

# SECONDARY EDUCATION - MATHEMATICS A.A.T. (TRANSFER)

Program website (<https://frederick.edu/programs/education-child-care/education.aspx>)

**Program Manager:** Julie Horton

**Email:** [juhorton@frederick.edu](mailto:juhorton@frederick.edu)

**Phone:** 301.846.2461

## Program Description

Designed for students planning to transfer to a mathematics teacher preparation program at a four-year college or university in the state of Maryland. Students planning to transfer out of the state should consult with Career and Academic Planning Services as well as an academic advisor at their transfer school of choice.

## Program Learning Outcomes

- Identify, apply and discuss major concepts, principles, and theories related to human development by completing one or more papers and projects based on observation of children and adolescents.
- Demonstrate knowledge of curriculum approaches and effective methods of teaching and learning through creating and presenting lesson plans applicable to course topics.
- Compose and collect artifacts (i.e. papers, projects) for current and future portfolios and participate in activities (i.e. case study experiences, interviews) to demonstrate how students differ in their development and approaches to learning.
- Demonstrate characteristics of future teachers by behaving professionally at events and experiences both on and off campus, utilizing college-level skills in course assignments, etc.
- Develop an initial knowledge base in future teaching content areas by successfully completing coursework in relevant areas.

## Program Requirements

Code	Title	Credits
<b>English</b>		
ENGL 101	English Composition	3
<b>Mathematics</b>		
MATH 185	Calculus I	4
MATH 195	Calculus II	4
<b>Social &amp; Behavioral Sciences</b>		
PSYC 101	General Psychology	3
EDUC 110	Schools and Society	3
<b>Arts &amp; Humanities</b>		
Arts Elective (Gen Ed course list) ( <a href="https://frederick-public.courseleaf.com/general-education-core/#arts">https://frederick-public.courseleaf.com/general-education-core/#arts</a> )		3
Communication Elective (Gen Ed course list) ( <a href="https://frederick-public.courseleaf.com/general-education-core/#communication">https://frederick-public.courseleaf.com/general-education-core/#communication</a> )		3
Humanities Elective (Gen Ed course list) ( <a href="https://frederick-public.courseleaf.com/general-education-core/#humanities">https://frederick-public.courseleaf.com/general-education-core/#humanities</a> )		3
<b>Biological &amp; Physical Sciences</b>		
PHYS 151	General Physics I	4
PHYS 252	General Physics II	4
<b>Interdisciplinary &amp; Emerging Issues</b>		

Wellness Elective (Gen Ed course list) ( <a href="https://frederick-public.courseleaf.com/general-education-core/#wellness">https://frederick-public.courseleaf.com/general-education-core/#wellness</a> )	3
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Computer Literacy Elective (Gen Ed course list) ( <a href="https://frederick-public.courseleaf.com/general-education-core/#computer">https://frederick-public.courseleaf.com/general-education-core/#computer</a> )	3
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### Other Requirements

EDUC 220	Educational Psychology	3
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EDUC 230	Foundations of Special Education (satisfies cultural competence requirement)	3
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MATH 285	Calculus III	4
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MATH 265	Linear Algebra (Fall)	4
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PSYC 204	Psychology of Adolescence	3
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Electives - Select six credits of electives <sup>1</sup>	6
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Total Credits	63
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Recommended to include MATH 165 Precalculus or MATH 145 College Algebra, if needed, and PHYS 101 Survey of Physics if there has been no previous coursework in physics.

## A.A.T. Requirements

To earn the A.A.T., students must achieve either a) a 3.0 cumulative grade point average on a 4.0 scale OR b) a 2.75 cumulative grade point average on a 4.0 scale and qualifying scores on the basic skills assessments for teacher licensure as established by the State Superintendent of Schools and as approved by the State Board of Education (students must provide the Registrar's Office with qualifying scores on one of the state approved basic skills tests for future teachers) AND students must earn a "C" or better in all courses used to satisfy the A.A.T. requirements.

Students are strongly encouraged to consult with an academic advisor at their transfer institution as early as possible and should be aware that some colleges and universities may require higher GPAs and/or additional tests. Forty-five (45) hours of observation in a school based setting is required as part of the education degree coursework.

