

UCF Degree Programs

Secondary Education - Mathematics Education Track (B.S.)

College of Education and Human Performance
School of Teaching, Learning, and Leadership,
Education Building, Room: 209

<http://education.ucf.edu/mathed>

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The Secondary Education B.S. -Mathematics Education program offers students the option of two tracks: Mathematics Education - Education Track and Mathematics Education - Lifelong Learning Track (non-certification). The Education Track is appropriate for students interested in opportunities for employment with formal, 6-12 schools that require certification. The Lifelong Learning Track is appropriate for students seeking opportunities outside formal, K-12 schools that do not require certification.

Admission Requirements

- Complete the University General Education requirements or its equivalent, i.e. an AA degree from a Florida College System or State University System institution.
- Complete the EDF 2005 Introduction to Teaching Profession, EDF 2085 Introduction to Diversity for Educators and EME 2040 Introduction to Technology for Educators courses with a minimum letter grade of "C-" (1.75) or better.
- Meet the Gordon Rule Requirement.
- Meet the foreign language admission requirement.
- Have a minimum 2.5 overall GPA
- Education Track: Pass all four parts of the General Knowledge Test (no alternatives or waivers are accepted). The Lifelong Learning Track is a non-certification program and does not require the General Knowledge Test.

Degree Requirements

- Students should see an advisor prior to registering for classes
- The courses designated in 1. (General Education) and 2. (Education Common Program Prerequisites) should be completed prior to admission to the major and upper division education courses.
- The Education Track is a state-approved, initial teacher preparation program designed in compliance with Florida Statutes and State Board of Education Rule 6A-5.066. Degree requirements are subject to change based on state mandates.

1. UCF General Education Program (GEP) (37 hrs)

- Students are advised to take the preferred courses.

A: Communication Foundations (9 hrs)

Required	ENC 1101	Composition I	3 hrs
Required	ENC 1102	Composition II	3 hrs
Prefer	SPC 1608	Fundamentals of Oral Communication	3 hrs

B: Cultural & Historical Foundations (9 hrs)

General Education Program elective from section B1 to meet Gordon Rule Requirement	3 hrs
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Select 1:

Prefer	MUL 2010	Enjoyment of Music or	3 hrs
Prefer	THE 2000	Theatre Survey or	3 hrs
Prefer	PHI 2010	Introduction to Philosophy	3 hrs
General Education Program elective: Prefer a second course from GEP section B1			3 hrs

C: Mathematical Foundations (7 hrs)

Required	MAC 2311C	Calculus with Analytic Geometry I	4 hrs
Required	STA 2023	Statistical Methods I	3 hrs

D: Social Foundations (6 hrs)

Prefer	POS 2041	American National Government	3 hrs
Prefer	PSY 2012	General Psychology	3 hrs

E: Science Foundations (6 hrs)

Prefer	PSC 1121	Physical Science	3 hrs
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Select 1: (3 hrs)

Prefer	ANT 2511	The Human Species or	3 hrs
Prefer	BSC 1005	Biological Principles	3 hrs

2. Common Program Prerequisites (CPP) (11 hrs)

- See "Common Prerequisites" in the Transfer and Transitions Services section for more information.

EDF 2005	Introduction to the Teaching Profession	3 hrs
MAC 2311C	Calculus with Analytic Geometry I	GEP
MAC 2312	Calculus with Analytic Geometry II	4 hrs
MAC 2313	Calculus with Analytic Geometry III	4 hrs

3. Core Requirements: Basic Level (12 hrs)

- Education Track requires 12 semester hours
- Lifelong Learning Track requires 15 semester hours
- Both the Education Track and Lifelong Learning Track require successful completion of EDF 2085 and EME 2040
- Students should consult advisor regarding course options.

¹ EDF 2085	Introduction to Diversity for Educators	3 hrs
EME 2040	Introduction to Technology for Educators	3 hrs

¹ In addition to this course, a minimum of 6 hours with an international or diversity focus is required. The foreign language admission requirement may be used to meet this requirement.

