



# Forensic Scientist

CLASS TITLE	CLASS CODE	SALARY GROUP	SALARY RANGE
FORENSIC SCIENTIST I	6052	B20	\$48,158 - \$77,477
FORENSIC SCIENTIST II	6053	B21	\$51,278 - \$82,901
FORENSIC SCIENTIST III	6054	B22	\$54,614 - \$88,703
FORENSIC SCIENTIST IV	6055	B23	\$58,184 - \$94,913
FORENSIC SCIENTIST V	6056	B24	\$62,004 - \$101,556
FORENSIC SCIENTIST VI	6057	B25	\$66,259 - \$108,666

## GENERAL DESCRIPTION

Performs forensic science work, conducting crime laboratory tests and analyses and identifying physical evidence from crime scenes; interpreting analytical results; establishing and maintaining records pertaining to casework and court testimony; preparing technical reports; and testifying as an expert witness.

## EXAMPLES OF WORK PERFORMED

Conducts laboratory tests and performs analysis to compare and identify physical evidence from crime scenes.

Conducts chemical tests and analyses of gunshot residue.

Conducts shotgun spread pattern tests and visible powder burn determinations for distance determination, and conducts paper edge examinations for cutter marks.

Prepares metals and other materials for visual and microscopic examinations to restore data eradications or obliterations and latent writing impressions.

Prepares casework and receives, catalogs, and files evidence.

Prepares technical reports concerning results of examinations conducted.

Serves as an expert witness regarding the results of analyses and examinations of physical evidence.

Helps conduct proficiency testing to ensure the validity of evidence testing.

Maintains laboratory and testing equipment and related records.

Participates as a member of a disaster team.

Performs related work as assigned.

## DESCRIPTION OF LEVELS

*Examples of work and descriptions are meant to progress through the levels. For example, an employee at level VI may also perform work listed within the previous levels.*

**Note:** *Factors that may distinguish between entry and journey levels include the degree of independence in performing the work and the complexity of the work and may include the employee's related experience, education, and certifications. Employees at the journey levels may independently perform the full range of work listed in the examples or may assist others in that work.*

**FORENSIC SCIENTIST I:** Performs entry-level forensic science work. Works under close supervision, with minimal latitude for the use of initiative and independent judgment. Employees at this level may have limited experience or no experience and spend the majority of their time performing simple to routine work following standard procedures. Employees may also assist others in performing work of greater complexity.

**FORENSIC SCIENTIST II:** Performs routine (journey-level) forensic science work. Works under moderate supervision, with limited latitude for the use of initiative and independent judgment. Employees at this level may rely on direction from others to solve problems that are not standard. Employees may also assist others in performing work of greater complexity and may:

- Conduct macroscopic, microscopic, and physical examinations of evidence.
- Determine weight, diameter, and other measurements of bullets to determine the make and caliber of the gun from which they were fired and to determine ammunition brand, type, and compatibility.
- Determine bullet trajectories, cartridge case ejection extraction patterns, and bullet entry and distance factors.
- Compare handwriting for determination of authorship.
- Identify weapons by make, caliber, type, and class characteristics.

**FORENSIC SCIENTIST III:** Performs moderately complex (journey-level) forensic science work. Works under general supervision, with limited latitude for the use of initiative and independent judgment. Employees at this level may work more independently than those at the previous levels and routinely assist others in performing work of greater complexity. Employees at this level may:

- Conduct laboratory tests and perform analysis to classify, compare, and identify physical evidence from crime scenes.
- Conduct instrumental chemical analyses of drug evidence to identify controlled substances.
- Conduct analysis of blood and breath for alcohol content and of stains to determine the presence of animal or human blood, its type, and genetic markers.
- Examine clothing to retrieve and identify physical trace evidence.
- Research new advances and techniques in forensic examinations.
- Provide instruction on forensics to law enforcement groups, schools, and other entities.
- Maintain relevant case and testimony records.
- Help conduct on-the-scene investigations and crime scene reconstructions.

