

Bachelor of Science in Middle Grades Math/Science Education

Bachelor of Science in Middle Grades Math/Science Education LOWER DIVISION (ASSOCIATE DEGREE) COURSES

The following program of study is designed to prepare students not only for the AA degree, but also for the general knowledge and middle grades math and middle grades science subject area exams in the Florida Teacher Certification Exam (FTCE) Program. If you plan to be a middle grades math or science teacher and are just beginning your AA degree, this program of study will best prepare you for that career choice. If you have already completed your AA degree and some of your general education courses differ from those listed below, your AA degree will still meet that component of the admission process; however, you may need to complete additional coursework, independent study, or workshops to be well prepared for the middle grades education FTCE exam.

There are three options in the Math/Science Education degree: Math, Science, and Math and Science. While there is no single certification exam for both Math and Science, these three options allow students to prepare to take the Math subject area exam, the Science subject area exam, or both.

Lab/field experiences are elements of classes with a C or L suffix.

Middle Grades Math/Science Education: Math Option

General Education Course Requirements		Credit Hours
ENC 1101	English Composition I	3
ENC 1102	English Composition II	3
MAC 1105	College Algebra	3
MAC 1140	Pre-calculus Algebra	3
_____	Two General Education Humanities courses	6
_____	General Education Social Science/History/Government course	3
PSY 2012	Psychology	3
GLY 2010C	Physical Geology ^{1,2}	4
_____	General Education Biological Science ¹	4
_____	General Education Science ^{1,2}	4

¹ At least one physical or biological science must include a lab.

² Other general education natural science courses may meet program requirement; see your advisor.

Total General Education Credits 36

Common Prerequisites		Credit Hours
EDF 1005	Introduction to Education	3
EDG 2701	Teaching Diverse Populations	3
EME 2040	Teaching Instructional Technology	3

Total Common Prerequisites Credits 9

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Lower Division Electives		Credit Hours
MGF 1106	Math for Liberal Arts I	3
STA 2023	Statistics (or another approved transferable math course)	3
SPC 1600	Speech	3
AMH 2010/ 2020	American History I or II	3
POS 1041	American Government	3

Total Lower Division Elective Credits **15**

TOTAL LOWER DIVISION (ASSOCIATE DEGREE) REQUIREMENTS³ **60**

³ Students who do not have foreign language requirement at the high school level will need to complete eight (8) credits of foreign language.

UPPER DIVISION COURSES⁴

Core Professional Education Courses		Credit Hours
EDF 3131C	Learning and the Developing Adolescent	3
EDF 3430	Measurement, Evaluation & Assessment in Education	3
EEX 3070	Methods of Inclusion & Collaboration	3
EDG 3410C	Classroom Management, School Safety, Law & Ethics	3
EDG 3343	Instructional Strategies	3
EME 3410C	Integrating Technology in the Classroom	3
TSL 4081C	TESOL Issues and Practice	3
RED 3335C	Teaching Reading in the Content Areas	3
RED 3324C	Teaching in the Middle School Curriculum	3

Total Core Professional Education Credits **27**

Additional Courses Required		Credit Hours
MAE 4312C	How Children Learn Math	3
MAE 4320C	Teaching Methods in Middle School Math	3
MAE 4940C	Teaching Methods in Middle School Math Practicum	1
MTG 2206	College Geometry	3
MAC 1114	Trigonometry	3
MAC 2311	Calculus I	4
MHF 4404	The History of Math	3
_____	Math elective	3

Total Additional Required Credits **23**

Student Teaching		Credit Hours
MAE 4945	Student Teaching in Math	9
MAE 4930C	Seminar in Math Education	1

Total Student Teaching Credits **10**

TOTAL UPPER DIVISION CREDITS **60**
TOTAL CREDITS FOR THE DEGREE **120**

⁴ Courses with the “C” or “L” designation include an extra number of “lab” hours to accommodate field experiences.

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Middle Grades Math/Science Education: Science Option

**All students in the Science Option must take a two-course science sequence with a lab. Substitutions for the biology sequence and for any other coursework in this program of study must be approved by the Teacher Education Advisor.*

General Education Course Requirements		Credit Hours
ENC 1101	English Composition I	3
ENC 1102	English Composition II	3
MAC 1105	College Algebra	3
MAC 1140	Pre-calculus Algebra	3
_____	Two General Education Humanities courses	6
_____	General Education Social Science/History/Government course	3
PSY 2012	Psychology	3
GLY 2010C	Physical Geology ²	4
BSC 1010C	Principles of Biology I	4
CHM 1025	Chemical Science	
	OR	
PHY 1020	Physical Science	4

² Other general education natural science courses may meet program requirement; see your advisor.

Total General Education Credits 36

Common Prerequisites		Credit Hours
EDF 1005	Introduction to Education	3
EDG 2701	Teaching Diverse Populations	3
EME 2040	Teaching Instructional Technology	3

Total Common Prerequisites Credits 9

Lower Division Electives		Credit Hours
SPC 1600	Speech	3
LIS 2004	Internet Research	1
AMH 2010	American History I or II	3
POS 1041	American Government	3
_____	A science lab	1
_____	A science elective	4

Total Lower Division Elective Credits 15

TOTAL LOWER DIVISION (ASSOCIATE DEGREE) REQUIREMENTS³ 60

³ Students who do not have foreign language requirement at the high school level will need to complete eight (8) credits of foreign language.

