Forensic Science - Chemistry Track (B.S.)

College of Sciences
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Students completing the Forensic Science - Chemistry Track B.S. degree will also meet the requirements for ACS certification. This track is designed to allow students the flexibility to prepare for multiple careers in forensics through selection of restricted elective courses.

Admission Requirements
- None

Degree Requirements
- Students who change degree programs and select this major must adopt the most current catalog.
- All courses specifically identified in the GEP must be completed from within UCF. Co-op credit cannot be used in this major.
- Students should consult with a departmental advisor.
- All prerequisites of courses taught within the College of Sciences will be enforced.
- Courses designated in 2 (Common Program Prerequisites) are usually completed in the first 60 hours.

1. UCF General Education Program (GEP) (39 hrs)
- Note: Certain courses must be selected in the GEP for this major, which brings the GEP hours above 36

A: Communication Foundations (9 hrs)
- Prefer: SPC 1603C Fundamentals of Technical Presentations
- Required: ENC 1101 Composition I 3 hrs
- Required: ENC 1102 Composition II 3 hrs

B: Cultural & Historical Foundations (9 hrs)
- Required: MAC 2311C Calculus with Analytic Geometry I 4 hrs
- Required: STA 2023 Statistical Methods I 3 hrs

C: Mathematical Foundations (7 hrs)
- Required: STA 2523 Statistical Methods II 3 hrs

D: Social Foundations (6 hrs)
- Required: BSC 2010C Biology I 4 hrs
- Required: PHY 2048C General Physics Using Calculus I 4 hrs

2. Common Program Prerequisites (CPP) (16 hrs)
- See "Common Prerequisites" in the Transfer and Transitions Services section for more information.

BSC 2010C Biology I GEP

Select one of the following sequences of courses:

CHM 2045C Chemistry Fundamentals I 4 hrs
or
CHM 2040 Chemistry Fundamentals IA and
CHM 2041 Chemistry Fundamentals IB 3 hrs

Take all of the following:

CHM 2046 Chemistry Fundamentals II 3 hrs
CHM 2046L Chemistry Fundamentals Laboratory 1 hr
MAC 2311C Calculus with Analytic Geometry I GEP
MAC 2312 Calculus with Analytic Geometry II 4 hrs
PHY 2048C General Physics Using Calculus I GEP
PHY 2049C General Physics Using Calculus II 4 hrs

3. Core Requirements: Basic Level (15 hrs)
- All courses specifically identified in the preceding Common Program Prerequisites section of this catalog are also required in the Basic Core, and must be taken.

Basic Core: Required, satisfies the CPP

CHM 2045C Chemistry Fundamentals I CPP
- or
CHM 2040 Chemistry Fundamentals IA and CPP
CHM 2041 Chemistry Fundamentals IB CPP
- and
CHM 2046 Chemistry Fundamentals II and CPP
CHM 2046L Chemistry Fundamentals Laboratory and CPP
BSC 2010C Biology I and GEP/CPP
MAC 2311C Calculus with Analytic Geometry I and GEP/CPP
MAC 2312 Calculus with Analytic Geometry II and GEP/CPP
PHY 2048C General Physics Using Calculus I and CPP
PHY 2049C General Physics Using Calculus II CPP

Basic Core: Additional Requirements 15 hrs

CHM 2210 Organic Chemistry I and 3 hrs
CHM 2211 Organic Chemistry II and 3 hrs
CHM 2211L Organic Laboratory Techniques I and 2 hrs
CHM 3120 Analytical Chemistry I and 3 hrs
CHM 3120L Analytical Chemistry Laboratory and 1 hr
STA 2023 Statistical Methods I and GEP
PCB 3063 Genetics 3 hrs

4. Core Requirements: Advanced Level (37 hrs)

A. Forensic Science Core: 32 hrs

CHS 3501 Introduction to Forensic Science 3 hrs
CHS 3505C Forensic Microscopy 4 hrs
CHS 3511C Trace Evidence 4 hrs
CHS 3530C Forensic Analysis of Controlled Substances 4 hrs
CHS 3533 Forensic Biochemistry I 2 hrs
CHS 3595 Forensic Science in the Courtroom 3 hrs
CHS 4537 Forensic Laboratory Quality Assurance 2 hrs
CHS 4591 Forensic Science Internship 4 hrs
CHM 4242 Applied Physical Chemistry 3 hrs
BOC 4553 Biochemistry I 3 hrs

B. Forensic Chemistry Track: 5 hrs

CHM 4130 Advanced Analytical Laboratory Technique 3 hrs
CHM 4130L Advanced Analytical Chemistry Laboratory 2 hrs

5. Restricted Electives (12 hrs)

Select from the following: 12 hrs
- Note: Substitutions require prior approval by the Forensic Science Program advisor.