Education Track (6 hrs)

¹ EDF 2130	Child and Adolescent Development for Educators	3 hrs
MAC 2311C	Calculus with Analytic Geometry I	GEP
STA 2023	Statistical Methods I	GEP
MAC 2312	Calculus with Analytic Geometry II	CPP
MAC 2313	Calculus with Analytic Geometry III	CPP
MAP 2302	Ordinary Differential Equations I	3 hrs

¹ Courses taken at Florida College System institutions may substitute for select courses in Other Program Requirements with the permission of the department.

Lifelong Learning Track (9 hrs)

MAC 2311C	Calculus with Analytic Geometry I	GEP
STA 2023	Statistical Methods I	GEP
MAC 2312	Calculus with Analytic Geometry II	CPP
MAC 2313	Calculus with Analytic Geometry III	CPP
MAP 2302	Ordinary Differential Equations I	3 hrs
MHS 2330	Career Planning	3 hrs

Select 1: (3 hrs)

EDF 2130	Child and Adolescent Development for Educators or	3 hrs
EDP 2270	Adult Development & Learning	3 hrs

4. Core Requirements: Advanced Level (57 hrs)

- Education Track requires 60 semester hours
- Lifelong Learning Track requires 57 semester hours

Education Core Requirements (18 hrs)

- Education Track requires 18 semester hours of Education Core Requirements
- Lifelong Learning Track requires 21 semester hours of Education Core Requirements

¹ EDG 4410	Teaching Strategies and Classroom Management	3 hrs
EDF 4467	Learning Theory and Assessment	3 hrs
EDF 4603	Analysis and Application of Ethical, Legal, and Safety Issues in Schools	3 hrs
TSL 4080	Theory and Practice of Teaching ESOL Students in Schools	3 hrs
EEX 4242	Teaching Exceptional Students in Secondary Settings	3 hrs
RED 4043	Content Reading in Kindergarten through Grade 12	3 hrs

Lifelong Learning Track: (3 hrs)

MAE 4634	Programs in Teaching of Mathematics	3 hrs
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¹ Prerequisite to Internship I

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Education Track Specialization Requirements 23 hrs

- A grade of "C-" (1.75) or better is required.

MAS 3105	Matrix and Linear Algebra	4 hrs
MAS 3203	Introduction to Number Theory	3 hrs
MHF 3302	Logic and Proof in Mathematics	3 hrs
MTG 4212	Modern Geometries	4 hrs
STA 4163	Statistical Methods II	3 hrs
¹ MAE 4634	Programs in Teaching of Mathematics	3 hrs
¹ MAE 3366	Middle and High School Mathematics for Teaching	3 hrs

¹ Prerequisite to Internship I

Internship I Block 7 hrs

■ Prior to Internship I, the student must have completed all Common Program Prerequisites, all Core Requirements: Basic Level, EDG 4410 and at least 50% of all required mathematics courses including MAE 3366 Middle and High School Mathematics for Teaching, MAE 4634 Programs in Teaching Mathematics and MAP 2302 Differential Equations with a minimum grade of "C-" (1.75) or better. However, a minimum GPA of 2.5 is required in the professional, specialization and overall for admission to Internship I.

■ Passing score on the General Knowledge Test portion of the Florida Teacher Certification Examination (FTCE) is required before application to Internship I.

■ Passing score on the Professional Education Test portion of the Florida Teacher Certification Examination (FTCE) is strongly recommended as soon as possible after completing the following courses: EDG 4410 Teaching Strategies and Classroom Management, EDF 4467 Learning Theory and Assessment, RED 4043 Content Reading Kindergarten through Grade 12, and TSL 4080 Theory and Practice of Teaching ESOL Students in Schools.

■ Students must apply and be approved for Internship I. Deadline dates and applications are available through the Office of Clinical Experiences at

<http://www.education.ucf.edu/clinicalexp/>

MAE 4360	Mathematics Instructional Analysis	4 hrs
MAE 3940	Internship	3 hrs

Internship II Block 12 hrs

■ At least 80% of all required mathematics courses and all methods courses must be completed with a letter grade of "C-" (1.75) or better before registering for Internship II. However, a minimum GPA of 2.5 is required in the professional, specialization and overall for admission to Internship II.

■ Passing scores on all sections [General Knowledge, Professional, and Subject Area (Mathematics 6-12)] of the Florida Teacher Certification Examination (FTCE) are required prior to entry into Internship II.

