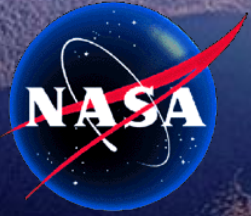




Cool Careers on the



Final Frontier



NASA Careers





The NASA Mission

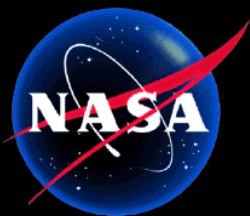
To understand and protect our home planet
To explore the universe and search for life
To inspire the next generation of explorers
...as only NASA can.



The NASA Vision

**To improve life here,
To extend life to there,
To find life beyond.**





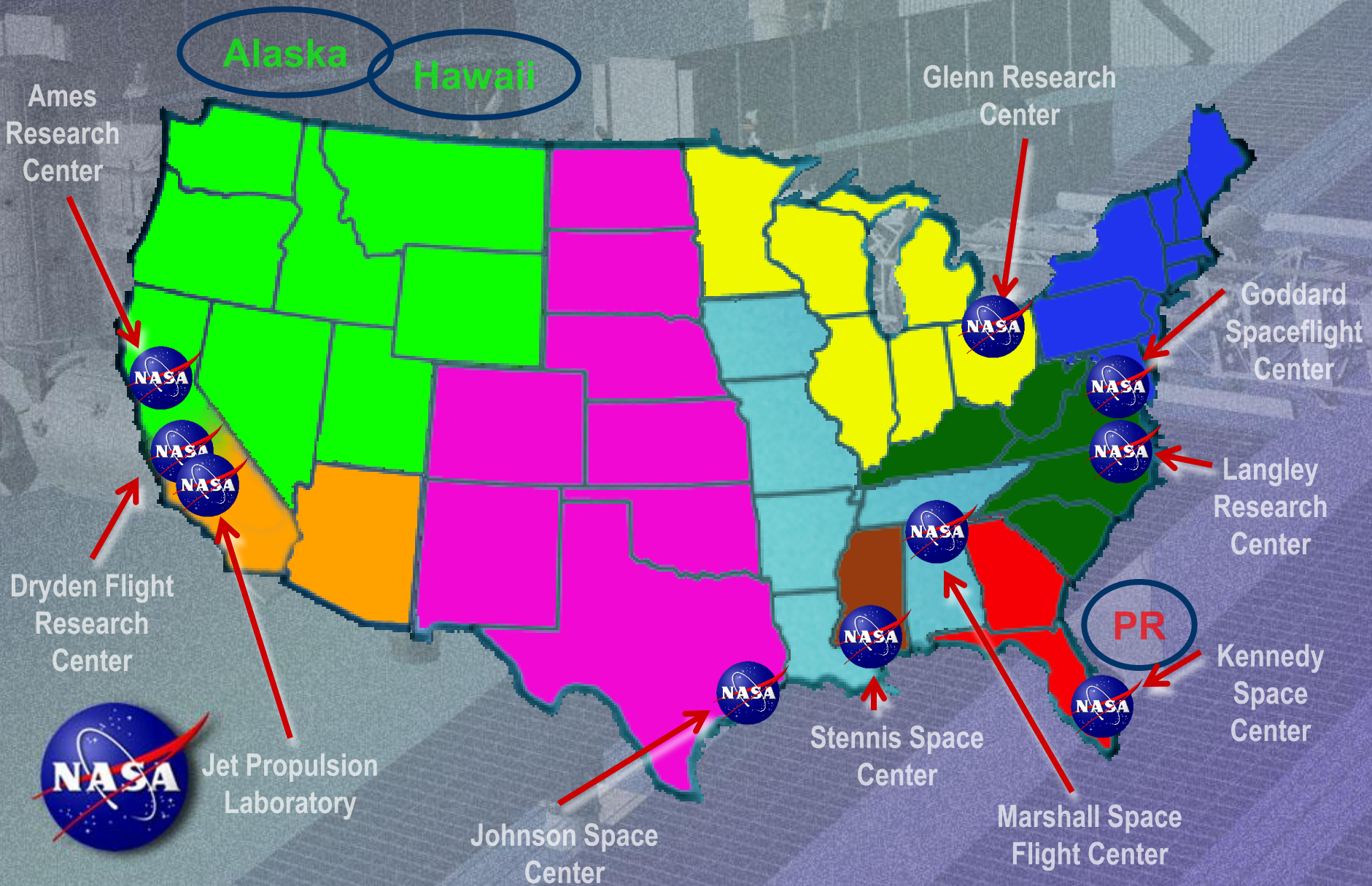
NASA needs people with interests in:



- Science
- Technology
- Engineering
- Mathematics
- And more...



