

About This Career Guide

Information in this guide reflects potential careers for students interested in *Science, Technology, Engineering* and *Math* (STEM) fields of study. While there are many career options for students to pursue upon completing a STEM degree, this guide provides a glimpse into some career options.

In addition to using this Guide, high school students are encouraged to research career information on their own and talk to high school counselors. Students entering a two or four-year college program are encouraged to talk to faculty about career opportunities. As a college student, it's important to talk to faculty in order to build a network of support and information for scholarship, internship and employment opportunities and graduate school applications.

The table below reflects the timeframe for completing an undergraduate degree and graduate degrees.

Approximate Timeframe to Complete an Undergraduate Degree and Graduate Degrees (contact individual institution programs as timeframe varies per institution)			
<u>Undergraduate Degree</u> Bachelor of Science	Combined B.S. & M.S. Coursework for Master of Science	<u>Graduate Degree</u> Master of Science	<u>Graduate Degree</u> Doctor of Philosophy (Ph.D.)
Approximately 4 to 5 years to complete when attending full-time each semester.	Some programs provide students an option to complete a MS degree in five- years through combined BS and MS coursework.	Approximately 2 years to complete when attending full-time each semester.	Coursework completion can take approximately 3 to 4 years <i>plus</i> timeframe of completing dissertation (research).

Tips and Links

http://study.com/articles/Tips_for_Choosing_a_Career.html

<http://www.bls.gov/careeroutlook/2015/article/career-planning-for-high-schoolers.htm>

<http://iseekinteractive.org/2010/04/27/10-job-search--tips-for-teens/>

Biology Careers

Anesthesiology..... 4

Biochemists..... 4

Dentistry..... 5

Marine Biologist..... 5

Pediatricians..... 6

Zoologist..... 7

Chemistry Careers

Chemical Technician..... 7

Forensic Technician..... 8

Lab Chemist..... 9

Pharmacist..... 9

Engineering Careers

Aeronautical Engineer..... 10

Architecture Engineer..... 11

Automotive Engineer..... 10

Civil Engineer..... 11

Petroleum Engineer..... 12

Environmental Science Careers

Environmental Science Technician..... 13

Environmental Geologist..... 12

Mathematics Careers

Actuary..... 13

Machinist..... 14

Math Teachers..... 14

Mathematician..... 15

Nutrition and Dietetics Careers

Dietitians..... 15

Dietetic Technician..... 15

Physics Careers

Astronomer..... 16

Industrial Hygienist..... 17

BIOLOGY

Anesthesiologists is a medical doctor who takes care of patients before and during a medical procedure. They monitor patient reactions and complications to ensure comfort or pain. They explain the procedure to the patient so he/she knows what to expect. The anesthesiologist also monitors patients' vital signs to make sure they adjust to anesthesia.

Anesthesiologists can work in different settings not just in a hospital. They have choices to work in dental offices, outpatient surgical centers, labor and delivery units, intensive care units, teaching, and research. Anesthesiologists are involved with patient care, relieving pain, and restoring health.

Education Individuals need to pay attention to what classes they take in high school and in college. They need to study subjects in math and science. After college, graduate students need to attend four years of medical school with two years studying basic sciences and clinical training.

Skills/Experience After graduating, individuals need to spend one year in internships and three years in a residency program. Anesthesiologists can also participate in a one year fellowship practicing in a certain area. These areas include critical care medicine, pain medicine, research, or education.

Colleges in NM: University of New Mexico

Colleges outside NM: University of California-San Francisco, University of Washington, University of Pittsburgh Medical Center

Salary \$270,885 per year

Per Hour \$23.88-\$197.63

Biochemists study the body's immune response to germs or allergens and some do stem cell and genetic research. As a biochemists, individuals will have opportunities to work in teams, research projects, and stay up-to-date in the field.

Education Future biochemists will need to take advance placement courses in biology, chemistry, calculus and physics. In order to participate in research projects, a Master's degree or Ph.D. is required.

