

UCF Degree Programs

Secondary Education - Science Education

Chemistry 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 Chemistry program offers students the option of two tracks: Science Education - Chemistry Track and Science Education - Chemistry 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 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 requirements are subject to change based on state mandates.

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

- Note: 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

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 (6 hrs)

Required	MAC 1114C	College Trigonometry	3 hrs
Prefer	STA 2014C	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)

¹ Required	BSC 2010C	Biology I	4 hrs
¹ Required	PSC 1121	Physical Science	3 hrs

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

2. Common Program Prerequisites (CPP) (15 hrs)

- See "Common Prerequisites" in the Transfer and

Transitions Services section for more information.

EDF 2005	Introduction to the Teaching Profession	3 hrs
CHM 2045C	Chemistry Fundamentals I	4 hrs
CHM 2046	Chemistry Fundamentals II	3 hrs
CHM 2046L	Chemistry Fundamentals Laboratory	1 hr
PHY 2053C	College Physics I	4 hrs

3. Core Requirements: Basic Level (10 hrs)

- Education Track requires 10 semester hours
- Lifelong Learning Track requires 13 semester hours
- Transfer Notes: Courses taken at Florida College

System institutions may substitute for select courses in this section with the permission of the department.

¹ EDF 2085	Introduction to Diversity for Educators	3 hrs
EME 2040	Introduction to Technology for Educators	3 hrs
CHM 2045C	Chemistry Fundamentals I	CPP
PSC 1121	Physical Science	GEP
PSC 1121L	Physical Science Lab	1 hr
BSC 2010C	Biology I	GEP
MAC 1114C	College Trigonometry	GEP

Education Track (3 hrs)

EDF 2130	Child and Adolescent Development for Educators	3 hrs
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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.

Lifelong Learning Track (6 hrs)

MHS 2330	Career Planning	3 hrs
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Select 1:

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

4. Core Requirements: Advanced Level (55 hrs)

- Education Track requires 58 semester hours
- Lifelong Learning Track requires 55 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

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

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

Education Track Specialization Requirements (21 hrs)

CHM 2046	Chemistry Fundamentals II	CPP
CHM 2046L	Chemistry Fundamentals Laboratory	CPP
PHY 2053C	College Physics I	CPP
CHM 3120	Analytical Chemistry	3 hrs
CHM 3120L	Analytical Chemistry Laboratory	1 hr
CHM 2210	Organic Chemistry I	3 hrs
CHM 2211	Organic Chemistry II	3 hrs
CHM 2211L	Organic Laboratory Techniques I	2 hrs
CHS 3501	Introduction to Forensic Science	3 hrs
BCH 4053	Biochemistry I	3 hrs
SCE 4361	Programs in Teaching Science	3 hrs

UCF Degree Programs

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 chemistry 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 chemistry 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 (Chemistry 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.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-5.066.

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

Lifelong Learning Track Specialization Requirements

34 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.

CHM 3120	Analytical Chemistry	3 hrs
CHM 3120L	Analytical Chemistry Laboratory	1 hr
CHM 2210	Organic Chemistry I	3 hrs
CHM 2211	Organic Chemistry II	3 hrs
CHM 2211L	Organic Laboratory Techniques I	2 hrs
CHS 3501	Introduction to Forensic Science	3 hrs
BCH 4053	Biochemistry I	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

Related Programs

■ None

UCF Degree Programs

Certificates

- None

Related Minors

- None

Advising Notes

- None

Transfer Notes

- None

Acceptable Substitutes for Transfer Courses

- None

Plan of Study

(120 hrs)

- Recommended Four Year Sequence of Courses

Freshman Year - Fall

13 hrs

GEP B1 Elective	3 hrs
ENC 1101 Composition I	3 hrs
PSC 1121 Physical Science	3 hrs
PSC 1121L Physical Science Lab	1 hr
PSY 2012 General Psychology	3 hrs

Freshman Year - Spring

12 hrs

ENC 1102 Composition II	3 hrs
MAC 1114C College Trigonometry	3 hrs
PHI 2010 Introduction to Philosophy	3 hrs
GEP B3 Elective (Prefer course from section B1)	

Freshman Year - Summer

6 hrs

STA 2014C Principles of Statistics	3 hrs
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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

14 hrs

EDF 2005 Introduction to the Teaching Profession	3 hrs
BSC 2010C Biology I	4 hrs
CHM 2045C Chemistry Fundamentals I	4 hrs
SPC 1608 Fundamentals of Oral Communication	3 hrs

Sophomore Year - Spring

13 hrs

CHM 2046 Chemistry Fundamentals II	3 hrs
CHM 2046L Chemistry Fundamentals Laboratory	1 hr
EDF 2085 Introduction to Diversity for Educators	3 hrs
EME 2040 Introduction to Technology for Educators	3 hrs

Education Track

3 hrs

¹ EDF 2130 Child and Adolescent Development for Educators	3 hrs
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Lifelong Learning Track

3 hrs

Select 1:

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

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.

Sophomore Year - Summer

4 hrs

PHY 2053C College Physics I	4 hrs
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Junior Year - Fall

16 hrs

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

7 hrs

CHM 2210 Organic Chemistry I and	3 hrs
CHM 3120 Analytical Chemistry and	3 hrs
CHM 3120L Analytical Chemistry Laboratory	1 hr

Lifelong Learning Track

7 hrs

Choose Lifelong Learning Specialization courses	7 hrs
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Junior Year - Spring

14 hrs

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

Education Track

8 hrs

CHM 2211 Organic Chemistry II and	3 hrs
CHM 2211L Organic Laboratory Techniques I and	2 hrs
CHS 3501 Introduction to Forensic Science	3 hrs

Lifelong Learning Track

8 hrs

MHS 2330 Career Planning and	3 hrs
Choose Lifelong Learning Specialization courses	5 hrs

Junior Year - Summer

3 hrs

SCE 4361 Programs in Teaching Science	3 hrs
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Senior Year - Fall

13 hrs

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

10 hrs

SCE 4360 Science Instructional Analysis and	4 hrs
SCE 3940 Internship and	3 hrs
BCH 4053 Biochemistry I	3 hrs

Lifelong Learning Track

10 hrs

Choose Lifelong Learning Specialization courses	10 hrs
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Senior Year - Spring

12 hrs

Education Track

12 hrs

SCE 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.oegas.ucf.edu/alc/academic_learning_compacts.htm

Equipment Fees

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