

UCF Degree Programs

Secondary Education - Science Education Physics Track (B.S.)

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

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

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The Secondary Education B.S. - Science Education Physics program offers students the option of two tracks: Science Education - Physics Track and Science Education - Physics Lifelong Learning Track (non-certification). The Education Track is appropriate for students interested in opportunities for employment in formal, 6-12 schools that require certification. The Lifelong Learning Track is appropriate for students seeking opportunities for employment 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 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 (UCF General Education Program) 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 requirement are subject to change based on state mandates.

1. UCF General Education Program (GEP) (38 hrs)

- Students are advised to take the preferred courses.
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|---|----------|------------------------------------|-------|
| 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

Select 1:

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|--|----------|----------------------------|-------|
| 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)

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| Required | MAC 2311C | Calculus with Analytic Geometry I | 4 hrs |
| Prefer | STA 2014C | Principles of Statistics | 3 hrs |

D: Social Foundations (6 hrs)

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

E: Science Foundations (7 hrs)

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| ¹ Required | PHY 2048C | General Physics Using Calculus I | 4 hrs |
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Select 1:

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| ² Prefer | ANT 2511 | The Human Species or | 3 hrs |
| ¹ Prefer | BSC 1005 | Biological Principles | 3 hrs |

¹ A grade of "C-" (1.75) or better is required.

² A grade of "C-" (1.75) or better is required.

2. Common Program Prerequisites (CPP) (23 hrs)

■ See "Common Prerequisites" in the Transfer and Transition Services section for more information.

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| 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 |
| PHY 2048C | General Physics Using Calculus I | GEP |
| PHY 2049C | General Physics Using Calculus II | 4 hrs |
| CHM 2045C | Chemistry Fundamentals I | 4 hrs |
| CHM 2046 | Chemistry Fundamentals II | 3 hrs |
| CHM 2046L | Chemistry Fundamentals Laboratory | 1 hr |

3. Core Requirements: Basic Level (9 hrs)

- Education Track requires 9 semester hours
 - Lifelong Learning Track requires 12 semester hours
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| PHY 2048C | General Physics Using Calculus I | GEP |
| MAC 2311C | Calculus with Analytic Geometry I | GEP |
| ¹ EDF 2085 | Introduction to Diversity for Educators | 3 hrs |
| EME 2040 | Introduction to Technology for Educators | 3 hrs |

¹ In addition, 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 (3 hrs)

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| ¹ EDF 2130 | Child and Adolescent Development for Educators | 3 hrs |
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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 (6 hrs)

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|----------|-----------------|-------|
| MHS 2330 | Career Planning | 3 hrs |
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Select 1:

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

4. Core Requirements: Advanced Level (47 hrs)

- Education Track requires 50 semester hours
 - Lifelong Learning Track requires 47 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

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

Lifelong Learning Track

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| SCE 4361 | Programs in Teaching Science | 3 hrs |
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¹ Prerequisite to Internship I

Education Track Specialization Requirements (13 hrs)

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|-----------|-------------------------------------|-------|
| CHM 2045C | Chemistry Fundamentals I | CPP |
| CHM 2046 | Chemistry Fundamentals II | CPP |
| CHM 2046L | Chemistry Fundamentals Laboratory | CPP |
| MAC 2312 | Calculus with Analytic Geometry II | CPP |
| MAC 2313 | Calculus with Analytic Geometry III | CPP |
| PHY 2049C | General Physics Using Calculus II | CPP |
| PHY 3101 | General Physics Using Calculus III | 3 hrs |

UCF Degree Programs

SCE 4361	Programs in Teaching Science	3 hrs
Elective:	3000 or 4000 level PHY or PHZ prefix	4 hrs
Select 1:		3 hrs
PHY 3752C	Physics of Scientific Instruments or	3 hrs
PHY 3722C	Physics Laboratory-Electronics	3 hrs

Internship I Block 7 hrs

■ Program Internship I Prerequisites: EDG 4410, TSL 4080, all Common Program Prerequisites, all Core Requirements: Basic Level, and at least 50% of all required physics courses must be completed prior to Internship I 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/>

SCE 4360	Science Instructional Analysis	4 hrs
SCE 3940	Internship	3 hrs

Internship II Block 12 hrs

■ At least 80% of all required physics 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 (Physics 6-12) of the Florida Teacher Certification Examination (FTCE) is 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.education.ucf.edu/clinicalexp/>

■ 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-5.006.

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

Lifelong Learning Track Specialization Requirements 26 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.

PHY 3101	General Physics Using Calculus III	3 hrs
PHY 3752C	Physics of Scientific Instruments	3 hrs
PHY 3722C	Physics Laboratory-Electronics	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
ECT 4184	Curriculum Development Techniques for Industry Training	3 hrs
HFT 1000	Introduction to the Hospitality and Tourism Industry	3 hrs
HFT 2750	The Event Industry	3 hrs
HFT 3798	Fairs and Festivals	3 hrs
HFT 4754	Exhibit and Trade Show Operations	3 hrs
SCE 4360	Science Instructional Analysis	4 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)

