Secondary Education - Science Education Physics

College of Education and Human Performance
School of Teaching, Learning, and Leadership,
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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.
   - Required ENC 1101 Composition I (3 hrs)
   - Required ENC 1102 Composition II (3 hrs)
   - Prefer SPC 1008 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:
     - Prefer MUL 2010 Enjoyment of Music or THE 2000 Theatre Survey or 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)
   - Prefer STA 2044C Principles of Statistics (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 (7 hrs)
   - Required PHY 2048C General Physics Using Calculus I (4 hrs)
   - Select 1: (3 hrs)
     - Prefer ANT 2511 The Human Species or BSC 1005 Biological Principles (3 hrs)
     - Prefer PHY 2048C General Physics Using Calculus I (3 hrs)
   - 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.
     - EDF 2005 Introduction to the Teaching Profession (3 hrs)
     - MAC 2311C Calculus with Analytic Geometry I (GEP) (4 hrs)
     - 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) (4 hrs)
     - 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
   - PHY 2048C General Physics Using Calculus I (GEP) (4 hrs)
   - MAC 2311C Calculus with Analytic Geometry I (GEP) (4 hrs)
   - 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 (B.S.)
- EDF 2130 Child and Adolescent Development for Educators (3 hrs)
- EDF 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

   Education Track Core Requirements
   - EDF 4467 Learning Theory and Assessment (3 hrs)
   - EDF 4603 Analysis and Application of Ethical, Legal, and Safety Issues in Schools (3 hrs)
   - 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)
   - TSL 4080 Theory and Practice of Teaching ESOL in Schools (3 hrs)

   Lifelong Learning Track
   - SCE 4361 Programs in Teaching Science (3 hrs)

   1 Prerequisite to Internship I

   Education Track Specialization Requirements (13 hrs)
   - CHM 2045C Chemistry Fundamentals I (3 hrs)
   - CHM 2046 Chemistry Fundamentals II (3 hrs)
   - CHM 2046L Chemistry Fundamentals Laboratory (3 hrs)
   - MAC 2312 Calculus with Analytic Geometry II (3 hrs)
   - MAC 2313 Calculus with Analytic Geometry III (3 hrs)
   - PHY 2049C General Physics Using Calculus II (3 hrs)
   - 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:**
- **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 prior to 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/clinicalexpx/](http://www.education.ucf.edu/clinicalexpx/)
- 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/clinicalexpx/](http://www.education.ucf.edu/clinicalexpx/)
- 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** 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/](http://livetext.education.ucf.edu/)

### Education Track
- Pass all applicable sections of the Florida Teacher Certification Examination. See [http://www.fldoe.org](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

### 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
- **15 hrs**
  - GEP B1 Elective
  - ENC 1101 Composition I
  - PSY 2012 General Psychology
  - SPC 1608 Fundamentals of Oral Communication
  - STA 2014C Principles of Statistics

#### Freshman Year - Spring
- **16 hrs**
  - GEP B3 Elective (Prefer course from section B1)
  - MAC 2311C Calculus with Analytic Geometry I
  - ENC 1102 Composition II
  - POS 2041 American National Government

  **Select 1:**
  - MUL 2010 Enjoyment of Music
  - THE 2000 Theatre Survey
  - PHI 2010 Introduction to Philosophy

#### Freshman Year - Summer
- **7 hrs**
  - MAC 2312 Calculus with Analytic Geometry II
  - EDF 2005 Introduction to the Teaching Profession

#### Sophomore Year - Fall
- **14 hrs**
  - MAC 2313 Calculus with Analytic Geometry III
  - PHY 2048C General Physics Using Calculus I
  - EDF 2085 Introduction to Diversity for Educators

  **Select 1:**
  - ANT 2511 The Human Species
  - BSC 1005 Biological Principles

#### Sophomore Year - Spring
- **14 hrs**
  - CHM 2045C Chemistry Fundamentals I
  - EME 2040 Introduction to Technology for Educators
  - PHY 2049C General Physics Using Calculus II

#### Education Track
- **4 hrs**
  - PHY or PHZ 3000 or 4000 level elective

#### Lifelong Learning Track
- **4 hrs**
  - MHS 2330 Career Planning and Choose Lifelong Learning Specialization course

#### Senior Year - Fall
- **13 hrs**
  - EDF 4603 Analysis and Application of Ethical, Legal, and Safety Issues in Schools

#### Education Track
- **10 hrs**
  - SCE 4360 Science Instructional Analysis
  - SCE 3940 Internship

#### Lifelong Learning Track
- **10 hrs**
  - Choose Lifelong Learning Specialization courses

#### Senior Year - Spring
- **12 hrs**
  - SCE 4941 Internship
  - ESE 4033C Critical Issues and Trends in Secondary Education

#### Education Track
- **12 hrs**
  - SCE 4941 Internship and
  - EDF 4607 Analysis and Application of Ethical, Legal, and Safety Issues in Schools

#### Lifelong Learning Track
- **12 hrs**
  - Choose Lifelong Learning Specialization courses

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

### Equipment Fees
- Part-Time Student: $12 per term
- Full-Time Student: $24 per term