## What Can I Do With a Degree in ForSci?

## FORENSIC SCIENCE

What can I do with this degree?

**General Areas** Various Disciplines Biology **DNA** Profiling **Paternity Testing Forensic Biology** Chemistry Toxicology Drug Analysis Fire Debris & Explosives Analysis **Chemical Trace Evidence** Crime Scene **Crime Scene Investigation Computer Forensics Comparative Sciences** 

**Computer Forensic Examination** Information Security **Criminal Investigation** 

Questioned Documents Fingerprints Firearms/Toolmarks Microscopy

#### Employers

FEDERAL	STATE	OTHER
Bureau of Alcohol, Tobacco, Firearms, and Explosives	State Crime Labs/State Police Departments	Insurance Agencies
Federal Bureau of Investigation	Coroner Offices	Private Lab Facilities
Drug Enforcement Administration	Medical Examiner Offices	Crime Scene Units
Armed Forces DNA Identification Laboratory	Law Enforcement Offices	
Secret Service	Bureau of Criminal Identification and Investigation	

### **Forensic Science Tech Career**

Forensic science techs work in crime labs to analyze the evidence collected from crime scenes. They may look at things such as hair, fibers, or weapons. They determine whether the evidence collected is important for the investigation. Forensic science technicians may need to write reports and appear in court to give testimony.

Forensic science techs should have a background in science and good problem solving skills. They should be comfortable working with a small group of people. They often do not need to interact with the general public.

#### **Crime Laboratory Analyst Career**

Crime laboratory analysts use their highly specialized scientific skills to examine the evidence that has been collected for a crime. They perform the experiments necessary to link evidence to a suspect and discover what really happened in a crime. They often have more specialized training than forensic science technicians.

Crime laboratory analysts should be detail oriented and have a background in science. Special training with scientific equipment will help those interested to get ahead. The work is occasionally repetitive, so those who wish to be crime laboratory analysts should like routines.

#### Forensic Pathologist Career

Forensic pathologists are medical doctors who perform autopsies on crime victims to determine the cause of death. They write reports that list the "manner of death" (including homicide, natural causes, accident, and undetermined). They are frequently called upon to testify in court cases.

Those who wish to be forensic pathologists must become medical doctors. They should have a keen eye for detail to allow them to determine the cause of death. It is not always the obvious answer. They also should be comfortable working with dead bodies.

### Forensic Toxicologist Career

Forensic toxicologists analyze the bodily fluids of a deceased person to determine the presence of drugs, chemicals, or poisons. This can help to identify the cause of death. Additionally, forensic toxicologists also frequently examine the contents of the stomach in order to make qualitative statements regarding what the deceased person last ate and if there were any abnormalities.

Forensic toxicologists should have a background in chemistry. They should be very detail-oriented as the levels of chemicals found in a body may be quite small.

#### **DNA Analyst Career**

DNA analysts help to link potential DNA evidence to crime suspects. DNA can be found in blood, hair, or skin that's been left at the scene of the crime. This evidence is carefully collected and then analyzed. DNA evidence is increasingly important in convicting suspects of their crimes. Conversely, DNA evidence has also helped to exonerate formerly convicted suspects who were innocent.

DNA analysts should have a background in science with specialized training in DNA research. They should be detail-oriented and comfortable working with lab equipment. DNA analysts should like routines as the research work that they perform may be somewhat repetitive.

## **Forensic Science Career Overview**

Forensic science uses science to aid in law enforcement, and in this pursuit forensic scientists work to give impartial, unbiased scientific evidence which can be used in courts and criminal investigations. Forensic science is very multidisciplinary, as it uses information acquired from a wide variety of fields and disciplines including chemistry, biology, physics, psychology, geology and the social sciences. In recent years, shows like CSI and Law and Order have popularized both the field and the profession, and have served to increase the number of students pursuing forensic science degrees.

Forensic scientists are concerned with collecting evidence, and they use the evidence found at places like crime scenes to help solve crimes. Forensic scientists play a very important role in any investigative team, and they rely upon their extensive training and education to help ensure the accuracy of all the evidence collected. Communication skills are very important, as are analytical and computer skills. Details are something forensic scientists must be very concerned with, due to the fact that everything a forensic scientist does is extremely detail oriented †they must be able to identify and properly process tiny pieces of evidence such as a single piece of hair or one fingerprint. A short sample of a forensic scientist's duties are:

- Collecting evidence at the scene of a crime
- ☑ Performing tests on evidence
- ☑ Preparing reports documenting findings and giving them to investigators
- Giving testimony as an expert witness in court cases

Forensic science is a broad field that encompasses many different careers and specializations, some of which include:

- DNA forensics
- ☑ Forensics engineering
- ☑ Forensics dentistry
- ☑ Forensic Anthropology
- Medical Examiner
- ☑ Crime Scene Examiner
- ☑ Handwriting Expert
- ☑ Ballistics Expert

Many forensic scientists work in labs, but some field agents do need to travel to crime scenes or to courtrooms. Long hours are not uncommon in this field, especially if evidence has to be collected and analyzed quickly for an important court case. Processing and analyzing evidence is a very meticulous, detail-oriented and time sensitive matter, so weekend work is not uncommon during particularly busy periods. Additionally, while some forensics scientists work full-time, others may work in different occupations and may be called in for forensic consulting work. Some work in forensics full time while others may work in other occupations and occasionally be called in to consult on forensics work.