Skills/Experience Individuals will need to have laboratory skills and follow safety procedures. They will need to know the proper use for lab equipment. Biochemists will need to do research on computers. Individuals will need to have some knowledge of computer science and software. Biochemists must pay attention to detail and work well in a team with good communication skills.

Colleges in NM: New Mexico State University and University of New Mexico

Colleges outside NM: Harvard University in Massachusetts, University of California-Berkley, University of California-San Francisco

Salary \$54,922 per year

Per Hour \$11.69-\$35.82

Dentistry American Dental Association

Dentists help people improve their oral health and treat diseases.

Education Individuals need to take courses to prepare them for dental school. Students need to take chemistry, biology, physics and organic chemistry courses. For experience, individuals need to join dental-related student organizations and attend health-related career fairs.

Junior Year College Students need to complete prerequisite requirements, prepare for the Dental Admission Test, and apply for admission one year in advance. Students who apply to dental school will also have their credentials reviewed. Individuals will also need letters of recommendation, personal interviews, and shadowing experiences. Admission requirements also vary from school to school.

Senior Year College students need to practice mock interviews and students who want to be dentists need to take prerequisites in biology, physics, English, general and organic chemistry.

Dentists

Salary \$123,431 per year

Per Hour \$39.20-\$98.87

Dental Assistant The majority of academic dental assisting programs take a short amount of time. Dental assistants can become certified by passing an exam and once students pass an exam, they will choose to become certified and take the Dental Assisting National Board Exam. Dental assistants can also take the certified dental assistant exam if they complete the dental assisting program accredited by the commission on dental accreditation.

Colleges in NM Central New Mexico Community College and University of New Mexico

Colleges outside NM University of California in Los Angeles, University of California San Francisco California, University of Michigan

Dental Assistant

Salary \$30,962 per year

Per Hour \$10.58-\$20.56

Marine Biologist Marine Biology is the study of marine organisms, behaviors, and interactions with the environment. Researchers select an interest and specialize in that specific area. Specializations can be in areas on a species, organism, behavior, technique, or ecosystem.

Marine Biologists might be divided into a specific position of a biological technician, fishery biologist, marine mammologist, or mathematician. Some are also associated with physical oceanographers.

Education Students can major in different areas such as Biology, Zoology, Chemistry, Physics, Biometrics, Math and Statistics. Studying English is also recommended for scientific papers. Courses in social sciences are also recommended for occupations dealing with the public, public policies and management.

Students can earn an undergraduate degree in Biology, Zoology and other animal sciences. Physical oceanographers can earn an oceanography degree. The jobs in this field are also highly competitive.

Experience Participate in hands-on experiences. Do volunteer work or an internship related to one's interests and develop practical skills.

Colleges in NM New Mexico State University, New Mexico Tech, University of New Mexico

Colleges outside NM: Duke University, Boston University, The University of Maine.

Salary \$51,742 per year

Per Hour \$9.94-\$40.55

Pediatricians specialize in treating illnesses of children. These doctors work in a medical office and travel to homes when needs arise. The job can be both rewarding and stressful.

Education Students need to earn a Bachelor's degree and complete pre-medical coursework that includes math, chemistry, biology and physics. Students will also need to take the Medical College Admission Test (MCAT) and be evaluated on knowledge of physical science and biology. Students can also participate in volunteer work.

Students will need to take courses with medical procedures, body systems, and diseases. Students will need to complete clinical rotation working with patients while under supervision of a licensed physician. Clinical rotations include pediatrics, psychiatry, obstetrics, and internal medicine. Students will need to complete the Medical Licensing Exam to earn a medical license.

Experience/Skills Students get experience by volunteering at a medical facility. They can volunteer with children in schools or after-school programs to get experience working with young people.

Certification Students will stay certified with education credits because they are evaluated regularly on professionalism, medical knowledge, practice techniques, and communications skills. Pediatricians will also need to take an exam every ten years.

Colleges in NM The University of New Mexico

Colleges outside NM Harvard Medical School, University of California San Francisco School of Medicine, Johns Hopkins School of Medicine.

