

# [There take bullets from crime scenes and run](https://assignbuster.com/there-take-bullets-from-crime-scenes-and-run/)

There are many careers out there and I have picked a couple to work for. I am looking to be either a  forensic scientist, a nanotechnologist, or a chemical engineer. I have also have found a couple of colleges that can help me get to where I want to go. Like Chico State, Sierra Nevada College, Cal Poly, Cal Tech, or Shasta College. Forensic scientists analyze crime scenes, take photos of crime scenes, sketch crime scenes, record findings, and collect evidence. They also catalog evidence, perform chemical analysis on evidence, explore links between suspects and criminal activity, and reconstruct crime scenes.

( “ Summary.” U. S. Bureau of Labor Statistics, U. S.

Bureau of Labor Statistics, 2017)Their work environments are police departments, offices, crime laboratories, morgues, medical offices, and outdoors. (“ Summary.” U. S. Bureau of Labor Statistics, U.

S. Bureau of Labor Statistics, 2017) Forensic scientists need a minimum of a bachelor’s degree in natural science or forensic science is required for working in this field. Some labs might require a master’s degree in forensic science for more advanced positions, such as lab technician leader or supervisor.

A master’s degree might also be useful for special areas, such as DNA analysis or ballistics. Undergraduate programs include biochemistry, toxicology and criminal justice courses. Students are required to participate in extensive lab work and fulfill an internship. Crime scene investigators will take samples, gather data, and take pictures of the crime scene so that they can further investigate and come to a conclusion on what happened. Forensic Ballistic Experts will take bullets from crime scenes and run tests to see what gun fired the bullet and use that info to find who committed the crime. Also, a Forensic DNA Analyst will go through hair, blood, or saliva to find out who has been near the crime scene or who committed the crime.

Some important qualities are communication skills, composure, critical-thinking skills, math and science skills, and problem solving skills.  (“ Forensic Scientist Education Requirements and Career Info.” Study. com, Study. com, 2017)Certification is generally not required for a forensic scientist, but this might vary by specialization. For instance, forensic odontologists are dentists, therefore they need to be licensed and certified by the state. Forensic computer examiners can pursue certification through training programs to remain competitive, but it’s not a requirement.

Certification might lend a hand in job placement for all forensic scientists. Those interested in pursuing specialized work in this field should research certification requirements. (“ Forensic Scientist Education Requirements and Career Info.” Study. com, Study. com, 2017)Occupational Health and Safety Specialist look at workplaces to ensure they’re run according to applicable rules and regulations, and in ways that are safe for people. They may take materials samples, evaluate workflow and processes, and look into workplace accidents. Occupational health and safety specialists may also develop workplace safety training programs for employees.

The BLS reports that 28% of occupational health and safety specialists worked for local, state or federal agencies in 2015. Employment typically requires a bachelor’s degree in occupational health or a field like engineering or chemistry, followed by on-the-job training; some employers give priority to candidates with voluntary professional certification. (“ Forensic Scientist Education Requirements and Career Info.” Study. com, Study.

com, 2017)Quality Control Inspectors look at items to see if they’ve been manufactured according to the product blueprints, recommending changes to the manufacturing process to make corrections. Quality Control Inspectors may also conduct tests on items. Quality Control Inspectors may also keep records and prepare reports related to inspected products. While many jobs require a high school diploma, people who complete secondary educations will have a better chance at getting better jobs, such as in industrial subjects or lab sciences. Quality Control Inspectors also receive on-the-job training.

Experienced quality control inspectors may earn voluntary professional certification.  (“ Forensic Scientist Education Requirements and Career Info.” Study. com, Study. com, 2017)Their pay is, as of May 2016, is $56, 570 a year, in the U. S. Forensic science technicians make $56, 800 a year.

Life, physical, and social science technicians make $44, 250. (“ Summary.” U.

S. Bureau of Labor Statistics, U. S. Bureau of Labor Statistics, 2017) The job outlook for forensic scientists is 27% growth between 2014 and 2024, in the U. S. In 2014 there were 14, 400 jobs and in 2024 there will be 18, 200 jobs. The demand for chemical engineers depends on the demand of products. Some jobs for a chemical engineers are working gas companies like Chevron, Shell, or 7/11.

(“ Summary.” U. S.