NASA Field Centers





NASA Federal Budget

- **\$19.3 Billion estimated for 2016**
- **Only 0.486% of the Federal Budget**
- **Other Agencies**
 - NOAA \$6 Billion
 - Department of Defense \$585.3 Billion +





Quick view at employees

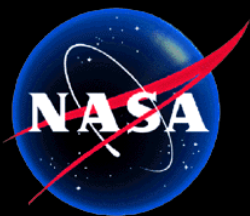
- **NASA and Contractors by numbers**

- **NASA 18,000 +**

- Federal Workers
- 34% women 66% men
- NASA KSC 2057 employee
 - 32% Women 68% men

- **Contractors 50,000 + (examples)**

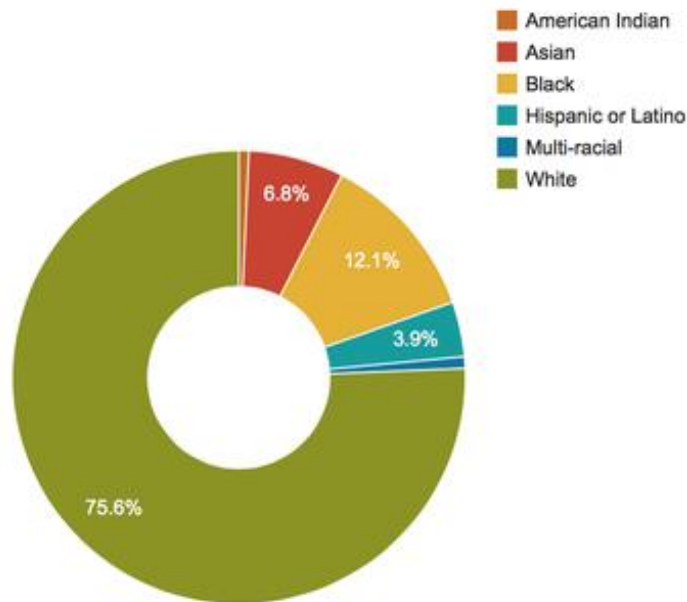
- Space X (5000 +)
- Boeing (10,000+)
- Lockheed Martin (12,000+)
- Orbital ATK (12,000+)

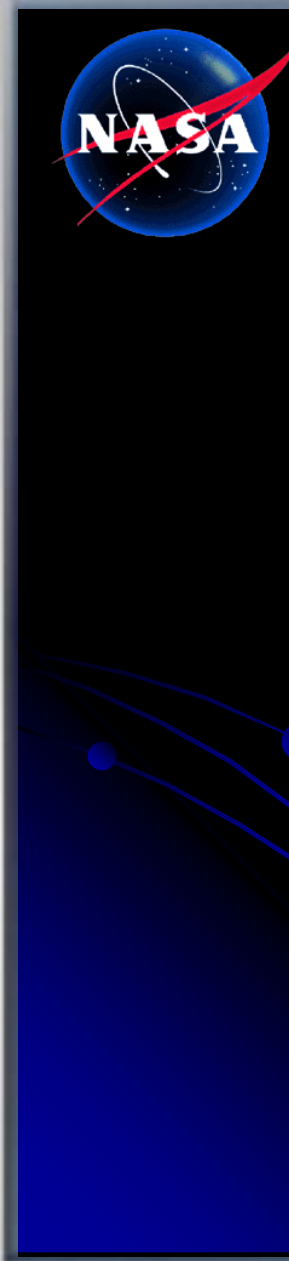


Latino/a working at NASA

- 18,000+ employee at NASA- this does not take into account contracts
- Only about 700 are Latino/a
- And about 250+ Puerto Rican

Race and Ethnicity Demographics





Employer: National Aeronautics and Space Administration (NASA)

Salary Range by Job

Sort by:

Job Title (A to Z)

\$80K

\$160K

\$240K

[+] Electronics Engineer (2) \$52,488 - \$100,057

[+] Engineering Technician (2) \$43,424 - \$113,738

[+] Environmental Engineering Manager (2) \$112,804 - \$195,116

[+] Fire Protection Engineer (3) \$68,299 - \$156,665

[+] Mechanical Engineer (6) \$51,687 - \$119,483

[+] Meeting Manager (2) \$36,413 - \$74,427

[+] Network Engineer (2) \$53,807 - \$107,755

[+] Organizational Development Consultant (2) \$78,215 - \$225,848

[+] Postdoctoral Research Associate (3) \$35,196 - \$68,293

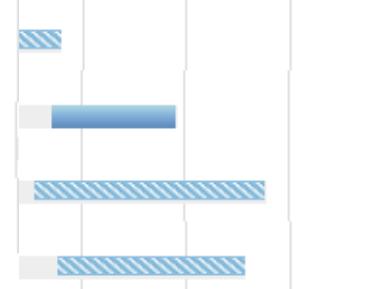
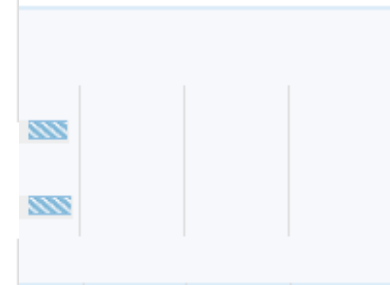
[+] Procurement Specialist (2) \$29,310 - \$62,986