Salary \$137,497 per year

Per Hour \$48.52-\$101.12

Zoologist Zoology is the study of living organisms. Zoologists can study multiple species in an ecosystem, population and different interactions. They collect and analyze data in labs or outdoor environments. Zoologists also conduct research, and teach at universities and others at zoos for federal agencies.

Education Students need to earn a Bachelor degree in Zoology for specialization. Some of the core courses students need to take for Zoology are general biology, chemistry, physics and math. Some Biology requirements are courses in molecular and organismal biology. If there are certain specializations in fields, students can study marine biology, ecology, genetics and animal science.

Bachelor degrees in Zoology have entry-level jobs such as zoologists and wildlife biologists. Some entry-level zoologists are involved in research, but to do independent research, an individual will need a graduate degree.

Zoology degrees are offered at both graduate and undergraduate levels. A Master's degree qualifies individuals for higher level positions with more pay. A Ph.D. is required for research and plan development.

Experience Students will need to sign up for an internship; volunteer work can count as college credit. A place to start can be at the U.S. Fish and Wildlife Service. Graduate courses are more advanced and focus on research and are offered in seminars.

Colleges in NM Western New Mexico University, Eastern New Mexico University, New Mexico State University

Colleges outside NM Duke University, Cornell University, and University of Florida

Salary \$94,070 per year

Per Hour \$17.46-\$45.23

Chemistry

Chemical Technician work with chemists and chemical engineers to develop, test, and manufacture chemical products. They are skilled scientific professionals and do required hands-on work. Some technicians assist senior researchers in the lab. However, many work independently to collect valuable information. Individuals will need to have an interest in scientific and technical areas. Familiarity with lab equipment instruments and analytical techniques is also important.

There are different types of chemical technicians:

Laboratory technician who operates standard laboratory equipment and conducts lab procedures ranging from process control to research projects.

Process technician who performs chemical tests and experiments for quality, performance, and composition.

Education Two-year Associate degree and Bachelor degree in Chemistry or Math. Students will need to have computer skills and oral and written skills as well.

Experience Dedication and hard work will advance individuals; personal motivation and teamwork are important.

Colleges in NM University of New Mexico, New Mexico Tech, New Mexico State University

Colleges outside NM University of California, Massachusetts Institute of Technology, Northwestern University.

Salary \$42,915 per year

Per Hour \$12.63-23.88

Forensic Technicians prepare crime scene evidence for police departments. Forensic Technicians are also called crime scene investigators or evidence technicians. Forensic Technicians collect evidence and analyze the evidence in a lab. They write reports summarizing results and can specialize in different types of evidence including fingerprinting. They may also need to testify in court cases.

Forensic Science Technicians work mostly in crime scenes or crime labs. For crime scenes, they need to preserve evidence. They may also need to brainstorm on the places where the evidence was collected.

Forensic Technicians interpret evidence collected from crime scenes and they also identify unknown substances and objects. DNA typing can identify a person who had bodily fluids on the scene. Once all evidence is collected, forensic technicians compile and document the results and put them into reports.

Skills/Experience Technicians can speak with experts in various fields to enhance interpretations of collected evidence. Forensic technicians can testify in court and report to police about evidence collected and the techniques they used to analyze it. Skills needed to be a forensic technician is collecting biological and non-biological samples without contaminating them.

When working in a lab, forensic technicians need to work with biological and non-biological samples without contaminating them. Technicians need to have attentive listening ability and know how to communicate orally and in writing. They must also explain and demonstrate methods used on site or in the lab.

Education Students need to complete a Bachelor's degree in one of the natural sciences and need to have analytical thinking and reasoning skills. They need to work under stress and have the set skills needed in the field, skills required in the lab, and skills to communicate the results of evidence analysis.

Colleges in NM University of New Mexico, New Mexico State University and New Mexico Tech

Colleges outside NM Texas A&M University, Pennsylvania State University, University of California-Irvine.