## Transfer Note

For more information on careers and transfer, contact the Career and Academic Planning Services office at 301.846.2471 or visit Transfer Services (<https://www.frederick.edu/student-resources/counseling-advising/transfer-services.aspx>).

## Guided Pathway to Success (GPS)

Suggested schedules map your path to degree completion.

Students should meet with an advisor each semester to carefully select and sequence courses based on their specific academic goals and interests. Visit Jefferson Hall or call 301.846.2471 for advising.

Recommended First Semester		Credits
ENGL 101	English Composition <sup>1</sup>	3
EDUC 110	Schools and Society (Milestone)	3
MATH 185	Calculus I <sup>1,2</sup>	4
PSYC 101	General Psychology	3
Wellness Elective (Gen Ed course list) ( <a href="https://frederick-public.courseleaf.com/general-education-core/#wellness">https://frederick-public.courseleaf.com/general-education-core/#wellness</a> )		3
Credits		16

Recommended Second Semester		Credits
MATH 195	Calculus II (Milestone)	4
EDUC 230	Foundations of Special Education	3
PSYC 204	Psychology of Adolescence	3
Communication Elective (Gen Ed course list) ( <a href="https://frederick-public.courseleaf.com/general-education-core/#communication">https://frederick-public.courseleaf.com/general-education-core/#communication</a> )		3

## 2 Secondary Education - Mathematics A.A.T. (Transfer)

Elective <sup>3</sup>		3
<b>Ensure that MSDE Testing Requirements are met: Praxis Core for Educators, ACT, SAT or GRE<sup>4</sup></b>		
Credits		16
<b>Recommended Third Semester</b>		
Arts Elective (Gen Ed course list) ( <a href="https://frederick-public.courseleaf.com/general-education-core/#arts">https://frederick-public.courseleaf.com/general-education-core/#arts</a> )		3
MATH 265	Linear Algebra (Fall)	4
EDUC 220	Educational Psychology (Milestone)	3
PHYS 151	General Physics I <sup>3</sup>	4
Credits		14
<b>Recommended Fourth Semester</b>		
PHYS 252	General Physics II	4
MATH 285	Calculus III	4
Elective <sup>3</sup>		3
Humanities Elective (Gen Ed course list) ( <a href="https://frederick-public.courseleaf.com/general-education-core/#humanities">https://frederick-public.courseleaf.com/general-education-core/#humanities</a> )		3
Computer Literacy Elective (Gen Ed course list) ( <a href="https://frederick-public.courseleaf.com/general-education-core/#computer">https://frederick-public.courseleaf.com/general-education-core/#computer</a> )		3
Credits		17
Total Credits		63

Fall, Spring, Summer - courses with a Fall, Spring, or Summer notation indicate the course is offered in the specified semester only.

1

Take this course within the first 24 credits.

2

Prerequisite: MATH 165 Precalculus

3

Recommend MATH 165 Precalculus or MATH 145 College Algebra in the first semester if needed, and PHYS 101 Survey of Physics if there has been no previous work in Physics.

4

The A.A.T. degree is designed to meet state requirements for the first two years of teacher education. To earn the A.A.T., students must achieve either a) a 3.0 cumulative grade point average on a 4.0 scale OR b) a 2.75 cumulative grade point average on a 4.0 scale and qualifying scores on the basic skills assessments for teacher licensure as established by the State Superintendent of Schools and as approved by the State Board of Education (students must provide the Registrar's Office with qualifying scores on one of the state approved basic skills tests for future teachers) AND students must earn a "C" or better in all courses used to satisfy the A.A.T. requirements.

Students are strongly encouraged to consult with an academic advisor at their transfer institution as early as possible and should be aware that some colleges and universities may require higher GPAs and/or additional tests. Forty-five (45) hours of observation in a school based setting is required as part of the education degree coursework.

### Part-time Students

Part-time students should complete courses in the order listed on the pathway. Please contact program manager for questions about part-time status.

Students who take fewer than 15 credits each semester or who require developmental English or Math coursework will need additional semesters to complete their degrees. Summer term and January session classes may help students to make faster progress.

### Pathway Legend

Milestone - courses with the Milestone notation should be taken within the recommend credit range to stay on track for program completion.