AYA INTEGRATED MATHEMATICS, BA

Bachelor of Arts in Education, Adolescent to Young Adult Integrated Mathematics Licensure (Grades 7-12) (530702BA)

More on the Adolescent to Young Adult Integrated Mathematics Licensure major (https://www.uakron.edu/education/academic-programs/undergraduate-programs.dot)

The LeBron James Family Foundation School of Education includes the areas of early childhood inclusive, middle childhood, secondary (adolescent to young adult), preschool to grades 12 (P-12) education and the areas of special education as an intervention specialist for early childhood (P-3 mild/moderate/ intensive), mild to moderate (K-12) or moderate to intensive (K-12). Initial Professional Education programs are available at the undergraduate, post-baccalaureate and master's degree levels. The secondary program prepares teachers of grades seven to twelve to teach language arts, mathematics, science, or social studies.

School of Education Admission Requirements For Those Persons Seeking State of Ohio Licensure

All students must complete the following requirements for admission:

1. **School of Education Application for Admission.** Responses to the questions on the application will help School of Education advisors offer the most effective and efficient advisement. It will also help advisors know students as individuals with unique backgrounds and experiences. Applications are available online at: http://www.uakron.edu/education/academic-programs/how-to-apply.dot.
2. **Intercollege Transfer (Undergraduate students only).** Those students enrolled in another college wishing to complete degree requirements in the School of Education should see their advisor to initiate an intercollege transfer to the School of Education. Those students may not access School of Education core courses prior to admission. Students planning to complete teacher education as part of their degree requirements in another college need not complete an ICT.
3. **Grade Point Average of 2.5 or better overall and 2.5 or better overall in prerequisite credit hours from specific courses identified by the School.**
4. **Evidence of competency in reading comprehension and writing as demonstrated by one of the following:**
   a. A composite ACT score of 21 or higher, or
   b. A composite SAT-R score of 1060 (Math and Verbal) or higher, or
   c. A grade of "B" or higher in a course that meets the University's General Education English Composition I requirement.
5. **Evidence of competency in mathematics as shown by one of the following:**
   a. A composite ACT score of 21 or higher, or
   b. A composite SAT-R score of 1060 (Math and Verbal) or higher, or
   c. A grade of "B" or better in a minimum of 3 credits of mathematics that meets the University's General Education mathematics requirement.
6. **Signed Criminal Background Check Acknowledgment Form**

The LeBron James Family Foundation School of Education
Zook Hall, Room 002
Akron, Ohio 44325-4201
(330) 972-7750

The following information has official approval of **The LeBron James Family Foundation School of Education** and **The Buchtel College of Arts & Sciences**, but is intended only as a supplemental guide. Official degree requirements are established at the time of transfer and admission to the degree-granting college. Students should refer to the Degree Progress Report (DPR) which is definitive for graduation requirements. *Completion of this degree within the identified time frame below is contingent upon many factors, including but not limited to: class availability, total number of required credits, work schedule, finances, family, course drops/withdrawals, successfully passing courses, prerequisites, among others.* The transfer process is completed through an appointment with your academic advisor.

Requirements Summary

Code	Title	Hours
General Education Requirements (https://bulletin.uakron.edu/undergraduate/general-education/)		34
Professional Education Requirements for Undergraduate Mathematics Students		39-44
Content Requirements for Undergraduate Integrated Mathematics Students		39-41
Additional Credits for Graduation *		8-1
Total Hours		120

* Bachelor's degrees require a minimum of 120 credit hours for graduation.