Salary \$50,405 per year

Per Hour \$17.69-33.81

Lab Chemists analyze chemicals and create new compounds. Chemists also do research and testing. Lab chemists work in different industries such as pharmaceuticals or petrochemicals. They test various compounds and write reports on findings to share them with other scientists.

Education Students will need a Bachelor degree in Chemistry. For those who want to do research will need to get a Master's degree.

Experience Some work experience may improve chances of employment. Individuals can get work experience at a hospital.

Colleges in NM New Mexico State University, University of New Mexico, New Mexico Tech

Colleges outside NM California Institute of Technology, Massachusetts Institute of Technology, University of California Berkeley.

Salary \$51,718 per year

Per Hour \$14.49-\$27.76

Pharmacist dispense medications prescribed by physicians and monitor patient health. Pharmacists advise physicians and health practitioners on dosage, interactions, and any side-effects of medications.

Pharmacists can work in retail, hospitals, clinics and home health care facilities, government, pharmacies, and other settings.

Education Pre-pharmacy students must complete two years of college to be eligible for pharmacy school. Students are not required to pursue majors but need to complete coursework in physics, chemistry, biology and calculus. Students will need to complete a four-year degree and hold a Doctor of Pharmacy professional degree and they take four years to complete. Graduates must pass the North American Pharmacist Licensure examination by the National Association of Boards of Pharmacy to demonstrate skills to distribute medicine.

Experience Students will get experience in a pharmacy setting under licensed pharmacists to get patient care experience.

Once a person is licensed, he/she can serve as pharmacist in the community, government, or consulting pharmacies. Most pharmacists work in retail locations as salaried employees.

Colleges in NM Central New Mexico Community College, University of New Mexico

Colleges outside NM Purdue University College of Pharmacy, University of California, San Francisco, and University of Illinois at Chicago.

Salary \$107,149 per year

Per Hour \$45.81-\$64.12

Engineering

Aeronautical and Astronautical Engineering Aeronautical engineers rely on mechanical electronics and material engineering skills. They focus on the design of aircraft or spacecraft. Aeronautical and astronautical engineers are also responsible for testing aircraft, materials, or flight systems.

Education Employers look for graduates from a four-year aerospace engineering program by the Accreditation Board for Engineering and Technology. Undergraduate courses for astronautical engineers provide education in electronics, physics, thermodynamics, and materials science. A graduate degree might be required to work on designs and most programs will accept students with a background in mechanical, electronic or computer engineering if students don't have an aerospace degree.

Experience Graduates in these degree programs can work for private or public corporations from aircraft companies and defense contractors.

Colleges in NM New Mexico State University

Colleges outside NM California Institute of Technology, Massachusetts Institute of Technology, and Stanford University.

Salary \$79,872 per year

Per Hour \$22-\$89

Automotive Engineers design the systems and mechanisms of cars. Automotive engineers make sure the automotive designs and systems conform to budget quality and cost. They analyze potential problems in design work to solve problems. Automotive engineers also design and retest prototypes of cars and parts.

Education Many automotive engineers need a Bachelor of Science degree in Mechanical Engineering. Individuals who have knowledge of computers is a plus. Some colleges and universities will offer students a degree in Mechanical Engineering so they can have an opportunity to specialize in Automotive Engineering. Students might consider a Master's degree to learn more skills even if it is not required. Students will also have research opportunities.

Experience Individuals need to work well with others and specialize in a specific area. Students must solve real world issues and evaluate problems. Individuals who can weld and have knowledge of designing and software systems is good. Students will need to have an accredited program by ABET the Accreditation Board for Engineering and Technology. Some may also need to have a license for work.

Students can participate in internships to get practice in professional environments. Internships are offered through suppliers or manufacturers to work in a specific area.

Colleges in NM University of New Mexico and New Mexico State University (Mechanical Engineering)

Colleges outside NM University of Michigan, Indiana University, and Cornell University

Salary \$67,955 per year

Per Hour \$10.14-\$50.77

Architectural Engineers create buildings and work on projects with other professionals such as construction workers and architects. Architectural engineers apply math and scientific principles to build designs and computer-aided drafting. Communication skills are necessary and individuals must be productive in different work environments

Education Architectural engineers need to complete a Bachelor's and Master's degree program. Architecture engineering coursework covers materials and methods, CAD, design analysis, and modern structural systems. Architectural Engineering degree candidates can also spend time in design labs and studio.