ANT 4521 Forensic Anthropology 3 hrs
BCH 4054 Biochemistry II 3 hrs
CHM 3215L Organic Laboratory Techniques II 2 hrs
CHM 4592 Directed Independent Research 3 hrs
CHS 5504 Topics in Forensic Science 3 hrs
PCB 3063L Genetics Laboratory 1 hr
PCB 3233 Immunology 3 hrs
PCB 3233L Immunology Laboratory 1 hr
CHS 3533L Forensic Biochemistry I Laboratory 1 hr
CHS 4534C Forensic Biochemistry II Laboratory 3 hrs
STA 4163 Statistical Methods II 3 hrs
ZOO 3733C Human Anatomy 4 hrs

6. Capstone Requirements
- None

7. Foreign Language Requirements

Admissions
- Two years high school, or one year college language (or equivalent proficiency exam) prior to graduation.

Graduation
- None

8. Electives
- Select primarily from upper level courses after consulting with a departmental advisor. Courses may be outside the department.

9. Additional Requirements
- None

10. Required Minors
- None
11. Departmental Exit Requirements
- Earn a grade of “C” (2.0) or better in each course used to satisfy categories 2, 3, 4, and 5 of the degree requirements.
- Students must maintain a cumulative GPA of 2.5 in all courses taken to meet Common Program Prerequisites and Core Requirements: Basic Level, Core Requirements: Advanced Level, and Core Requirements: Restricted Electives.
- All attempts of courses taken that could meet major requirements are included in the GPA calculation. Additional courses that could meet requirements but are taken beyond the minimum required (e.g., additional restricted electives) and a “C” (2.0) or better is earned are also included in both GPA calculations.
- The last 30 credit hours of regularly scheduled courses that satisfy degree requirements must be taken in Residence at UCF.

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
- 124

Honors In Major
- None

Related Programs
- Chemistry
- Forensic Science - Biochemistry Track

Certificates
- Behavioral Forensics
- Crime Scene Investigation

Related Minors
- Chemistry

Advising Notes
- None

Transfer Notes
- Lower division courses do not substitute for upper division courses.
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for Transfer Courses
- CHM 2045C: may use CHM X040 plus CHM X041.
- Calculus: Although other math courses may satisfy the CPP, the specified courses are required in the major and still must be taken.
- Physics: Although CPP requirements permit substitution by Organic Chemistry, all the specified courses are required for graduation and still must be taken.

Plan of Study
- One of numerous possible plans of study. See program description for all requirements. Consult a departmental advisor for alternate, new or more appropriate selections.
- Before registering for Chemistry, take Chemistry Placement Test – http://knightsource.sdes.ucf.edu/placement
- Before registering for Math, take Math Placement Test – http://utc.sdes.ucf.edu
- This plan assumes you need to begin with the three semester chemistry sequence and calculus. Having to start at a lower math class will increase the hours taken.

### Freshman Year - Fall
- **CHM 2040** Chemistry Fundamentals I 3 hrs
- **CHS 3501** Introduction to Forensic Science 3 hrs
- **MAC 2311C** Calculus with Analytic Geometry I 4 hrs
- **ENC 1101** Composition I 3 hrs

### Freshman Year - Summer
- **CHM 2211** Organic Chemistry I 4 hrs
- **PHY 2049C** General Physics Using Calculus I 4 hrs
- **Restricted Elective** 3 hrs

### Sophomore Year - Fall
- **CHM 2046L** Chemistry Fundamentals Laboratory 1 hr
- Lab may be taken in a later term if seats are not available.
- **GEP** 3 hrs

### Sophomore Year - Spring
- **CHM 2040** Chemistry Fundamentals I 3 hrs
- **CHM 2046L** Chemistry Fundamentals Laboratory 1 hr
- Lab may be taken in a later term if seats are not available.
- **GEP** 3 hrs

### Junior Year - Fall
- **BSC 2010C** Biology I 4 hrs
- **PHY 2049C** General Physics Using Calculus II 4 hrs
- **SPC 1603C** Fundamentals of Technical Presentations 3 hrs

### Junior Year - Spring
- **CHS 3505C** Forensic Microscopy 4 hrs
- **CHS 3520** Analytical Chemistry Laboratory 1 hr
- **CHM 3422** Applied Physical Chemistry 3 hrs
- **Restricted Elective** 3 hrs

### Senior Year - Fall
- **CHS 3530C** Forensic Analysis of Controlled Substances 4 hrs
- **CHS 3533** Forensic Biochemistry I 2 hrs
- **GEP** 3 hrs
- **Restricted Elective** 3 hrs

### Senior Year - Spring
- **CHS 4591** Forensic Science Internship 4 hrs
- **CHS 4537** Forensic Laboratory Quality Assurance 2 hrs
- **CHA 4753** Forensic Science in the Courtroom 3 hrs
- **Restricted Elective** 3 hrs

### Program Academic Learning Compacts
- Program Academic Learning Compacts (student learning outcomes) for undergraduate programs are located at: [http://www.oelas.ucf.edu/alacademic_learning_compacts.htm](http://www.oelas.ucf.edu/alacademic_learning_compacts.htm)

### Equipment Fees
- Part-Time Student: $45 per term
- Full-Time Student: $90 per term