■ Students must apply and be approved for Internship II. Deadline dates and applications are available through the Office of Clinical Experiences at

<http://www.clinical-experiences.education.ucf.edu>

■ Satisfactory completion of Internship II requires the student to demonstrate proficiency in all Florida Educator Accomplished Practices in accordance with State Board of Education Rule 6A-5.066.

MAE 4941	Internship	9 hrs
ESE 4033C	Critical Issues and Trends in Secondary Education	3 hrs

Lifelong Learning Track Specialization Requirements 36 hrs

■ Select preferred specialization courses with advisor approval. A minimum of nine (9) hours must be taken in the content area. Substitutions are allowed with advisor approval.

■ A grade of "C-"(1.75) or better is required.

■ Must have a total of 48 or more hours of upper level courses to graduate.

MAE 3366	Middle and High School Mathematics for Teaching	3 hrs
MAE 4360	Mathematics Instructional Analysis	4 hrs
MAS 3105	Matrix and Linear Algebra	4 hrs
MAS 3203	Introduction to Number Theory	3 hrs
MHF 3302	Logic and Proof in Mathematics	3 hrs
MTG 4212	Modern Geometries	4 hrs
STA 4163	Statistical Methods II	3 hrs
EDG 4941	Directed Field Experience	1 hr
EDG 4948	Service Learning	3 hrs
DIG 3525	Digital Media Production I	3 hrs
DIG 2000	Introduction to Digital Media	3 hrs
DIG 2030	Digital Video Fundamentals	3 hrs
DIG 2109	Digital Imaging Fundamentals	3 hrs
DIG 2500	Fundamentals of Interactive Design	3 hrs
DIG 3811	User-Centered Design	3 hrs
DEP 2004	Developmental Psychology	3 hrs
DEP 3202	Psychology of Exceptional Children	3 hrs
DEP 3464	Psychology of Aging	3 hrs
EXP 3604	Cognitive Psychology	4 hrs
EXP 3250	Principles of Human Factors Psychology	3 hrs
EAB 3703	Principles of Behavior Modification	3 hrs
MAN 3025	Management of Organizations	3 hrs
MAN 4101	Human Relations in Management	3 hrs
MAR 3023	Marketing	3 hrs
HFT 1000	Introduction to the Hospitality and Tourism Industry	3 hrs
HFT 2750	The Event Industry	3 hrs
ECT 4184	Curriculum Development Techniques for Industry Training	3 hrs
HFT 3798	Fairs and Festivals	3 hrs
HFT 4754	Exhibit and Trade Show Operations	3 hrs

5. Restricted Electives

- None

6. Capstone Requirements

- None

7. Foreign Language Requirements

Admissions

■ State University System foreign language admission requirement: two years in high school or one year of college instruction in a single foreign language. (This requirement applies to those students admitted to the University without the required two units of foreign language in high school.)

Graduation

- None

8. Electives

- None

9. Additional Requirements

- None

10. Required Minors

- None

11. Departmental Exit Requirements

■ Achieve a minimum 2.5 GPA in all courses within the major.

■ In courses throughout the program, you must upload key assignments into your LiveText Dashboard. These key assignments are then assessed by faculty. The resulting data provides evidence of your demonstrated professional growth, reflection, and proficiency in all Florida Educator Accomplished Practices. All teacher education candidates, lifelong learning majors and early childhood and development and education majors (all ECDE tracks) are required to complete all LiveText requirements in order to be cleared for graduation. <http://livetext.education.ucf.edu/>

Education Track

■ Pass all applicable sections of the Florida Teacher Certification Examination. See <http://www.fldoe.org> for test dates and test sites. Effective January 1, 2015, only examination results earned by educators within 10 years prior to the date of application for a new Florida Educator's Certificate with the Florida Department of Education may be acceptable for certification eligibility requirements (SBE Rule 6A-4.002)

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12. University Minimum Exit Requirements

- A 2.0 UCF GPA
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 30 of the last 39 hours of course work must be completed in residency at UCF.
- A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted.
- Complete the General Education Program, the Gordon Rule, and nine hours of Summer credit.