Some programs offer architect engineers an opportunity to work in an area of architectural engineering to focus on electrical and mechanical elements. Some architectural engineering programs requires students to get a license from the Accreditation Board for Engineering and Technology (ABET).

Architectural engineers who offer their service to the public need to be licensed as professional engineers. They become licensed professional engineers by passing two exams by the National Council of Examiners for Engineers and Surveyors.

Experience After four years of experience, students can take the Principles and Practice of Engineering exam to get a full license.

Colleges in NM Central New Mexico Community College A.S.

Colleges outside NM Purdue University, Pennsylvania State University, Auburn University.

Salary \$62,795 per year

Per Hour \$14.37-\$50.17

Civil Engineers will need to know how to solve problems and solutions with others. Individuals will need to have an Associate and Bachelor degree to be a civil engineer.

Education A Bachelor of Science in Civil Engineering is required. A Master's degree in Civil Engineering is required for individuals who want to be a professor at a university or develop new technology. Students will need to take a variety of courses in math and science. In high school and colleges, students need to study all areas of math, science, and computer science.

Algebra, trigonometry, chemistry and physics are important subjects to study in high school and college. Civil Engineers will need to know how to solve problems and think outside the box. Some states require students to get a professional engineer's license required for all engineers who want to serve the public. This person must have a Bachelor degree and four-year experience.

Colleges in NM New Mexico State University, University of New Mexico, New Mexico Tech

Colleges outside MIT Massachusetts Institute of Technology, Stanford University, University of Cambridge

Salary \$61,626 per year

Per Hour \$19.14-\$39.62

Petroleum Engineers locate natural reservoirs of petroleum deposits. The engineers work with teams of specialists to develop cost efficient methods of petroleum through math, chemistry, engineering and geology principles. There are two types of Petroleum Engineers: Reservoir Engineers who monitor the geological formation for extraction. Drilling engineers who generate computer simulated models and have the best tools for the best extraction method.

Education Petroleum engineers are required to have a Bachelor's degree in a field accredited by the Accreditation Board for Engineering and Technology. Licensing procedures involve examination and graduates can apply for engineering licenses.

Experience/Skills Petroleum engineers must be a specialist in their trade with knowledge and techniques with petroleum procedures. Petroleum engineers will face challenges with researching new methods for extracting petroleum and existing sources.

Colleges in NM New Mexico Tech

Colleges outside NM University of Texas, Texas A&M, Colorado School of Mines

Salary \$99,194 per year

Per Hour \$15.62-\$86.57

Environmental Science

Environmental Geologist study physical characteristics and composition of earth and natural resources. They perform field and lab work using tools and software to collect data and conduct studies. Some geologists work for engineering firms, and oil and gas companies.

Education Students need to earn a Bachelor's degree in a geoscience field such as geology, hydrogeology, or environmental science. Some positions require a Masters in this field. Individuals might need a license to work with the public. Coursework involved includes physical geology, mineralogy, geophysics, and labs.

Experience Students will need experience in a summer program and internships to get hands-on experience in a lab while working towards a degree. Students will need computer skills and computer drafting. Job duties includes site evaluations, gathering and interpreting data and writing technical reports.

Once a student earns a professional geologist license, they need to pass the National Association of State Boards of Geology exam

Colleges in NM The University of New Mexico, New Mexico State University, New Mexico Tech

Colleges outside NM Yale University, Columbia University, and Pomona College

Salary \$61,657 per year

Per Hour \$15.24-\$45.51

Environmental Science and Protection Technician monitor the environment and investigate sources of pollution and contamination affecting health. Protection technicians inspect public places and businesses to make sure there are no environmental health or safety hazards. They set up and maintain equipment and collect samples of air, soil, water and, materials for lab analysis. They work under the supervision of environmental scientists and specialists.