[+] Program Manager, Aviation / Aerospace (2) \$68,697 - \$127,020

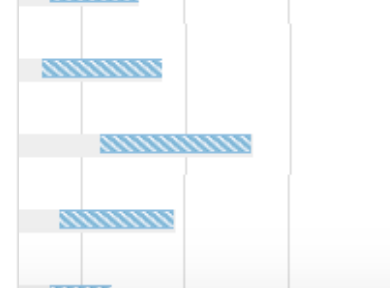
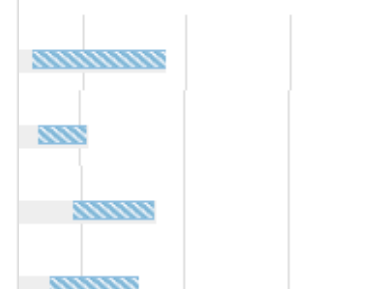
[+] Program Project Manager (2) \$73,940 - \$173,764

[+] Project Manager, Engineering (4) \$85,848 - \$171,928

[+] Quality Assurance (QA) Engineer (2) \$53,995 - \$129,256



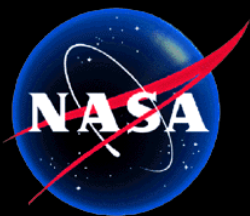
Company. [Start survey.](#)





Qué ofrece NASA

- Se parte de las competencias nacionales de NASA en todos los niveles
 - <http://www.nasa.gov/audience/forstudents/stu-competitions-current-ops.html>
- Solicitudes de becas e internados
 - <https://intern.nasa.gov/ossi/web/public/main/>
- ¿Quieres ser parte de la fuerza laboral?
 - <http://nasajobs.nasa.gov/studentops/Pathways.htm>

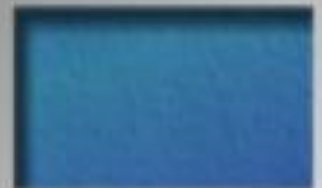
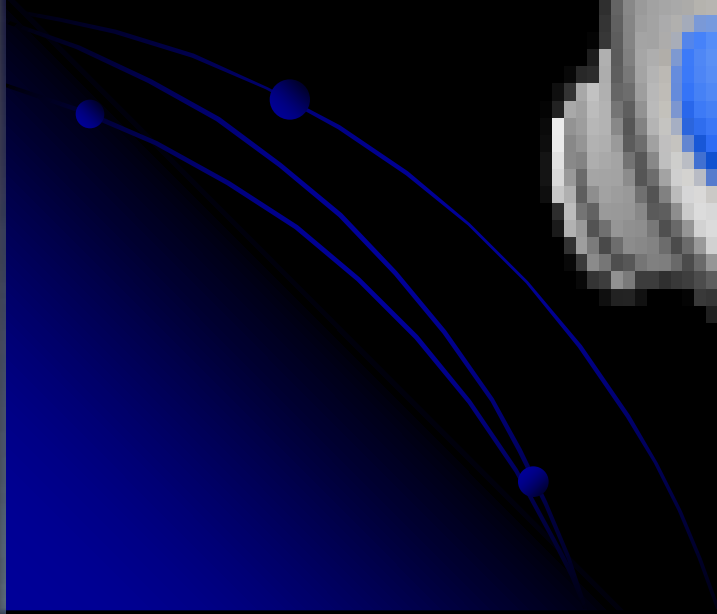
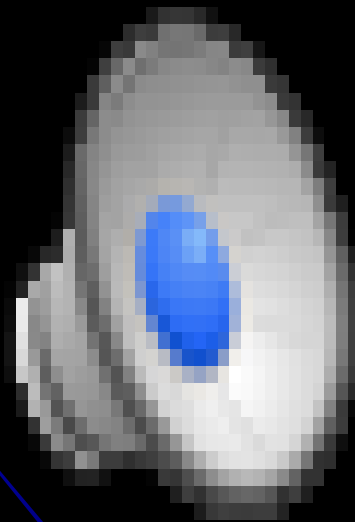


Pregunta a un Hispano en NASA

- **NASA STARS en Español**
 - Una día al mes por una hora el programa fue creado para ti!
 - <https://www.txstate-epdc.net/nasa-stars/>
 - <http://www.ustream.tv/channel/nasa-dlinfo>
- **September 21st @1pm ET**
- **October 13th @1pm ET**
- **November 10th @12pm ET**
- **December 13th @12pm ET**
- **January 26th @12pm ET**
- **February 23rd @12pm ET**
- **March 14th (Pi Day) @12pm ET**



!Qué esperas! Explora con
Nosotros...