## **Job Search Websites and Resources**

## Association Websites:

- American Academy of Forensic Science (AAFS): www.aafs.org
- AAFS Young Forensic Scientists: www.aafs.org/yfsf
- American Society of Crime Laboratory Directors: www.ascld.org / www.ascld-labs.org
- American Society of Questioned Document Examiners: www.asqde.org
- California Association of Criminalists: www.cacnews.org/jobs/jobs.shtml
- International Association of Identification (IAI): www.theiai.org
- Mid-Atlantic Association of Forensic Scientists: www.maafs.org
- Midwestern Association of Forensic Scientists: www.mafs.net
- National Association of Medical Examiners: thename.org
- Northeastern Association of Forensic Scientists: www.neafs.org
- Northwest Association of Forensic Scientists: www.nwafs.org
- Society of Forensic Toxicologists: www.soft-tox.org
- Southwestern Association of Forensic Scientists: www.swafs.us

## Government/Civil Sites:

- Army Criminal Investigation Command: www.cid.army.mil
- Bureau of Alcohol, Tobacco, and Firearms (ATF): www.atf.gov/careers
- California Dept. of Justice: www.ag.ca.gov/careers/exams.htm
- CIA: www.cia.gov/careers
- Federal Job Search: www.federaljobsearch.com
- FBI: www.fbijobs.gov
- National Institute of Justice: www.ojp.usdoj.gov/nij
- NCIS: www.ncis.navy.mil
- UNjobs: unjobs.org
- USA Jobs www.usajobs.gov
- U.S. Drug Enforcement Administration (DEA): www.usdoj.gov/dea/resources/ job\_applicants.html
- Virginia Dept. of Forensic Science: www.dfs.virginia.gov/jobs/index.cfm

## Lab Sites:

- ASCLD (www.ascld.org): Lists all accredited crime labs
- Program on Network Governance- List of Forensic Labs in US: www.hks.harvard.edu/netgov/ html/research\_dna\_cj\_labs.htm

# Job Search Websites and Resources—Continued

### Science Job Search Sites:

- Crime Science Investigator.net: www.crime-scene-investigator.net/employment.html
- New Scientist Job Search: www.newscientistjobs.com/jobs
- Forensic Magazine Job Search: jobs.forensicmag.com
- Forensic Hub (Discussion Board): www.forensicHUB.com
- MedZilla: www.medzilla.com
- Police Employment: www.policeemployment.com
- Science Careers, From the Journal of Science: sciencecareers.sciencemag.org

### **Internship Programs:**

- FBI Honors Internship Program: www.fbijobs.gov/231.asp
- NCIS Honors Internship Program: pia.gmu.edu/internships/ documents/NCIS.pdf
- Forensic Science Internships: people.rit.edu/gtfsbi/forensics/internships.htm

### **General Job Search Sites:**

- Monster.com: Largest Job Search Engine
- Indeed.com: A Meta Search Job Engine
- USA.gov: Government Jobs
- CareerBuilder.com: Job Search Engine with great job advice and job resources
- Dice.com: A technology only job search engine
- LinkUp.com: Searches within company websites
- Yahoo! HotJobs: hotjobs.yahoo.com
- SimplyHired.com: Meta Search Engine for Jobs
- LinkedIn.com: Job search/ social network
- Craigslist.com



## **Forensic Science Certification Opportunities**

Forensic Document Examiner http://www.abfde.org/Certification.html

Forensic Toxicology Specialist http://www.abft.org/Specialist.asp

Basic Student Knowledge CSI & Other Certifications http://www.theiai.org/certifications/

Forensic Science (Student) Assessment Test http://www.criminalistics.com/pdf/announcements/FSAT2009.pdf

Various Certifications through the American Board of Criminalistics http://www.criminalistics.com/cert\_ovw.cfm

http://www.chiminalistics.com/cert\_ovw.chim

- Diplomate (D-ABC) Certification as a Diplomate of the ABC, denoted by the designation D-ABC, is awarded to individuals with a BS/BA in a natural science, two years of forensic laboratory or teaching experience and upon successful completion of any ABC Examination. The examinations are: Comprehensive Criminalistics Examination (CCE), Drug Analysis (DA), Molecular Biology (MB), Fire Debris Analysis (FD), Trace Evidence- Hairs and Fibers (THF) and Trace Evidence – Paints and Polymers (TPP). The CCE is a comprehensive examination covering all disciplines found in a crime laboratory as well as the areas of safety and ethics. Diplomate status is designed for laboratory directors, supervisors, educators, or where Specialty Examinations have not been planned or developed, (e.g. explosives, soils, etc.) or those no longer able to maintain the proficiency testing requirement for their Fellow status.
- Fellow (F-ABC) Certification as a Fellow of the ABC, denoted by the designation F-ABC, is awarded to successful completion of any of the ABC examinations, successful performance on a proficiency test, and a minimum of two years experience in the specialty area. The specialty areas currently covered are Molecular Biology, Drug Analysis, Fire Debris Analysis and Trace Evidence – Hairs and Fibers and Trace Evidence – Paint and Polymers. An ABC Fellow certificate signifies that the analyst is qualified to conduct examinations in the specialty area.
- Affiliate Status An individual who meets all requirements for certification except for the two year forensic laboratory or teaching experience may sit for any examination and upon successful completion of the examination they become "Certification Eligible" until they complete their two years experience in the specialty tested.





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