Many technicians also can work for state or local governments, testing labs, or consulting firms. They specialize in lab testing or fieldwork and sample collections. It is common for lab technicians to collect samples in the field and do lab work.

Education Environmental science and protection technicians need an associate's degree in environmental science, environmental health, or public health. It is important to have a background in environmental science and protection technicians. Students need to take courses in chemistry, biology, geology and physics. Taking courses in math, statistics and computer science is also helpful. Depending on the state, students may need to have a license to perform certain types of inspections.

Skills/Experience Depending on the job, experiences may vary!

Colleges in NM New Mexico State University, New Mexico Tech, University of New Mexico

Colleges outside NM Yale University, Columbia University, Pomona College

Salary \$49,058 per year

Per Hour \$14.84-\$30.47

MATH

Actuary compiles and analyzes statistics and uses them to calculate insurance risks and premiums. Actuaries play a key role in the psychological, financial, and physical stability of society. Actuaries also work in a variety of settings to solve problems.

Education Actuaries are specialized with knowledge of math such as calculus, statistics and probability. They have analytical, project management, and problem-solving skills. Actuaries must have strong computer and communication skills. High school students should take a math class every year and take advanced courses in statistics and calculus.

College Students need to take calculus, microeconomics, macroeconomics, computer science courses and business and marketing courses.

Experience/Skills Students need to get an actuary experience through internships. As a recent graduate, begin looking for a full-time position if you have an internship.

Colleges in NM New Mexico State University

Colleges outside NM Columbia University, University of Pennsylvania, Carnegie University

Salary \$80,965 per year

Per Hour \$15.28-\$51.99

Machinists cut and shape finished products from nuts and bolts to car parts. They use lathes and grinders in metal and plastic. They program production equipment using instructions from blueprints.

To work in an aerospace industry, students need to take calculus and physics courses. Machinists can learn trade on the job or in community colleges.

Education Individuals need a high school diploma or a GED and be proficient in computer skills. High school courses include math. Machinists can learn trade on the job or in community colleges.

Skills and Experience Students can learn more about becoming a machinist through jobs or any community college. There are a few apprenticeship programs that last four years.

Colleges in NM Central New Mexico Community College

Colleges outside NM NTMA Training Centers of Southern California, Louisiana Technical College, Hawkeye Community College

Salary \$47,528 per year

Per Hour \$12.21-63,681

Math Teachers are responsible for lecturing students, assigning homework, and grading tests. A Bachelor's degree in Education with a math background is the requirement for middle and high school teachers.

Middle school math teachers instruct math at the middle school level and are responsible for grading tests and lectures. High School Math teachers must complete a Bachelor degree and need to be licensed.

Education Students can take advanced courses in teaching that include different strategies, classroom management, or math curriculum development

Careers and Experience Students are assistants to teachers and help teach students. The Master degree programs last two to three years and cover advanced topics in math.

Colleges in NM New Mexico State University, University of New Mexico, New Mexico Tech

Colleges outside NM Massachusetts Institute of Technology, Princeton University, University of California

Salary High School \$45,440 per year

Per Hour \$9.82-36.29

Salary Middle School \$42,929 per year

Per Hour \$10.01-\$30.21

Mathematicians need to understand and develop math principles and analyze data.

Education Individuals pursuing a career as a mathematician need to take courses in math. Students will need a Master's degree.

Experience/Skills Math technicians are responsible for understanding math concepts and working with others to solve math-related programs. They work with scientists, engineers and other professionals.

Colleges in NM New Mexico State University, New Mexico Tech, University of New Mexico

Colleges outside NM Harvard University, Massachusetts Institution of Technology, Princeton University

Salary \$101,360 per year

Per Hour \$48.73

Nutrition and Dietetics

Dietitians focus on the impact of food and health. Dietitians design nutrition programs to protect health, prevent allergic reactions, and alleviate symptoms of diseases.

Skills/Experience Dietitians work in a variety of settings, overseeing food planning and preparation. They manage nutrition programs in health care, facilities, schools, and cafeterias.

