 Black Experience I: Beginnings-1865	3				KHU	
	MATH 11010 Algebra for Calculus	3		C		KAD	
	MATH 14002 Basic Mathematics Concepts II	4		C		KMC	
Semester Three [19 Credits]							
Requirement: minimum 2.750 cumulative GPA by the end of term							
!	EPSY 29525 Educational Psychology	3		C			
	BSCI 10120 Biological Foundations	4		C		KBS	
	ENG 22071 Great Books to 1700 or ENG 22072 Great Books since 1700	3				KHU	
	MATH 10041 Introductory Statistics (4) or MATH 30011 Basic Probability and Statistics (3)	3-4	■	C		KMC	
	MATH 11022 Trigonometry	3		C		KMC	
	Kent Core Requirement	3					
Semester Four [18 Credits]							
Requirement: minimum 2.750 cumulative GPA; Note: apply online for advanced study by the second Friday of the term							
!	CHDS 20092 Field Experience I: Middle Childhood	1		C		ELR	
!	HDFS 24013 Early Adolescence	3		C			
!	MATH 12002 Analytic Geometry and Calculus I	5		C		KMC	
	CHEM 10060 General Chemistry I and CHEM 10062 General Chemistry Laboratory I or PHY 13001 General College Physics I and PHY 13021 General College Physics Laboratory I	5		C		KBS	
	GEOL 11040 How the Earth Works and GEOL 11041 How the Earth Works Laboratory or GEOL 11042 Earth and Life Through Time and GEOL 11043 Earth and Life Through Time Laboratory	4		C		KBS	
Semester Five [18 Credits]							
Requirement: admission to advanced study; minimum 2.750 cumulative GPA							
!	MCED 30001 Teaching Mathematics in Middle Childhood I	3	■	C			
!	MCED 30002 Integrated Social Studies and Science in Middle Childhood	3	■	C			
!	MCED 31000 Teaching and Learning in Middle Childhood	3	■	C			
!	MCED 40006 Reading and Writing in Middle Childhood²	6	■	C		WIC	
	MATH 34001 Fundamental Concepts of Algebra	3	■	C			
Semester Six [18 Credits]							
Requirement: minimum 2.750 cumulative GPA; Note: apply for student teaching							
!	MCED 40001 Teaching Mathematics in Middle Childhood II	3	■	C			
!	MCED 40002 Teaching Science in Middle Childhood II	3	■	C			
!	MCED 40007 Teaching Reading With Literature in Middle Childhood	3	■	C			
!	MCED 41000 Curriculum and Organization in Middle Childhood	3	■	C			
!	MATH 34002 Fundamental Concepts of Geometry	3	■	C			
	PSYC 11762 General Psychology	3				DD/KSS	
Semester Seven [18 Credits]							
Requirement: minimum 2.750 cumulative GPA; Note: apply for graduation							
	MCED 40005 Effective Use of Phonics in Reading	3	■	C			
	HED 42575 Health and Learning: Strategies for Students and Teachers	3	■	C			
	ITEC 19525 Educational Technology	3		C			
	MATH 12003 Analytic Geometry and Calculus II or MATH 21001 Linear Algebra with Applications or MATH 31011 Discrete Mathematics	3-5		C			
	SPED 23000 Introduction to Exceptionalities	3		C		DD	
	Science Elective ³	3-4		C			



Critical	Course Subject and Title	Credit Hours	Upper Div.	Min. Grade	Major GPA	Type	Term Taken
Semester Eight [12 Credits]							
Requirement: minimum C grade in all professional courses and minimum 2.750 cumulative GPA							
!	MCED 42358 Student Teaching in Middle Childhood	9	■	S		ELR	
!	MCED 49525 Inquiry into Professional Practice: Middle Childhood	3	■	C			

Graduation Requirements Summary

Minimum Total Hours	Minimum Upper-Division Hours	Minimum Kent Core Hours	Minimum Overall GPA
139	39	36	2.750

1. US 10097 is not required of transfer students with 25 credits or students age 21+ at time of admission.
2. A minimum C (2.000) grade must be earned with to fulfill the writing-intensive requirement.
3. Science electives (3 credit hours)

Choose from the following below	
BSCI 10110 Biological Diversity (4)	GEOG 41073 Conservation of Natural Resources (3)
BSCI 20021 Basic Microbiology (3)	GEOL 21080 All About the Oceans (3)
BSCI 30275 Local Flora (4)	GEOL 41073 Geology of Ohio (3)
BSCI 30560 Invertebrate Zoology (4)	PHY 21040 Physics in Entertainment and Arts (3)
GEOG 31062 Fundamentals of Meteorology (3)	PHY 21430 Frontiers in Astronomy (3)

Special Major Notes:

Licensure Requirement (not required for graduation):

Candidates seeking Ohio licensure are required to pass specific assessments in order to apply for licensure. See [Ohio Department of Education-Educator Preparation](http://www.ohio.gov/education) website for more information on assessments specific to licensure type. Taking and passing the licensure tests prior to graduation is encouraged but not required.

Students who pass 15 credits of non-remedial academic coursework each fall and spring semester and the 1-credit First Year Experience course will accumulate 120 credits in four years. This major requires 139 credits for graduation. Students can stay on track for graduation by:

- Declaring their major as freshmen and completing all courses in sequence (bear in mind that switching majors may cause a delay in graduation);
- Prioritizing required courses above electives;
- Meeting regularly with their academic advisors to stay on track;
- Passing each required course the first time attempted and maintaining the minimal GPA for the major;
- Successfully completing more than 15 credit hours of relevant coursework (field-based work, internship) during academic semesters; and/or
- Completing relevant coursework (field-based work, internship) during summer sessions.

University Requirements Summary

Type	Categories	Course(s) Satisfying Category	Remaining Requirements
KCM	Kent Core I. Composition Enrollment based on placement test	a grade of C is required in both courses visit www.kent.edu/catalog/kent-core	6
KMC	Kent Core II. Mathematics and Critical Reasoning Enrollment based on placement test	MATH 11010	fulfilled
KHU	Kent Core III. Humanities Minimum one course from humanities in Arts and Sciences; may fulfill diversity requirement	ENG 22071 or ENG 22072	fulfilled
KFA	Kent Core IV. Fine Arts Minimum one course from the fine arts; may fulfill diversity requirement	visit www.kent.edu/catalog/kent-core	3
KFH	Kent Core V. Humanities or Fine Arts One additional course from either the humanities or fine arts category, may fulfill diversity requirement.	HIST 11050 or HIST 12070	fulfilled
KSS	Kent Core VI. Social Sciences Must be selected from two curricular areas; may fulfill diversity requirement	GEOG 17063 and PSYC 11762	fulfilled
KBS	Kent Core VII. Basic Sciences Must include one laboratory	ANTH 18630 BSCI 10002 and 10120; CHEM 10062 or PHY 13021	fulfilled
KAD	Kent Core VIII. Additional May fulfill diversity requirement	PSYC 11762, ECON 22060	fulfilled
DD	Domestic Diversity Course Requirement Either domestic or global diversity must be from Kent Core	SPED 23000	fulfilled
DG	Global Diversity Course Requirement Either domestic or global diversity must be from Kent Core	GEOG 17063	fulfilled
ELR	Experiential Learning Requirement Either course or non-course experience approved by the appropriate faculty member	CHDS 20092, MCED 42358	fulfilled
WIC	Writing-Intensive Course Requirement Minimum C (2.000) grade	MCED 40006	fulfilled