Engineering



Engineer

Aerospace Engineer

Chemical Engineer

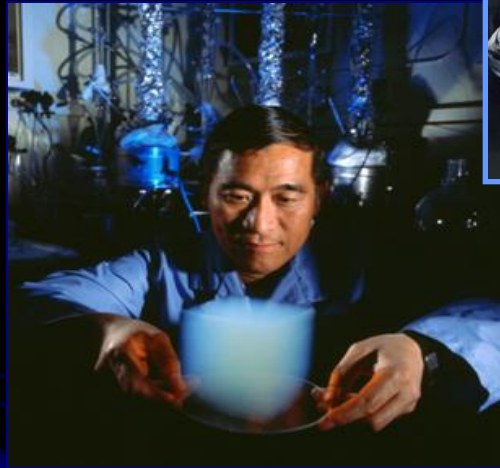
Electronics Engineer

Mechanical Engineer

Computer Engineer



Scientific



Astrobiologist

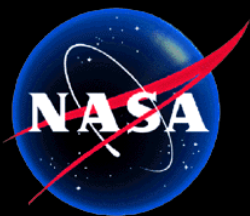
Astrophysicist

Biologist

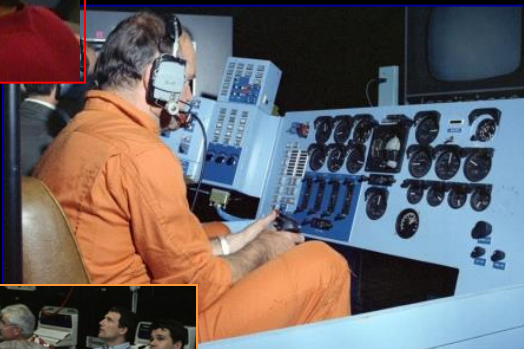
Human
Factors
Researcher

Mathematician

Meteorologist



Technical



Component
Technician

Computer
Specialist

Engineering
Technician

Physical
Science
Technician

Technical
Manager

Tugboat
Captain



Professional



Accountant

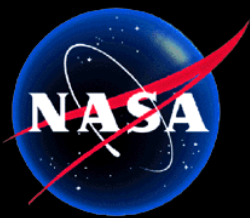
Astronaut

Lawyer

Medical
Doctor

Psychologist

Surveyor



Administrative and Management



Computer
Support
Specialist

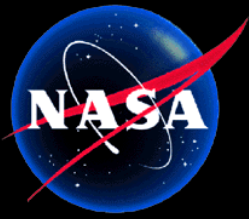
Construction
Manager

Executive
Manager

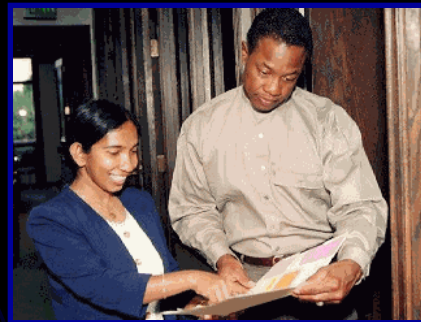
Project
Manager

Public
Affairs
Specialist

Weather
Station
Manager



Clerical and Administrative Support



Accounting
Clerk

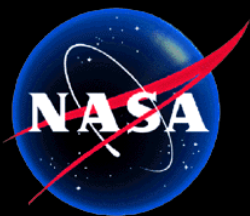
Data
Entry
Clerk

Management
Assistant

Planner/
Scheduler

Procurement
Clerk

Secretary



Trades and Labor



Carpenter

Electrician

Machinist

Marine
Mechanic

Painter

Welder



Engineer

- **Related job titles**

- Electrical engineer
- Design engineer
- Instrument engineer
- Component engineer, etc.

- **Job description**

- Designs, develops and tests products, systems, machinery, factories and buildings
- Designs systems such as robots, instruments, airplanes, motors, equipment and more

- **Suggested school subjects**

- Mathematics (algebra, trig, geometry, calculus)
- Science (physics, biology, chemistry)
- English (writing)
- Social Studies (history)
- Computer programming
- Engineering

- **Education**

- Minimum of bachelor's degree, usually in areas such as electrical, mechanical, aerospace or civil engineering





Aerospace Engineer

- **Related job titles**

- Mechanical engineer
- Fluid dynamicist

- **Job description**

- Designs, develops, tests and oversees the building of aircraft, spacecraft, propulsion systems and space flight mission paths
- Figures out what the product needs to do, then designs and tests parts to see if it works, writes reports

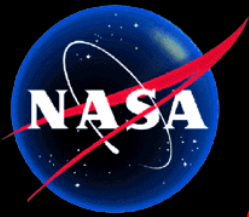
- **Suggested school subjects**

- Mathematics (trigonometry, calculus)
- Science (physics, chemistry)
- Computer programming
- Engineering (fluid dynamics, aerodynamics, thermodynamics, propulsion dynamics, mechanical)

- **Education**

- Requires minimum of bachelor's degree such as aerospace engineering





Chemical Engineer

- **Related job titles**

- Materials engineer, organic chemist, polymer chemist, fluid dynamicist, etc.