Recommended General Education Courses

Code	Title	Hours
Students pursuing a bachelor's degree must complete the following General Education coursework. Diversity courses may also fulfill major or Breadth of Knowledge requirements. Integrated and Applied Learning courses may also fulfill requirements in the major.		
Students are not required to enroll in the specific courses listed below. However, to facilitate successful degree completion, the academic department strongly encourages completion of the following recommendations.		
Academic Foundations		**12**
Mathematics, Statistics and Logic: 3 credit hours		
Speaking: 3 credit hours		
COMM:105	Introduction to Public Speaking	
or COMM:10	Effective Oral Communication	
Writing: 6 credit hours		
ENGL:111	English Composition I	
ENGL:112	English Composition II	
Breadth of Knowledge		**22**
Arts/Humanities: 9 credit hours		
Natural Sciences: 7 credit hours		
Social Sciences: 6 credit hours		
Diversity		

Domestic Diversity	
Global Diversity	
Integrated and Applied Learning	
Select one class from one of the following subcategories:	
Complex Issues Facing Society	
Capstone	
Review the General Education Requirements page for detailed course listings.	
Total Hours	34

Professional Education Requirements for Undergraduate Mathematics Students [1]

Code	Title	Hours
Professional Education		
EDFN:200	Introduction to Education	3
EDFN:220	Educational Psychology	3
EDSE:100	Orientation to the AYA/P-12 Multi-Age Programs	0
EDSE:320	Introduction to Teaching in the Content Area	3
EDSE:420	Instructional Techniques in Secondary Education	3
EDSE:421	Instructional Techniques in Secondary Education - II	3
EDCI:308	Instructional Design and Assessment	6
EDSE:430	Clinical Teaching I	3
EDSE:431	Clinical Teaching II	3
EDCI:440	Literacy in the Content Areas	3
EDIS:225	Introduction to Exceptionalities	3
Phase II:		
EDSE:495	Student Teaching: Secondary Education [2]	6-11
Total Hours		39-44

1 39 credit hours with a grade of C or better and a GPA of 2.5 or better.

2 All students must have the approval of the Student Teaching Committee, based upon approved application to student teaching, and passing OAE content test. Planned teaching experience in schools selected and supervised by the Office of Field experiences. To qualify for student teaching, students must have a 2.5 GPA overall, 2.5 in education classes, and 2.5 in the student's major, in methods courses, core courses, and in their teaching fields. Satisfactory completion of a minimum of 100 hours of field experience is also required before student teaching.

Content Requirements for Undergraduate Integrated Mathematics Students

Theoretical Math Option [1]

Code	Title	Hours
MATH:221	Analytic Geometry-Calculus I	4
MATH:222	Analytic Geometry-Calculus II	4
MATH:223	Analytic Geometry-Calculus III	4
MATH:307	Fundamentals of Advanced Mathematics	3
MATH:312	Linear Algebra	3
MATH:335	Introduction to Ordinary Differential Equations	3
or MATH:412	Abstract Algebra II	
or MATH:421	Advanced Calculus I	
MATH:401	History of Mathematics	3
MATH:411	Abstract Algebra I	3
MATH:441	Concepts in Geometry	4
CPSC:209	Computer Science I	4
STAT:461	Applied Statistics	4
Total Hours		39

1 Students must have a GPA of 2.5 or higher in the mathematics content area prior to student teaching.

STEM-Based Option

Code	Title	Hours
MATH:208	Introduction to Discrete Mathematics	4
or MATH:209	Discrete Mathematics for Educators	
MATH:221	Analytic Geometry-Calculus I	4
MATH:222	Analytic Geometry-Calculus II	4
MATH:223	Analytic Geometry-Calculus III	4
MATH:312	Linear Algebra	3
MATH:401	History of Mathematics	3
MATH:441	Concepts in Geometry	4
STAT:461	Applied Statistics	4
CPSC:200	Programming for Data Science	4
PHYS:291	Elementary Classical Physics I	4
EDCI:439	Engineering for Educators	3
Total Hours		41

Recommended Sequence

Theoretical Option:

1st Year

Fall Semester		**Hours**
ENGL:111	English Composition I	3
MATH:221	Analytic Geometry-Calculus I	4
CPSC:209	Computer Science I	4
	Natural Science with Lab Requirement	4
	Hours	15
Spring Semester		
ENGL:112	English Composition II	3
MATH:222	Analytic Geometry-Calculus II	4
	Speaking Requirement	3
	Natural Science Requirement	3
	Social Science Requirement	3
	Hours	16