Total Semester Hours Required

- 120

Honors In Major

- None

Related Programs

- None

Certificates

- None

Related Minors

- None

Advising Notes

- None

Transfer Notes

- None

Acceptable Substitutes for Transfer Courses

- None

Plan of Study

(120 hrs)

Freshman Year - Fall

13 hrs

ENC 1101	Composition I	3 hrs
MAC 2311C	Calculus with Analytic Geometry I	4 hrs
PSC 1121	Physical Science	3 hrs
GEP B1 Elective		3 hrs

Freshman Year - Spring

16 hrs

ENC 1102	Composition II	3 hrs
MAC 2312	Calculus with Analytic Geometry II	4 hrs
SPC 1608	Fundamentals of Oral Communication	3 hrs
GEP B3 Elective (Prefer course from section B1)		

Select 1:

3 hrs

ANT 2511	The Human Species or	3 hrs
BSC 1005	Biological Principles	3 hrs

Freshman Year - Summer

10 hrs

MAC 2313	Calculus with Analytic Geometry III	4 hrs
PSY 2012	General Psychology	3 hrs

Select 1:

MUL 2010	Enjoyment of Music or	3 hrs
THE 2000	Theatre Survey or	3 hrs
PHI 2010	Introduction to Philosophy	3 hrs

Sophomore Year - Fall

15 hrs

EDF 2005	Introduction to the Teaching Profession	3 hrs
MAP 2302	Ordinary Differential Equations I	3 hrs
POS 2041	American National Government	3 hrs
STA 2023	Statistical Methods I	3 hrs

Education Track

3 hrs

MHF 3302	Logic and Proof in Mathematics	3 hrs
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Lifelong Learning Track

3 hrs

Choose Lifelong Learning Specialization course		3 hrs
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Sophomore Year - Spring

16 hrs

EME 2040	Introduction to Technology for Educators	3 hrs
EDF 2085	Introduction to Diversity for Educators	3 hrs

Education Track

10 hrs

MAS 3105	Matrix and Linear Algebra and	4 hrs
MAS 3203	Introduction to Number Theory and	3 hrs
EDF 2130	Child and Adolescent Development for Educators	3 hrs

Lifelong Learning Track

7 hrs

MHS 2330	Career Planning and	3 hrs
Choose Lifelong Learning Specialization course		4 hrs

Select 1:

3 hrs

EDF 2130	Child and Adolescent Development for Educators or	3 hrs
EDP 2270	Adult Development & Learning	3 hrs

Junior Year - Fall

EDF 4467	Learning Theory and Assessment	3 hrs
EDG 4410	Teaching Strategies and Classroom Management	3 hrs
EEX 4242	Teaching Exceptional Students in Secondary Settings	3 hrs

Education Track

3 hrs

STA 4163	Statistical Methods II	3 hrs
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Lifelong Learning Track

3 hrs

Choose Lifelong Learning Specialization course		3 hrs
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Junior Year - Spring

12 hrs

RED 4043	Content Reading in Kindergarten through Grade 12	3 hrs
MAE 4634	Programs in Teaching of Mathematics	3 hrs
TSL 4080	Theory and Practice of Teaching ESOL Students in Schools	3 hrs

Education Track

3 hrs

MAE 3366	Middle and High School Mathematics for Teaching	3 hrs
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Lifelong Learning Track

3 hrs

Choose Lifelong Learning Specialization course		3 hrs
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Senior Year - Fall

14 hrs

EDF 4603	Analysis and Application of Ethical, Legal, and Safety Issues in Schools	3 hrs
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Education Track

11 hrs

MTG 4212	Modern Geometries	4 hrs
MAE 4360	Mathematics Instructional Analysis	4 hrs
MAE 3940	Internship	3 hrs

Lifelong Learning Track

11 hrs

Choose Lifelong Learning Specialization courses		11 hrs
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Senior Year - Spring

12 hrs

Education Track

12 hrs

MAE 4941	Internship and	9 hrs
ESE 4033C	Critical Issues and Trends in Secondary Education	3 hrs

Lifelong Learning Track

12 hrs

Choose Lifelong Learning Specialization courses		12 hrs
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Program Academic Learning Compacts

- Program Academic Learning Compacts (student learning outcomes) for undergraduate programs are located at: http://www.o eas.ucf.edu/alc/academic_learning_compacts.htm

Equipment Fees

- Part-Time Student: \$12 per term
- Full-Time Student: \$24 per term