- **Job description**

- Uses chemistry, engineering and physics to develop products such as propulsion gases
- Figures out what a product needs to do, then designs and tests the product and writes reports

- **Suggested school subjects**

- Mathematics (algebra, geometry, trigonometry, pre-calculus, calculus)
- Science (physics, biology, chemistry)
- Computer programming
- Engineering (fluid mechanics, thermodynamics)
- Social studies (history)
- English (writing)

- **Education**

- Requires minimum of bachelor's degree in field such as chemical engineering





Electronics Engineer

- **Related job titles**

- Electrical engineer, computer engineer, computer scientist

- **Job description**

- Designs, develops, tests and leads production of electrical and electronic equipment such as scientific instruments, motors, wiring in buildings, aircraft, radar, computers, robots and video equipment

- **Suggested school subjects**

- Mathematics (algebra, geometry, trigonometry, calculus)
- Science (physics, biology, chemistry)
- Computers
- Engineering (thermodynamics, fluid dynamics, mechanical, electronic)

- **Education**

- Minimum of bachelor's degree in field such as electrical engineering





Mechanical Engineer

- **Related job titles**

- Mechanical systems engineer, aerospace engineer, materials engineer

- **Job description**

- Plans and designs engines, machines and other equipment
- Figures out what a product needs to do, then designs and tests the parts, fits the parts together and writes reports

- **Suggested school subjects**

- Mathematics (algebra, geometry, trigonometry, pre-calculus, calculus), science (physics, biology, chemistry), computer programming, engineering (thermodynamics, fluid mechanics), social studies (history), English (writing)

- **Education**

- Bachelor's degree in mechanical engineering





Computer Engineer

- **Related job titles**
 - Computer hardware engineer, electronics engineer, computer scientist
- **Job description**
 - Designs and develops computers or robots
 - Figures out what a product needs to do, then designs and tests the parts and writes reports
- **Suggested school subjects**
 - Mathematics
 - Science (physics)
 - Computer programming
 - Engineering (computer electronics, electrical)
 - Social studies (history)
 - English (writing)
- **Education**
 - Requires minimum of bachelor's degree in field such as computer engineering





Astrobiologist

- **Related job titles**
 - Astrobiologist, life scientist, space scientist
- **Job description**
 - Studies how life in the universe began, where it is and how it has evolved
 - Understands how sciences work together
 - Works in labs with microscopes and computers
- **Suggested school subjects**
 - Science (physics, biology, chemistry, astronomy, planetary science with research)
 - Mathematics
- **Education**
 - Minimum of bachelor's degree in biology, astronomy, space science, chemistry, etc.
 - Minimum of 20 semester hours of physical science or engineering, or experience that leads to the understanding of equipment used for manned aerospace flights





Astrophysicist

- **Related job titles**

- Space scientist
- Astronomer
- Research scientist
- Physicist

- **Job description**

- Studies the universe, galaxies and stars
- Interprets information gathered by telescopes sensors and probes

- **Suggested school subjects**

- Physics
- Chemistry
- Electronics
- Mathematics

- **Education**

- Minimum of a bachelor's degree related to math, physics, astrophysics, or astronomy
- For research jobs, a Ph.D. is desired





Biologist

- **Related job titles**

- Life scientist, medical scientist, biomedical engineer, biological scientist, psychologist

- **Job description**

- Studies living things and their relationship to the environment
- Works in research and development
- Researches how space environments affect living things and how to support life in space

- **Suggested school subjects**

- Mathematics
- Physics
- Biology
- Chemistry
- Biochemistry (with lab research and fieldwork)

- **Education**

- Bachelor's or Ph.D. degree in field such as biology. Must have 20+ hours of physical science or engineering, or experience that leads to understanding of equipment used for manned aerospace flights.





Human Factors Researcher

- **Related jobs**

- Research psychologist, research associate, human performance researcher, human physiology researcher

- **Job description**

- Works in aviation areas studying pilots from in the cockpit to studying sleep physiology in flight to improve pilot safety
- Uses scientific method to develop hypotheses, set up experiments and test theories
- Makes keen observations and writes reports

- **Suggested school subjects**

- Mathematics (algebra and statistics), psychology, sociology, physiology, kinesiology, biology

- **Education / Training / License**

- Bachelor's, master's or Ph.D. degree
- License may be required





Mathematician

- **Related job titles**

- Computer scientist or computer programmer

- **Job description**

- Theoretical mathematicians come up with new math rules and processes
- Applied mathematicians use math rules and processes to solve scientific, engineering and business problems such as designing computer models that help create faster and higher aerospace vehicles and systems

