UCF Degree Programs

Forensic Science - Biochemistry Track (B.S.)
College of Sciences
Department of Chemistry,
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Admission Requirements
- None

Degree Requirements
- Students who change degree programs and select this major must adopt the most current catalog.
- Departmental Residency Requirement consists of at least 30 semester hours of regularly scheduled 3000-4000 level courses taken from the UCF Department of Chemistry.
- Co-op credit cannot be used in this major.
- Students should consult with a departmental advisor.
- Students must complete categories 2 (Common Program Prerequisites) and 3 (Core Requirements: Basic Level) below and achieve a minimum 2.5 cumulative GPA in categories 2 and 3 prior to enrolling in the courses described in categories 4 and 5.
- Students must maintain a minimum 2.5 cumulative GPA in categories 4 and 5 to continue in the major.
- Individual course prerequisites for enrollment in courses 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)
- 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 3 hrs
  - 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 MAC 2311C Calculus with Analytic Geometry I 4 hrs
  - Required STA 2023 Statistical Methods I 3 hrs

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

E: Science Foundations (8 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 3 hrs
  - 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 (20 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 GEP/CPP
  - or
  - CHM 2040 Chemistry Fundamentals IA and CPP
  - CHM 2341 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 CPP
  - PHY 2048C General Physics Using Calculus I and CPP
  - PHY 2049C General Physics Using Calculus II and CPP

Basic Core: Additional Requirements 20 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 and 3 hrs
- CHM 3120L Analytical Chemistry Laboratory and 1 hr
- STA 2023 Statistical Methods I and GEP
- PCB 3063 Genetics and 3 hrs
- PCB 3063L Genetics Laboratory and 1 hr
- PCB 3233 Immunology and 3 hrs
- PCB 3233L Immunology Laboratory 1 hr

4. Core Requirements: Advanced Level (45 hrs)

A: Forensic Science Core 18 hrs

- CHS 3501 Introduction to Forensic Science 3 hrs
- CHS 3508C Forensic Microscopy 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

B: Forensic Biochemistry Track: 27 hrs

- BCH 4053 Biochemistry I 3 hrs
- BCH 4054 Biochemistry II 3 hrs
- BCH 4103L Biochemical Methods 2 hrs
- BCH 3403C Quantitative Biological Methods 4 hrs
- CHS 4534C Forensic Biochemistry I 3 hrs
- CHS 3533L Forensic Biochemistry I Laboratory 1 hr
- MCB 3020C General Microbiology 5 hrs
- PCB 3522 Molecular Biology I 3 hrs
- PCB 4542 Molecular Biology II 3 hrs

5. Restricted Electives (3 hrs)

Any course approved by the Forensic Program advisor.

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.
Students must maintain a cumulative GPA of 2.5 in all course taken to meet Core Requirements: Advanced Level and 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 - Analysis Track
- Biomedical Sciences

Certificates
- None

Related Minors
- Chemistry
- Biomedical Sciences

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 classes 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 two semester chemistry course and pre-calculus. Having to start at a lower math class will increase the hours needed to be taken.

**Freshman Year - Fall** 16 hrs
- CHM 2040 Chemistry Fundamentals IA 3 hrs
- CHS 3501 Introduction to Forensic Science 3 hrs
- MAC 2311C Calculus with Analytic Geometry I 4 hrs
- STA 2023 Statistical Methods I 3 hrs
- ENC 1101 Composition I 3 hrs
- GE P 3 hrs

**Freshman Year - Summer** 4 hrs
- CHM 2046 Chemistry Fundamentals II 3 hrs
- CHM 2046L Chemistry Fundamentals Laboratory 1 hr

**Sophomore Year - Fall** 14 hrs
- CHM 2210 Organic Chemistry I 3 hrs
- PHY 2048C General Physics Using Calculus I 4 hrs
- MAC 2312 Calculus with Analytic Geometry II 4 hrs
- SPC 1603C Fundamentals of Technical Presentations 3 hrs

**Sophomore Year - Spring** 13 hrs
- CHM 2211 Organic Chemistry II 3 hrs
- CHM 2211L Organic Laboratory Techniques I 2 hrs
- Lab may be taken in a later term if seats are not available.
- MCB 3020C General Microbiology 5 hrs
- GE P 3 hrs

**Sophomore Year - Summer** 4 hrs
- PHY 2049C General Physics Using Calculus II 4 hrs

**Junior Year - Fall** 14 hrs
- CHS 3505C Forensic Microscopy 4 hrs
- PCB 3233 Immunology 3 hrs
- PCB 3233L Immunology Laboratory 1 hr
- GE P 3 hrs

**Junior Year - Spring** 14 hrs
- CHS 3595 Forensic Science in the Courtroom 3 hrs
- CHS 4537 Forensic Laboratory Quality Assurance 2 hrs
- CHM 3120 Analytical Chemistry 3 hrs
- CHM 3120L Analytical Chemistry Laboratory 1 hr
- PCB 3063 Genetics 3 hrs
- PCB 3063L Genetics Laboratory 1 hr

**Senior Year - Fall** 16 hrs
- CHS 3533 Forensic Biochemistry I 2 hrs
- CHS 3533L Forensic Biochemistry I Laboratory 1 hr
- BCH 4053 Biochemistry I 3 hrs
- PCB 3522 Molecular Biology I 3 hrs
- BSC 3403C Quantitative Biological Methods 4 hrs
- GE P 3 hrs

**Senior Year - Spring** 14 hrs
- CHS 4534C Forensic Biochemistry II 3 hrs
- BCH 4054 Biochemistry II 3 hrs
- BCH 4103L Biochemical Methods 2 hrs
- PCB 4524 Molecular Biology II 3 hrs
- Restricted Elective 3 hrs

**Senior Year - Summer** 4 hrs
- CHS 4591 Forensic Science Internship 4 hrs

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: $45 per term
- Full-Time Student: $90 per term