**FORENSIC SCIENTIST IV:** Performs complex (journey-level) forensic science work. Works under general supervision, with moderate latitude for the use of initiative and independent judgment. Employees at this level may work more independently than those at the previous levels, routinely assist others in performing work of greater complexity, and provide guidance to others in previous levels. Employees at this level may:

- Facilitate the testing, classifying, and analysis of firearms and bullets to identify evidence.
- Conduct examinations and analyses of criminal cases; macroscopic, microscopic, and physical examinations of evidence; and crime scene investigations.
- Develop, conduct, and/or research new techniques and procedures and instruct staff in their use.
- Prepare technical reports of scientific examination results.
- Instruct law enforcement staff on laboratory functions and procedures.
- Requisition laboratory equipment, apparatus, and chemicals.
- Maintain records and security of evidence and disposition of evidence per guidelines.
- Help prepare laboratory activity reports.
- Help train staff on conducting analyses and examinations of physical evidence.

**Note:** Any senior-level employee (levels V-VI) can serve as a team lead or supervisor. Senior-level employees may perform the full range of work listed in the examples above and may coordinate or oversee that work for others. Factors that may distinguish between senior levels include the scope of responsibility and oversight, the complexity of the work performed, and the employee's related experience, education, and certifications.

**FORENSIC SCIENTIST V:** Performs highly complex (senior-level) forensic science work. Works under limited supervision, with considerable latitude for the use of initiative and independent judgment. Employees at this level may:

- Oversee and/or conduct forensic and crime laboratory work, tests, analysis, and identification of physical evidence.
- Oversee and ensure that laboratory facilities and equipment are maintained, and acquire and maintain safety equipment and supplies.
- Oversee the security, retention, and proper destruction of evidence according to agency and statutory guidelines.
- Coordinate and/or examine and analyze criminal cases; macroscopic, microscopic, and physical examinations of evidence; and crime scene investigations.
- Prepare and review technical reports of scientific examination results.
- Develop and/or evaluate new techniques and procedures and instruct staff in their use.
- Plan casework and coordinate work assignments.
- Identify complex chemical and biochemical compounds using analytical laboratory equipment.
- Review laboratory reports and work records for accuracy and compliance with laws and regulations.
- Research new advances and techniques in forensics examinations.

**FORENSIC SCIENTIST VI:** Performs highly advanced and/or supervisory (senior-level) forensic science work. Works under minimal supervision, with extensive latitude for the use of initiative and independent judgment. Employees at this level may independently perform the most complex forensic science work and may:

- Oversee and/or examine and analyze criminal cases; macroscopic, microscopic, and physical examinations of evidence; and crime scene investigations.
- Oversee and/or prepare technical reports of scientific examination results.
- Oversee casework and coordinate work assignments.
- Oversee the maintenance of laboratory facilities and equipment.
- Coordinate and provide instruction on forensics to law enforcement groups, schools, and other entities.
- Review and approve requisitions for laboratory equipment, apparatus, and chemicals.
- Identify, measure, and modify program goals and objectives.

## **GENERAL QUALIFICATION GUIDELINES**

### **EXPERIENCE AND EDUCATION**

Experience in forensic science work. Graduation from an accredited four-year college or university with major coursework in forensic science, chemistry, physical science, biological science, chemical engineering, criminal justice, or a related field is generally preferred. Experience and education may be substituted for one another.

### **KNOWLEDGE, SKILLS, AND ABILITIES**

#### **For all levels**

- Knowledge of principles, techniques, and procedures of related forensic science disciplines; methodologies and techniques used in fingerprint identification; proper evidence and hazardous chemical handling procedures; criminal court proceedings and rules of evidence; and weapons and ammunition.
- Skill in the use of laboratory equipment and materials, and in the use of a computer and applicable software.
- Ability to conduct microscopic and macroscopic examinations, to prepare reports, to recommend improvements in methodology and equipment, to conduct crime scene investigations, to perform instrumental chemical analyses, and to communicate effectively.

#### **Additional for Forensic Scientist III-IV levels**

- Knowledge of trace evidence, serology, toxicology, drug analysis, and alcohol testing methods and techniques.

**Additional for Forensic Scientist IV-V levels**

- Ability to obtain, interpret, and present results of examinations and analyses; and to plan and/or coordinate, organize, develop, and conduct research in the development of new and improved criminalistics, toxicological, serological, drug analysis, and/or alcohol testing techniques and procedures.

**Additional for Forensic Scientist V – VI levels**

- Knowledge of training methods and public communication techniques.
- Ability to recommend and/or develop improvements in methodology and equipment, to conduct and/or oversee crime scene investigations, and to oversee and/or supervise the work of others.

**REGISTRATION, CERTIFICATION, OR LICENSURE**

May require registration, certification, or licensure in a specialty area.