- **Suggested school subjects**

- Mathematics (algebra, geometry, statistics, calculus), computer science (programming), engineering, science

- **Education**

- Bachelor's or Ph.D. degree in biology field
- Studies must contain 20+ hours of physical science or engineering, or experience that leads to understanding of equipment used for manned aerospace flights





Meteorologist

- **Related job titles**

- Weather officer, weather forecaster, meteorology researcher, meteorological modeling specialist, atmospheric scientist, atmospheric chemist

- **Job description**

- Collects weather data, surveys weather indicators and makes weather predications
- Advises air traffic control and others about weather hazards and issues advisories

- **Suggested school subjects**

- Mathematics (algebra, trigonometry, calculus), physics, meteorology, statistics, computer modeling, geography

- **Education**

- Bachelor's, master's or Ph.D. degree in field such as meteorology or atmospheric sciences





Component Technician

- **Related job titles**

- Mechanic, quality technician, equipment technician, engineering technician

- **Job description**

- Disassembles, reassembles and tests valves at NASA test complex facilities

- **Suggested school subjects**

- Mathematics
- Mechanical drawing

- **Education/Training**

- High school graduate or certificate program
- On-the-job training
- Mechanic experience is helpful





Computer Specialist

- **Related job titles**

- Systems programmer, applications programmer, computer programmer, systems administrator

- **Job description**

- Writes, tests and manages computer programs

- **Suggested school subjects**

- Math
- Science (physics)
- Computer programming

- **Education**

- Minimum education is a bachelor's degree in or related to computer science, information science, mathematics, engineering or physical science





Engineering Technician

- **Related job titles**

- Physical science technician, data technician, engineering aid, aerospace engineering technician, architecture technician, biomedical technician, chemical engineering technician, civil engineering technician, electrical engineering technician, materials engineering technician

- **Job description**

- Assists engineers and scientists by setting up or installing, testing, maintaining and repairing equipment, conducting experiments, etc.

- **Suggested school subjects**

- Mathematics (algebra, trigonometry), science, computers, technical drawing/drafting

- **Education / Training**

- Two years training or associate's degree, or experience in computer or engineering technology





Physical Science Technician

- **Related jobs**

- Biological, chemical, environmental or engineering technician

- **Job description**

- Helps scientists and engineers with their products and experiments
- Sets up and runs lab instruments
- Gathers data and report errors

- **Suggested school subjects**

- Science (lab), mathematics, computer courses

- **Education / Training**

- Two years of training or associate's degree in science or science-related technology
- Laboratory experience is helpful





Technical Manager

- **Related jobs**

- Engineer, mathematician, scientist

- **Job description**

- Serves as project manager for engineering projects
- Performs engineering project planning duties and engineering studies
- Provides technical advice and guidance
- Manages, develops and evaluates grants and contracts

- **Suggested school subjects**

- Engineering, mathematics, science

- **Education**

- Minimum of a bachelor's degree
- Strong technical knowledge
- Engineering and management experience





Tugboat Captain

- **Related jobs**

- Tugboat pilot, fisherman, fishing vessel operator

- **Job description**

- Commands tugboat to tow barges and ships into and out of harbors, estuaries, straits, and sounds, and on rivers, lakes, and bays
- Signals workers on deck to rig towlines to barges or ship to be towed
- Determines course and towing speed
- Steers tugboat to push or pull barges

- **Suggested school subjects**

- Global positioning systems training

- **Education / Training / License**

- Maintains a Coast Guard license
- Accumulates sea time





Accountant

- **Related jobs**

- Budget analyst, cost estimator, loan officer, financial analyst, tax examiner

- **Job description**

- Ensures that taxes are paid properly and on time
- Keeps accurate public records
- Prepares, analyzes and verifies financial documents

- **Suggested school subjects**

- Mathematics

- **Education**

- Bachelor's degree with 24 hours of study in financial management, two years of government experience





Astronaut

- **Related jobs**

- Payload specialist (not a NASA astronaut but is a crew member on the shuttle that performs specialized duties onboard)

- **Job description**

- **Pilot astronauts** are space commanders and pilots responsible for the vehicle, crew, mission success and safety of the flight
- **Mission specialist astronauts** perform space walks responsible for coordinating operations-systems, crew activity planning, consumables usage and experiment/payload operations

- **Suggested school subjects**

- Math, science, engineering, foreign language

- **Education**

- Minimum of bachelor's degree in field of engineering, biological science, physical science or math





Lawyer

- **Related jobs**

- Paralegal, legal assistant, law clerk, judge

- **Job description**

- Provides legal counsel to NASA centers
- Serves as congressional liaison for NASA centers
- Serves as labor relations officer
- Serves as Freedom of Information Act officer
- Manages ethics programs

- **Suggested school subjects**

- English, public speaking, government, philosophy, history, economics, courses related to law specialty