Education To become a registered dietitian, students must complete a four-year college degree and major in dietetics. There are two programs to choose from. A didactic program provides classroom learning in college, followed by a one-year internship. A coordinated program in dietetics includes classroom study and 900 hours of supervised practice.

Colleges in NM University of New Mexico

Colleges outside NM Columbia University, University of Chicago, Cornell University

Salary \$49,377 per year

Per Hour \$19.78-\$36.39

Dietetic Technician develop nutritional plans to promote health, treat illness and prevent disease. Dietetic technicians also promote healthy living through counseling and instruct patients, clients,

and their families to prepare healthy food. They can prepare nutritional plans for patients and clients in settings including hospitals, nursing homes, and private practices.

Dietetic technicians and other nutrition specialists plan and prepare patient meals, order food, and provide direction. They can also educate healthcare providers, groups, and training sessions. They can develop or recommend nutrition programs for individuals and groups based on dietary needs.

Education Students will need to earn a Bachelor or an Associate degree with nutrition science, wellness and health to teach students. Students will need to take courses in human biology and anatomy, medical nutrition, chemistry, and nutrition principles.

Technicians can choose to complete a two-year Associate degree approved by the Commission on Accreditation for Dietetics Education (CADE) and passing the Dietetic Registration exam. Students can also enroll in a Bachelor degree program and engage in CADE-approved supervised practice and need to pass the Commission on Dietetic Registration exam.

Skills and Experience Identify problems and solve them, have good critical thinking skills and able to speak with others effectively. Individuals need to know food management systems, nutrition and diet therapy, and medical nutrition therapy with sanitation, and safety.

Colleges in NM University of New Mexico

Colleges outside NM Central Arizona College in Chandler Gilbert Community College, Cincinnati State Technical, Community College in Cincinnati, Ohio.

Salary \$35,515 per year

Per Hour \$11.97-\$22.35

PHYSICS

Astronomers learn about celestial objects and how they work. Astronomers study beyond earth and into the universe. Astronomers also have to understand the behavior of matter and the type of light from radio to gamma rays, along with computers. Observational astronomers might also look for new planets, stars, galaxies, and black holes. They also can build models of the universe.

Some but not all astronomers are faculty members at a university or college through observatories and labs. For some astronomers, teaching is a major activity and they can spend time on research depending on their schedules. Some astronomers teach physics or astronomy courses.

Observational astronomers spend their nights working at an observatory and analyzing data collections. Students who are the most passionate about astronomy can find jobs in research areas, and commercial or industrial enterprises.

Education Math, physics, chemistry and computer science are requirements to be an astronomer. Students will need to earn a Physics, Math, or Engineering degree and Ph.D. in Astronomy and Astrophysics.

Skills Students will need to have excellent communication skills and will have to write numerous scholarly articles such as grant proposals.

Colleges in NM New Mexico State University, New Mexico Tech, University of New Mexico

Colleges outside NM California Institute of Technology, Massachusetts Institute of Technology, Stanford University

Salary \$85,500 per year

Per Hour \$51.14

Industrial Hygienist monitor, assess, and resolve workplace health and safety issues. Industrial hygienist's duties include evaluating chemical or biological physical dangers like air quality and sound levels.

Education Students who major as an industrial hygienist need a Bachelor degree in Biology, Chemical Engineering, or Physics. A Bachelor's degree and four years of professional job experience are required for the American Board of Industrial Hygiene certification that needs to be renewed periodically. An entry-level job can be earned with a Bachelor degree. Industrial hygienists require a Master degree in a specialized field. Hygienists study ethics, toxicology, environmental hazards, and public health.

Skills Industrial hygienists need observation and reporting skills to report potential problems. They need leadership skills to work with colleagues.

Colleges in NM New Mexico State University, New Mexico Tech, University of New Mexico

Colleges outside NM California Institute of Technology, Massachusetts Institute of Technology, Stanford University

Salary \$69,481 per year

Per Hour \$14.81-\$38.05