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 the 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).
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

Information courtesy of Georgia Regents University Chemistry and Physics Department.
One Way of Meeting the Academic Requirements:

Chemistry Major on the Forensic Science Track at Georgia Regents University

Courses required by AAFS or NIJ are in Bold; Recommended courses are in italics

*Courses required for DNA Analysts

The schedule, as given, generally accounts for prerequisite courses.

FRESHMAN YEAR

Fall Semester
CHEM 1211—Principles of Chemistry I  
MATH 1113—Precalculus  
ENGL 1101—College Composition I  
Core E—social science  
CHEM 1000—Chemistry Orientation  
14 Total

Spring Semester
CHEM 1212—Principles of Chemistry II  
MATH 2011—Calculus I  
ENGL 1102—College Composition II  
Core E—social science  
WELL 1000—Wellness  
16 Total

Major Electives:

Choose 2 CHEM, 1 BIOl; 1 non-science and other courses

for a minimum of 17 credit hours:

CHEM 3721 (Physical Chemistry I)
CHEM 3810 (Advanced Organic Chemistry)
CHEM 4210 (Advanced Inorganic Chemistry)
CHEM 4552 (Biochemistry II)
CHEM 3000 (Introduction to Nuclear Chemistry)
*BIOI 3200 (Genetics)
BIOL 3500 (Histology)
BIOL 3210 (Human Genetics)
*BIOl 3400 (Cell and Molecular Biology)
BIOL 3500 (Microbiology)
COMC 3100 (Communications for Professionals)
POLS 3301 (Judicial Process)
POLS 3302 (Judicial Process II)
CHEM 4990 (Undergraduate Research)
not to exceed 3 hours

SOPHOMORE YEAR

Fall Semester
CHEM 3411—Organic Chemistry I  
PHYS 1111—Introductory Physics I  
BIOL 1107—Principles of Biology I  
HUMN 2001—World Humanities I  
16 Total

Spring Semester
CHEM 3412—Organic Chemistry II  
PHYS 1112—Introductory Physics II  
BIOL 1108—Principles of Biology II  
HUMN 2002—World Humanities II  
16 Total

Major Electives:

Choose 2 CHEM, 1 BIOI; 1 non-science and other courses

for a minimum of 17 credit hours:

CHEM 3721 (Physical Chemistry I)
CHEM 3810 (Advanced Organic Chemistry)
CHEM 4210 (Advanced Inorganic Chemistry)
CHEM 4552 (Biochemistry II)
CHEM 3000 (Introduction to Nuclear Chemistry)
*BIOI 3200 (Genetics)
BIOL 3500 (Histology)
BIOL 3210 (Human Genetics)
*BIOl 3400 (Cell and Molecular Biology)
BIOL 3500 (Microbiology)
COMC 3100 (Communications for Professionals)
POLS 3301 (Judicial Process)
POLS 3302 (Judicial Process II)
CHEM 4990 (Undergraduate Research)
not to exceed 3 hours

JUNIOR YEAR

Fall Semester
CHEM 4551—Biochemistry I  
CHEM 2810—Quantitative Analysis  
CHEM 3820—Lab Management & Safety  
COMS 1010/1020—Human Communication  
Core E—social science  
15 Total

Spring Semester
CHEM 4100—Forensic Chemistry  
CHEM 4553—Biochemistry Lab  
Major Elective 1  
Major Elective 2  
WELL activity  
12-14 Total

Major Electives:

Choose 2 CHEM, 1 BIOI; 1 non-science and other courses

for a minimum of 17 credit hours:

CHEM 3721 (Physical Chemistry I)
CHEM 3810 (Advanced Organic Chemistry)
CHEM 4210 (Advanced Inorganic Chemistry)
CHEM 4552 (Biochemistry II)
CHEM 3000 (Introduction to Nuclear Chemistry)
*BIOI 3200 (Genetics)
BIOL 3500 (Histology)
BIOL 3210 (Human Genetics)
*BIOl 3400 (Cell and Molecular Biology)
BIOL 3500 (Microbiology)
COMC 3100 (Communications for Professionals)
POLS 3301 (Judicial Process)
POLS 3302 (Judicial Process II)
CHEM 4990 (Undergraduate Research)
not to exceed 3 hours

SENIOR YEAR

Fall Semester
CHEM 4700—Integrated Lab  
Major Elective 3  
Major Elective 4  
*MATH 2210--Statistics  
WELL activity  
13-15 Total

Spring Semester
CHEM 4840—Instrumental Analysis  
CHEM 4990—Undergraduate Research  
Major Elective 5  
Major Elective 6  
Core E-social science  
14-16 Total

Additional 2-8 hours of free electives required for total 124 hours for the degree.

Total Hours: 124 (includes 4 hours of WELL)