- **Education /Training**

- Professional law degree (LL.B. or J.D.)
- Must have admission to the Bar





Medical Doctor

- **Related jobs**

- Physicians assistant, nurse practitioner, registered nurse

- **Job description**

- Monitors and analyzes health of astronauts during training and in flight
- Provides medical treatment to personnel at NASA centers

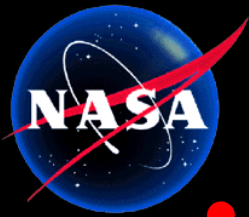
- **Suggested school subjects**

- Aerospace medicine, anatomy, biochemistry, microbiology

- **Education / Training / License**

- Doctor of medicine
- Must have completed internship and residency in appropriate specialization (aerospace preferred)
- Must have Board Certification License





Surveyor; Cartographer

• Related job titles

- Photogrammetrist, surveying technician, civil engineer, architect, environmental scientist, geoscientist, urban and rural planner

• Job description

- **Land surveyors** establish official land, air space and water boundaries
- **Cartographers** compile geographic and political information and prepare maps
- **Photogrammetrists** measure and analyze aerial photographs used to prepare maps
- **Surveying technicians** assist land surveyors

• Suggested school subjects

- Mathematics, drafting, mechanical drawing, computer science, engineering, forestry, geography, physical science

• Education / Training

- Minimum associate's degree; most jobs require bachelor's degree and on-the-job experience





Psychologist

- **Related job titles**
 - Cognitive psychologist
- **Job description**
 - Studies the mind and human behavior
 - NASA psychologists usually research and explain how people behave and function in space
- **Suggested school subjects**
 - Mathematics (statistics)
 - Science (biology, psychology)
 - Research methods
- **Education**
 - Bachelor's, master's or Ph.D. degree in field such as behavioral science
 - Studies must contain 20+ hours of physiology experimental physiological psychology or experience in biotechnology, hardware or related field





Computer Support Specialist

- **Related jobs**

- Computer programmers, computer software engineers, computer scientists

- **Job description**

- Provides technical assistance, support and advice to customers and other users
- Interprets problems and provides technical support for hardware, software and systems
- Answers telephone calls, analyzes problems using automated diagnostic programs and resolves difficulties

- **Suggested school subjects**

- English, computer courses

- **Education / Training**

- Associate or bachelor's degree in computer science or information systems





Construction Manager

- **Related jobs**

- Architect, civil engineer, cost estimator, landscape architect, engineering and natural sciences manager

- **Job description**

- Plans and coordinates construction projects
- Schedules and coordinates all design and construction processes
- Obtains all necessary permits and licenses
- Monitors compliance with building and safety codes

- **Suggested school subjects**

- Mathematics, business and management, engineering and computer courses

- **Education / Training**

- Two- or four-year degree in construction science, construction management or civil engineering; on-the-job experience

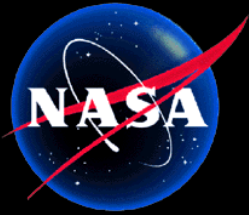




Executive Manager

- **Related job titles**
 - Director, administrator, deputy, chief
- **Job description**
 - Top leaders of a business or organization
 - Sets center or program goals and makes an action plan to lead activities, research, programs and missions
- **Suggested school subjects**
 - Management
 - Public speaking
 - Engineering
 - Science
- **Minimum Education**
 - Bachelor's degree. Most begin as scientists or engineers and are promoted due to leadership and their broad understanding of science.





Project Manager

- **Related job titles**
 - Project lead, technical lead, principal investigator
- **Job description**
 - Plans, organizes and leads research, development, design and computer activities
- **Suggested school subjects**
 - Science, engineering or computer science
 - Math
 - Speech
 - Leadership
- **Minimum Education**
 - Bachelor's degree, management skills, experience as an engineer, mathematician, scientist or computer professional related to the type of work managed. NASA knowledge.





Public Affairs Specialist

- **Related jobs**

- Advertising, marketing, reporter

- **Job description**

- Handles organizational functions such as media and community relations
- Informs the general public about NASA policies, activities and accomplishments

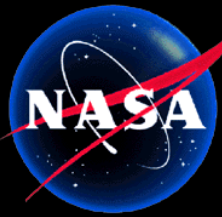
- **Suggested school subjects**

- English
- Journalism
- Public speaking

- **Education**

- Bachelor's degree in journalism, public relations or related field





Weather Station Manager

- **Related job titles**

- Meteorologist, weather officer, weather forecaster, meteorology researcher, meteorological modeling specialist

- **Job description**

- Supervises employees, other meteorologists, who collect weather data, make weather predictions, and advise air traffic controllers on weather hazards

- **Suggested school subjects**

- Algebra, trigonometry, physics, meteorology, statistics, computer modeling, psychology, interpersonal communication

- **Education / Training**

- Bachelor's and master's of science degree in meteorology and management training courses





