

So you want to be a Forensic Scientist?

What should you major in?

Crime labs are looking for people with a “hard science” background.

Preferred majors are Chemistry and Biology

DNA specialists must take: biochemistry, genetics, molecular biology and statistics

Accredited Forensic Science programs* require a minimum of:

1 biology course, 4 chemistry courses, 2 physics courses—each with lab

3 advanced science courses, 5 forensic science courses—most with lab

What about an advanced degree?

Regardless of degree, substantial job-specific training after hiring is required

Many jobs require only a bachelors degree (very few accept lower educational levels)

All jobs will require continuing education with yearly minimum credits

Several schools offer a Masters degree in Forensic Science*

NIJ recommends these schools require a BS in chemistry or biology to enter the program

Are there any other requirements?

The FBI sites “honesty, integrity and scientific objectivity” thus you will undergo a background check

Including: drug tests, drug use history, criminal history, personal associations, driving record, credit history

Disqualifiers: felony, failure of drug test, default on student loan, failure to register for selective service

Since you have to serve as an expert witness, excellent communication skills are required

Other “soft skills”: critical thinking, good and safe laboratory practices, time management, attention to detail

Is it like *CSI*?

NO.

Few forensic scientists actually go to crime scenes. None make arrests.

Most of their time is spent in the lab, usually doing routine experiments.

A significant amount of time is spent on paperwork, reporting on samples and validating results and equipment.

You must also serve as an expert witness where all your paperwork will be evidence.

What is the salary range?

Entry level positions start at about \$35,000/yr (GBI)

High-level, prestigious, supervisory position can be as much as \$150,000 (FBI)

References

*Accreditation is from American Association of Forensic Scientists (AAFS): <http://www.aafs.org/> (Includes a list of accredited programs)

FBI Lab division <http://www.fbijobs.gov/311143.asp#2> (Includes requirements for jobs)

Georgia Bureau of Investigation (GBI) homepage <http://gbi.georgia.gov>

Crime lab page: <http://dofs.gbi.georgia.gov/02/gbi/divison/0,2650,75166109,00.html>

(Includes various job types, and very general requirement, see actual job descriptions for more specific requirements)

National Institute of Justice (NIJ) Special Report on Education and Training in Forensic Science

<https://www.ncjrs.gov/pdffiles1/nij/203099.pdf>



One Way of Meeting the Academic Requirements:

Chemistry Major (biology minor) on the Biochemistry Track at Augusta State University

Courses **required** by AAFS or NIJ are in Bold; other *recommended* courses are in italics

Numbers in parenthesis indicate courses that must be taken in a particular order.

Other classes may also have prerequisites, but the schedule, as given, accounts for this.

*Courses required for the biology minor. A minor is not required for the chemistry degree or to be a forensic scientist.

FRESHMAN YEAR

Fall Semester

CHEM 1211-general/inorganic chemistry (1)

MATH 1113-precalculus (1)

ENGL 1101

Social Science

WELL 1000

Spring Semester

CHEM 1212-general/inorganic chemistry (2)

MATH 2011-calculus

ENGL 1102

BIOL 1107

WELL activity

SOPHOMORE YEAR

Fall Semester

CHEM 3411-organic chemistry (3)

PHYS 1111

BIOL 1108

HUMN 2001

Spring Semester

CHEM 3412-organic chemistry (4)

PHYS 1112

*upper level BIOL**

HUMN 2002

JUNIOR YEAR

Fall Semester

CHEM 4551-biochemistry (5)

CHEM 2810-quantitative analysis

CHEM 3820-laboratory safety

Social Science

COMS 1010

Spring Semester

CHEM 4552-biochemistry II (6)

CHEM 4553-biochemistry lab

CHEM 3810-advanced organic chemistry

*upper level BIOL**

SENIOR YEAR

Fall Semester

CHEM 3721-physical chemistry

CHEM 4840-instrumental analysis

CHEM 4700-advanced lab

Social Science

WELL activity

Spring Semester

CHEM 4210-inorganic chemistry

*upper level BIOL**

upper level BIOL*

CHEM 4800-seminar

Social Science

Upper level biology courses regularly offered at ASU (taken after completion of BIOL 1108):

Cell Biology

Zoology

Botany

Genetics

Ecology

Microbiology

Other courses offered at ASU that might be useful for a forensic scientist

(as electives or replacing upper level biology, if you opt not to do the biology minor):

Statistics

Judicial Process (I & II)

Communications for Professionals