Bureau of Labor Statistics, U. S. Bureau of Labor Statistics, 2017) A chemical engineer uses chemistry, biology, physics, and math to solve problems with chemicals, fuel, drugs, food, and many other products. They also develop safety procedures for dangerous chemicals. They will also design and process equipment for large-scale manufacturing. They will then monitor the performance of the equipment.

Chemical engineers will also troubleshoot problems with manufacturing problems. (Summary.” U. S. Bureau of Labor Statistics, U.

S. Bureau of Labor Statistics, 2017, ) Their work environment is in offices and labs. They will also work in industrial plants, refineries, and other places involving chemicals. Chemical engineers make smaller, more efficient computer chips, treat diseases, cleaning water and generating energy. They will also work in engineering services. (Summary.

” U. S. Bureau of Labor Statistics, U.

S. Bureau of Labor Statistics, 2017, )Chemical engineers need a bachelor’s degree. Some of the best places to go for a bachelor’s degree is MIT, Berkeley, and Stanford. Some jobs they can get are Chemical Manufacturing, Engineering Services, and Petroleum and Coal Products Manufacturing. Chemical Manufacturers make chemicals for cleaning, cooking, and many more things.

Engineering Service workers will fix different machines. Petroleum and Coal Products manufacturers make different coal and gas products. It is also recommended to have analytical skills, creativity, ingenuity, interpersonal skills, math skills, and problem-solving skills.

(Summary.” U. S. Bureau of Labor Statistics, U. S. Bureau of Labor Statistics, 2017, )Nuclear engineers focus on research and design. Nuclear engineers work with methods and equipment to study nuclear energy and the advantages it can offer.

They do so by creating equipment, overseeing production at nuclear power plants, identifying potential safety hazards, and investigating any nuclear plant accidents. Nuclear engineers typically work in electric power generation, transmission, and distribution or for the federal government and must have a bachelor’s degree.  (“ Alternative Careers for Chemical Engineers.” Study. com, 2017)Industrial engineers focus on production processes. Industrial engineers specialize in devising ways to improve the efficiency in production to reduce waste. They do so by examining current production processes, developing ways to enhance the effectiveness of these processes, and creating procedures for better financial analysis.

Industrial engineers often work in computer, electronic products, or machinery manufacturing and must complete a bachelor’s degree. (“ Alternative Careers for Chemical Engineers.” Study. com, 2017)Material Engineers may appeal to those interested in chemical engineering since they have similar duties. Like a chemical engineer, a materials engineer also focuses on design. However, materials engineers work with a vast array of components used in production processes.

A materials engineer examines existing materials to develop new ones, oversees testing methods, and modifies materials to ensure maximum success and efficiency. (“ Alternative Careers for Chemical Engineers.” Study. com, 2017)Agricultural Engineers focus on improving farming power sources, machinery, and how farming products are stored. Job duties may involve utilizing computer programs to streamline farming methods, such as new equipment or improving building designs, performing safety tests on any new equipment. They may work for engineering services firms or government agencies and will need a bachelor’s degree for this career. (“ Alternative Careers for Chemical Engineers.” Study.

com, 2017)They make, as of May 2016, on average $98, 340 a year, in the U. S. A person who does research and development in physical engineering make about $98, 210 a year. A person who manufactures resin and synthetic materials, that can make plastics that are biodegradable and plastic electronics, makes about $99, 550 a year. A basic chemical manufacturer makes about $102, 100 a year. (Summary.” U. S.

Bureau of Labor Statistics, U. S. Bureau of Labor Statistics, 2017, )The job outlook for chemical engineering from 2014 to 2024 is about 2% growth in jobs, in the U. S. In 2014 there were 34, 300 jobs and in 2024 there will be 34, 900 jobs. The demand for chemical engineers depends on the demand of products. Some jobs that involve chemical engineers are gas companies.

(Summary.” U. S. Bureau of Labor Statistics, U. S.

Bureau of Labor Statistics, 2017, )       Nanotechnologists and mechanical engineers analyze problems with mechanical and thermal devices. They design mechanical and thermal devices, develop and test prototypes of devices they design, and analyze test results. They also oversee the manufacturing process for a device.

(“ Summary.” U. S. Bureau of Labor Statistics, U. S. Bureau of Labor Statistics, 2017, ) Their work environment is labs and offices. They need a bachelor’s degree to get a good job.