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UPPER DIVISION COURSES⁴

Core Professional Education Courses		Credit Hours
EDF 3131C	Learning and the Developing Adolescent	3
EDF 3430	Measurement, Evaluation & Assessment in Education	3
EEX 3070	Methods of Inclusion & Collaboration	3
EDG 3410C	Classroom Management, School Safety, Law & Ethics	3
EDG 3343	Instructional Strategies	3
EME 3410C	Integrating Technology in the Classroom	3
TSL 4081C	TESOL Issues and Practice	3
RED 3335C	Teaching Reading in the Content Areas	3
RED 3324C	Teaching in the Middle School Curriculum	3

Total Core Professional Education Credits 27

Additional Courses Required		Credit Hours
SCE 4320C	Teaching Methods in Middle School Science	3
SCE 4940C	Teaching Methods in Middle School Science Practicum	1
ISC 4145	Global Systems	3
BSC 1011C	Principles of Biology II	4
CHM 1025	Chemical Science	
	OR	
PHY 1020	Physical Science	4
_____	Two science electives	8

Total Additional Courses Required Credits 23

Student Teaching		Credit Hours
SCE 4945	Student Teaching in Science	9
SCE 4930C	Seminar in Science Education	1

Total Student Teaching Credits 10

TOTAL UPPER DIVISION CREDITS 60
TOTAL CREDITS FOR THE DEGREE 120

⁴ Courses with the “C” or “L” designation include an extra number of “lab” hours to accommodate field experiences.

Bachelor of Science in Middle Grades Math/Science Education

Middle Grades Math/Science Education: Math and Science Option

**All students in the Math/Science Option must take a two-course science sequence with a lab. Substitutions for the biology sequence and for any other coursework in this program of study must be approved by the Teacher Education Advisor.*

General Education Course Requirements		Credit Hours
ENC 1101	English Composition I	3
ENC 1102	English Composition II	3
MAC 1105	College Algebra	3
MAC 1140	Pre-calculus Algebra	3
_____	Two General Education Humanities courses	6
_____	General Education Social Science/History/Government course	3
PSY 2012	Psychology	3
GLY 2010C	Physical Geology ²	4
BSC 1010C	Principles of Biology I*	4
CHM 1025	Chemical Science	
	OR	
PHY 1020	Physical Science	4
Total General Education Credits		36

Common Prerequisites		Credit Hours
EDF 1005	Introduction to Education	3
EDG 2701	Teaching Diverse Populations	3
EME 2040	Teaching Instructional Technology	3

Total Common Prerequisites Credits 9

Lower Division Electives		Credit Hours
<i>From the list below, fifteen lower division elective credit hours will be counted towards the B.S. in Middle Grades Math/Science:</i>		
MAC 1114	Trigonometry	3
STA 2023	Statistics	3
BSC 1011C	Principles of Biology II*	4
MGF 1106	Math for Liberal Arts I	3
_____	Any lower division transferable math or science course	—
Total Lower Division Elective Credits		15

TOTAL LOWER DIVISION (ASSOCIATE DEGREE) REQUIREMENTS³ 60

³ Students who do not have foreign language requirement at the high school level will need to complete eight (8) credits of foreign language.

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UPPER DIVISION COURSES⁴

Core Professional Education Courses		Credit Hours
EDF 3131C	Learning and the Developing Adolescent	3
EDF 3430	Measurement, Evaluation & Assessment in Education	3
EEX 3070	Methods of Inclusion & Collaboration	3
EDG 3410C	Classroom Management, School Safety, Law & Ethics	3
EDG 3343	Instructional Strategies	3
EME 3410C	Integrating Technology in the Classroom	3
TSL 4081C	TESOL Issues and Practice	3
RED 3335C	Teaching Reading in the Content Areas	3
RED 3324C	Teaching in the Middle School Curriculum	3

Total Core Professional Education Credits **27**

Additional Courses Required		Credit Hours
MAE 4320C	Teaching Methods in Middle School Math	3
MAE 4940C	Teaching Methods in Middle School Math Practicum	1
SCE 4320C	Teaching Methods in Middle School Science	3
SCE 4940C	Teaching Methods in Middle School Science Practicum	1
MTG 2206	College Geometry	3
ISC 4145	Global Systems	3
CHM 1025	Chemical Science	
<i>or</i>		
PHY 1020	Physical Science	4
_____	Math elective	4

Total Additional Courses Required Credits **22**

Student Teaching		Credit Hours
MAE 4945	Student Teaching in Math	
	OR	
SCE 4945	Student Teaching in Science	9
SCE 4930C	Seminar in Science Education	1
MAE 4930C	Seminar in Math Education	1

Total Student Teaching Credits **11**

TOTAL UPPER DIVISION CREDITS **60**
TOTAL CREDITS FOR THE DEGREE **120**

⁴ Courses with the “C” or “L” designation include an extra number of “lab” hours to accommodate field experiences.