2nd Year

Fall Semester		
MATH:223	Analytic Geometry-Calculus III	4
MATH:307	Fundamentals of Advanced Mathematics	3
EDFN:200	Introduction to Education	3
EDSE:100	Orientation to the AYA/P-12 Multi-Age Programs	0
	Social Science Requirement	3
	Humanities Requirement	3
	Hours	16

Spring Semester		
EDFN:220	Educational Psychology	3
EDIS:225	Introduction to Exceptionalities	3
MATH:312	Linear Algebra	3
STAT:461	Applied Statistics	4
	Arts Requirement	3
	Hours	16
3rd Year		
Fall Semester		
EDCI:308	Instructional Design and Assessment	6
MATH:411	Abstract Algebra I	3
	Art/Humanities Requirement	3
Select one of the following:		
MATH:335	Introduction to Ordinary Differential Equations	3
MATH:421	Advanced Calculus I	
	Hours	15
Spring Semester		
EDSE:320	Introduction to Teaching in the Content Area	3
MATH:401	History of Mathematics	3
	Complex Issues Requirement	3
	General Elective	3
	Global Diversity Requirement or General Elective	3
	Hours	15
4th Year		
Fall Semester		
MATH:441	Concepts in Geometry	4
EDSE:420	Instructional Techniques in Secondary Education	3
EDSE:430	Clinical Teaching I	3
EDCI:440	Literacy in the Content Areas	3
	Domestic Diversity Requirement or General Elective	3
	Hours	16
Spring Semester		
EDSE:421	Instructional Techniques in Secondary Education - II	3
EDSE:431	Clinical Teaching II	3
EDSE:495	Student Teaching: Secondary Education	6
	Hours	12
	Total Hours	121

STEM Option:

1st Year		
Fall Semester		**Hours**
ENGL:111	English Composition I	3
MATH:208	Introduction to Discrete Mathematics	4
MATH:221	Analytic Geometry-Calculus I	4
COMM:105 or COMM:106	Introduction to Public Speaking or Effective Oral Communication	3
	Hours	14
Spring Semester		
ENGL:112	English Composition II	3
MATH:222	Analytic Geometry-Calculus II	4
	Social Science Requirement	3
	Social Science Requirement	3
	Natural Science Requirement	3
	Hours	16
2nd Year		
Fall Semester		
EDFN:200	Introduction to Education	3
EDSE:100	Orientation to the AYA/P-12 Multi-Age Programs	0
MATH:223	Analytic Geometry-Calculus III	4
PHYS:291	Elementary Classical Physics I	4
	Humanities Requirement	3
	Arts Requirement	3
	Hours	17
Spring Semester		
EDFN:220	Educational Psychology	3
EDIS:225	Introduction to Exceptionalities	3
MATH:312	Linear Algebra	3
CPSC:200	Programming for Data Science	4
	Art/Humanities Requirement	3
	Hours	16
3rd Year		
Fall Semester		
EDCI:308	Instructional Design and Assessment	6
STAT:461	Applied Statistics	4
	Complex Issues Requirement	3
	General Elective	3
	Hours	16
Spring Semester		
MATH:401	History of Mathematics	3
EDSE:320	Introduction to Teaching in the Content Area	3
EDCI:439	Engineering for Educators	3
	Global Diversity Requirement or General Elective	3
	General Elective	2-3
	Hours	14-15
4th Year		
Fall Semester		
EDSE:420	Instructional Techniques in Secondary Education	3
EDSE:430	Clinical Teaching I	3
EDCI:440	Literacy in the Content Areas	3
MATH:441	Concepts in Geometry	4
	Domestic Diversity Requirement or General Elective	3
	Hours	16
Spring Semester		
EDSE:421	Instructional Techniques in Secondary Education - II	3

EDSE:431	Clinical Teaching II	3
EDSE:495	Student Teaching: Secondary Education	6
	Hours	12
	Total Hours	121-122