Some jobs for Mechanical Engineers are Machinery Manufacturing, Computer and Electronic Product Manufacturing, and Transportation Equipment Manufacturing. Machinery Manufacturers make different kinds of machines that are used in all parts of the world. Computer and Electronic Product Manufacturers will make electronics like phones, computers, and car components.

Also Transportation Equipment Manufacturers make products for cars like extra mirrors, seats, and seatbelts. Some skills to have are creativity, listening skills, math skill, and problem-solving skills. They make steam and gas turbines as well as electrical generators and internal combustion generators. (“ Summary.

” U. S. Bureau of Labor Statistics, U. S. Bureau of Labor Statistics, 2017, ) Mechanical engineering technicians solve specialized technical problems while assisting scientists and engineers. Like other engineering technicians, those who work in mechanical engineering may concentrate in a particular area, such as research or design. Engineering technology programs are more practical than those in engineering and often require that you take classes like trigonometry and calculus.

These programs may include courses similar to mechanical engineering programs, such as fluid mechanics and thermodynamics. (“ Mechanical Device Engineer Career Info.” Study. com, 2017)Mechanical device engineers are concerned with the mechanical aspects of physics and its practical application to a variety of manufacturing fields. Almost all areas of engineering make use of mechanical engineering principles to some extent.

Mechanical device engineers provide expertise to the fields of manufacturing, energy technology, noise control and biomedical engineering, in addition to developing mechanical devices for everyday use. They also design tools for other engineers and have recently become involved in the field of pollution control where they work to develop machines and processes that produce fewer pollutants, as well as new devices that reduce or remove existing ones. (“ Mechanical Device Engineer Career Info.” Study. com, 2017)They make, as of May 2016, on average $84, 190, in the U.

S. Machinery manufacturers make about $75, 480 a year. Engineering services make about 86, 270 a year. Research in physical engineering and life sciences make around $96, 380 a year. Transportation equipment manufacturers make about $84, 940 a year.

Computer and electronic product manufacturers make about $89, 330 a year. (“ Summary.” U. S. Bureau of Labor Statistics, U.

S. Bureau of Labor Statistics, 2017, ) The job outlook for a mechanical engineer is 5% growth between 2014 and 2024. Jobs in 2014 were 277, 500 and jobs in 2024 will be 292, 100.

(“ Summary.” U. S. Bureau of Labor Statistics, U.

S. Bureau of Labor Statistics, 2017, ) Sierra Nevada College is a 4 year college and it’s tuition is $31, 685. That is the flat rate for 12-19 units. Their room and board is $12, 764. They also have a Sierra Nevada College fee which is $618 and student fees that are $336.

Their book, supplies, and transportation is about $2, 800. (“ Tuition & Fees.” Sierra Nevada College, Sierra Nevada College, 2017, 11/10/17) Shasta College is also a community college their in-state tuition is $1, 104. Their books and supplies are $1, 764. The room and board is $5, 500.

The other expenses come out to $3, 178. This college will help me get my general education so that I can go focus on my main career at another college. (CollegeSimply. “ Home.” Shasta College – Net Price, Tuition, Cost to Attend, Financial Aid and Student Loans, CollegeSimply. com, 2017, 11/10/17)Cal Tech is my dream college because it has a very low acceptance rate. Their tuition is $48, 111.

Some fees come out to $1, 797. Housing is $8, 391 and board is $6, 405. Their book and supplies fee is $1, 323.

(“ Cost of Attendance.” Cost of Attendance – Caltech Financial Aid, 11/10/17)Cal Poly is one of my most anticipated colleges because my grandfather went to that college and I want to go there to make him proud. Cal Polys’ registration fee for a California undergrad is $9, 432. Their books and supplies are $1, 884. Room and board is $13, 116. Transportation comes to $1, 254.

Personal fees are $1, 467.(“ Cost of Attendance.” Cost of Attendance 2017-2018 Financial Aid – Cal Poly, San Luis Obispo, California Polytechnic State University , 2017, 11/10/17)Chico State is my final choice for college and it is part of my list because it is close to home.

Their tuition is $7, 348 and their books and supplies are $1, 854. Their room and board is $11, 862 for off-campus. On-campus is $12, 712 and for living at home it’s $5, 248. Transportation is $1, 056. (“ College Match – Find the Right Colleges for You.” COLLEGEdata, 1st Financial Bank USA , 2017, 11/10/17)