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

UCF Degree Programs

<p>Related Programs</p> <ul style="list-style-type: none"> ■ None <p>Certificates</p> <ul style="list-style-type: none"> ■ None <p>Related Minors</p> <ul style="list-style-type: none"> ■ None <p>Advising Notes</p> <ul style="list-style-type: none"> ■ None <p>Transfer Notes</p> <ul style="list-style-type: none"> ■ None <p>Acceptable Substitutes for Transfer Courses</p> <ul style="list-style-type: none"> ■ None <p>Plan of Study (120 hrs)</p> <p>Freshman Year - Fall 15 hrs</p> <ul style="list-style-type: none"> GEP B1 Elective 3 hrs ENC 1101 Composition I 3 hrs PSY 2012 General Psychology 3 hrs SPC 1608 Fundamentals of Oral Communication 3 hrs STA 2014C Principles of Statistics 3 hrs <p>Freshman Year - Spring 16 hrs</p> <ul style="list-style-type: none"> GEP B3 Elective (Prefer course from section B1) 3 hrs MAC 2311C Calculus with Analytic Geometry I 4 hrs ENC 1102 Composition II 3 hrs POS 2041 American National Government 3 hrs <p>Select 1:</p> <ul style="list-style-type: none"> MUL 2010 Enjoyment of Music or 3 hrs THE 2000 Theatre Survey or 3 hrs PHI 2010 Introduction to Philosophy 3 hrs <p>Freshman Year - Summer 7 hrs</p> <ul style="list-style-type: none"> MAC 2312 Calculus with Analytic Geometry II 4 hrs ¹ EDF 2005 Introduction to the Teaching Profession 3 hrs 	<p>Education Track 4 hrs</p> <ul style="list-style-type: none"> PHY or PHZ 3000 or 4000 level elective 4 hrs <p>Lifelong Learning Track 4 hrs</p> <ul style="list-style-type: none"> MHS 2330 Career Planning and 3 hrs Choose Lifelong Learning Specialization course 1 hr <p>Junior Year - Summer 3 hrs</p> <ul style="list-style-type: none"> SCE 4361 Programs in Teaching Science 3 hrs <p>Senior Year - Fall 13 hrs</p> <ul style="list-style-type: none"> EDF 4603 Analysis and Application of Ethical, Legal, and Safety Issues in Schools 3 hrs <p>Education Track 10 hrs</p> <ul style="list-style-type: none"> SCE 4360 Science Instructional Analysis 4 hrs SCE 3940 Internship 3 hrs <p>Select 1: 3 hrs</p> <ul style="list-style-type: none"> PHY 3752C Physics of Scientific Instruments or 3 hrs PHY 3722C Physics Laboratory-Electronics 3 hrs <p>Lifelong Learning Track 10 hrs</p> <ul style="list-style-type: none"> Choose Lifelong Learning Specialization courses 10 hrs <p>Senior Year - Spring 12 hrs</p> <p>Education Track 12 hrs</p> <ul style="list-style-type: none"> SCE 4941 Internship and 9 hrs ESE 4033C Critical Issues and Trends in Secondary Education 3 hrs <p>Lifelong Learning Track</p> <ul style="list-style-type: none"> Choose Lifelong Learning Specialization courses 12 hrs <p>Program Academic Learning Compacts</p> <ul style="list-style-type: none"> ■ Program Academic Learning Compacts (student learning outcomes) for undergraduate programs are located at: http://www.o eas.ucf.edu/alc/academic_learning_compacts.htm <p>Equipment Fees</p> <ul style="list-style-type: none"> ■ Part-Time Student: \$12 per term ■ Full-Time Student: \$24 per term
<p>¹ Transfer notes: Courses taken at Florida College System institutions may substitute for select courses in Other Program Requirements with the permission of the department.</p> <p>Sophomore Year - Fall 14 hrs</p> <ul style="list-style-type: none"> MAC 2313 Calculus with Analytic Geometry III 4 hrs PHY 2048C General Physics Using Calculus I 4 hrs EDF 2085 Introduction to Diversity for Educators 3 hrs <p>Select 1: 3 hrs</p> <ul style="list-style-type: none"> ANT 2511 The Human Species or 3 hrs BSC 1005 Biological Principles 3 hrs <p>Sophomore Year - Spring 14 hrs</p> <ul style="list-style-type: none"> CHM 2045C Chemistry Fundamentals I 4 hrs EME 2040 Introduction to Technology for Educators 3 hrs PHY 2049C General Physics Using Calculus II 4 hrs <p>Education Track 3 hrs</p> <ul style="list-style-type: none"> EDF 2130 Child and Adolescent Development for Educators 3 hrs <p>Lifelong Learning Track 3 hrs</p> <p>Select 1: 3 hrs</p> <ul style="list-style-type: none"> EDF 2130 Child and Adolescent Development for Educators or 3 hrs EDP 2270 Adult Development & Learning 3 hrs <p>Junior Year - Fall 12 hrs</p> <ul style="list-style-type: none"> EEX 4242 Teaching Exceptional Students in Secondary Settings 3 hrs EDG 4410 Teaching Strategies and Classroom Management 3 hrs TSL 4080 Theory and Practice of Teaching ESOL Students in Schools 3 hrs <p>Education Track 3 hrs</p> <ul style="list-style-type: none"> PHY 3101 General Physics Using Calculus III 3 hrs <p>Lifelong Learning Track 3 hrs</p> <ul style="list-style-type: none"> Choose Lifelong Learning Specialization course 3 hrs <p>Junior Year - Spring 14 hrs</p> <ul style="list-style-type: none"> EDF 4467 Learning Theory and Assessment 3 hrs RED 4043 Content Reading in Kindergarten through Grade 12 3 hrs CHM 2046 Chemistry Fundamentals II 3 hrs CHM 2046L Chemistry Fundamentals Laboratory 1 hr 	