Accounting Clerk

- **Related jobs**

- Bookkeeping clerk, auditing clerk

- **Job description**

- Updates and maintain financial
- Makes numerous computations

- **Suggested school subjects**

- Computer courses
- Mathematics

- **Education / Certification**

- Bookkeeper or accounting certification





Data Entry Clerk

- **Related jobs**

- Court reporters, secretaries and administrative assistants, medical records and health information technicians

- **Job description**

- Enters data into a computer
- Operates a variety of office machines
- Performs various clerical duties

- **Suggested school subjects**

- English (grammar skills)
- Keyboarding and computer courses
- Business courses

- **Education / Training**

- High school graduate
- Knowledge of word processing and database management software





Management Assistant

- **Related jobs**

- Secretary, typist, data entry clerk

- **Job description**

- Delegates authority
- Supports multiple bosses and teams
- Handles general management challenges

- **Suggested school subjects**

- Business technology
- Computer
- English (grammar)

- **Education / Training**

- High school diploma or college education
- On-the-job training and experience





Planner / Scheduler

- **Related jobs**

- Secretary, management assistant, data entry clerk

- **Job description**

- Coordinates work orders with personnel who will carry out the work and closes out the account when the work is finished
- Completes status reports on projects

- **Suggested school subjects**

- Business technology
- Computer course (database knowledge)

- **Education / Training**

- High school graduate
- On-the-job training
- Good computer skills





Procurement Clerk

- **Related jobs**

- Secretary
- Data entry clerk
- Administrative assistant

- **Job description**

- Compiles requests for materials, prepares purchase orders, keeps track of purchases and supplies, and handles inquiries about orders
- Orders goods and supplies

- **Suggested school subjects**

- Computer courses
- Mathematics

- **Education / Training**

- High school graduate





Secretary

- **Related jobs**

- Bookkeeping and accounting clerks, receptionists, human resources assistants, data entry

- **Job description**

- Performs and coordinates an office's administrative activities
- Plans and schedules meetings and appointments; organizes and maintains files
- Manages projects and conducts research
- Provides training and orientation for new staff

- **Suggested school subjects**

- Business courses
- Keyboarding and computer courses
- English (grammar)

- **Education / Training**

- High school graduate
- Business school or vocational training





Carpenter

- **Related jobs**

- Brickmason, blockmason, stonemason, plasterer and stucco mason, electrician, plumber

- **Job description**

- Cuts, fits and assembles wood and other materials for the construction of buildings, highways, bridges, docks, industrial plants, boats and many other structures

- **Suggested school subjects**

- Carpentry
- Shop
- Mechanical drawing
- Mathematics

- **Education /Training**

- High school graduate
- Apprenticeship





Electrician

- **Related jobs**

- Line installers and repairers, electrical and electronics installers and repairers

- **Job description**

- Installs, connects, tests and maintains electrical systems
- Installs and maintains electronic controls

- **Suggested school subjects**

- Mathematics, electronics, mechanical drawing, science, shop

- **Education / Training**

- High school diploma
- Apprenticeship programs that include classroom and on-the-job training
- On-the-job training as an electrician's assistant





Machinist

- **Related jobs**

- Tool and die makers
- Machine setters
- Welders

- **Job description**

- Uses machine tools to produce precision metal parts

- **Suggested school subjects**

- Trigonometry and other mathematics courses, drafting, metalworking, physics

- **Education /Training**

- Formal apprenticeship programs
- Informal on-the-job training
- High school, vocational school, community or technical colleges





Marine Mechanic

- **Related jobs**

- Marine draftsman, riveters, ship fitters

- **Job description**

- Adjusts, tests and repairs engines, transmission, fuel systems, hydraulic steering systems, cooling systems, electrical systems, propellers and boat trailers
- Dismantles faulty assemblies, repairs or replaces worn or damaged parts and reassembles, adjusts and tests the repaired mechanism
- Performs scheduled maintenance services such as oil changes, lubrications and tune-ups

- **Suggested school subjects**

- Vocational courses about boat engines, fuel systems, electrical systems, steering systems, GPS navigation systems

- **Education / Training**

- Apprenticeship program or on-the-job training





Painter

- **Related jobs**

- Carpenter
- Carpet, floor and tile installers, and finishers
- Drywall installers
- Plasterers and stucco masons

- **Job description**

- Applies paint, stain, varnish and other finishes to buildings and other structures

- **Suggested school subjects**

- Mathematics

- **Education / Training**

- High school graduate
- Apprenticeship or informal, on-the-job instruction





Welder

- **Related jobs**

- Machinists, sheet metal workers, assemblers and fabricators

- **Job description**

- Uses machine tools to produce precision metal parts
- Works with computerized robots

- **Suggested school subjects**

- Mathematics, physics, chemistry, mechanical drawing, computers, metallurgy, welding, soldering

- **Education / Training**

- Formal apprenticeship programs
- Informal on-the-job training
- High school, vocational school, community or technical colleges

