



# AEROSPACE

## Aerospace Occupations

- Engineering Managers
- Aerospace/Systems Engineers
- Computer Software Engineers, Applications
- Industrial Engineers
- Mechanical Engineers
- Business Operations Specialists
- Aerospace Engineering & Operations Technicians
- Industrial Engineering Technicians
- Computer Support Specialists
- Aircraft Structure, Surfaces, Rigging & Systems Assemblers
- Machinists
- Inspectors, Testers, Sorters, Samplers & Weighers
- Structural Metal Fabricators & Fitters

**Did you know?** Aerospace isn't just engineering! Machinists, Computer Specialists and Manufacturing Workers are employed in this industry as well.

**Aerospace** has taken off in Colorado, and if you're looking for an out-of-this-world career, you might have just found it. Aerospace jobs launch rockets, send humans to the moon and search for alien life in space – and this is just in the next few years! Besides space, our region's aerospace industry focuses on earth science activities that support climate monitoring and extreme weather forecasting, helping our planet and people.

## Start Exploring Aerospace Careers

### Step 1: Identify your interests

Compare your interests, skills and work values with Aerospace occupations using Labor Market Information's Career Explorer:

Visit [www.coworkforce.com/lmigateway](http://www.coworkforce.com/lmigateway)

- Click on "Services for Individuals"
- Choose "Career Services"

This will take you to "Career Explorer" where you can match your skills to occupations.

### Step 2: Explore the Aerospace industry & careers

Learn about high-growth, in-demand careers and what they pay on the LMI Gateway website:

[www.coworkforce.com/lmigateway](http://www.coworkforce.com/lmigateway)

For more information on a career in Aerospace, check out [www.spacefoundation.org](http://www.spacefoundation.org), [www.incose.org](http://www.incose.org) and [www.spacecolorado.org](http://www.spacecolorado.org)

### Step 3: Find education, training & financial aid options

Discover the best education or training institutions for your career goals and how to get money for school at [www.collegeincolorado.org](http://www.collegeincolorado.org)

### Step 4: Find available job openings

[www.connectingcolorado.com](http://www.connectingcolorado.com)

## A Day in the Life of...

### Matthew Dahl

Satellite Flight Controller at  
LASP in Boulder, CO

Instead of checking email, like many workers' days begin, Matthew starts out by checking spacecraft data. After reviewing the data and making sure everything is set for the day's activities, he'll sit down on-console with a student Command Controller and command a spacecraft to retrieve data collected since its last contact with the ground. After the contacts are done, he'll send out a shift report, detailing the day's activities.

For Matthew, the best part of his job is knowing that when he goes into work that he'll be in command of a spacecraft flying hundreds, in some cases thousands, of miles above the Earth, traveling at an incredible speed. Even better is that he is a part of cutting-edge science that improves human knowledge of the universe and our way of life.



# Who do you want to be tomorrow?

Occupation	Average Hourly/Annual Wage	Minimum Education/Training	Suggested Programs of Study
<b>Engineering Managers</b> <i>Plan, coordinate &amp; direct engineering design, production &amp; research &amp; development activities. They may supervise engineers, scientists, technicians &amp; support personnel.</i>	\$63.05 / \$131,147	Work experience + Bachelor's Degree	Aerospace Management, Engineering & Technology Management
<b>Aerospace/Systems Engineers</b> <i>Perform a variety of engineering work in designing, constructing &amp; testing aircraft, missiles &amp; spacecraft. May recommend improvements in testing equipment &amp; techniques. Systems Engineers work with the "big picture," making sure that all of the aerospace systems work together effectively.</i>	\$49.63 / \$103,236	Bachelor's Degree	Aerospace Engineering, Astrophysics/Physics, Astrophysical & Planetary Sciences Systems engineers sometimes have education in other engineering disciplines.
<b>Computer Software Engineers, Applications</b> <i>Develop, create &amp; modify general computer applications software or specialized utility programs. Design or customize software for client use, optimizing operational efficiency.</i>	\$44.37 / \$92,284	Bachelor's Degree	Applied Computing Technology, Computer Science, Electrical & Computer Engineering
<b>Industrial Engineers</b> <i>Design, develop, test &amp; evaluate integrated systems for managing industrial production processes like quality/inventory control, logistics/material flow &amp; cost analysis.</i>	\$39.46 / \$82,080	Bachelor's Degree	Engineering & Applied Science, Engineering Physics
<b>Mechanical Engineers</b> <i>Perform engineering tasks like planning/designing tools, engines, machines &amp; other mechanical equipment. Supervise equipment installation, operation, maintenance &amp; repair.</i>	\$45.55 / \$94,751	Bachelor's Degree	Mechanical Engineering, Mechanical Engineering Technology
<b>Business Operations Specialists</b> <i>Administer &amp; manage a variety of business operations from human resources to financial services. Project managers are often in this job category.</i>	\$33.99 / \$70,694	Bachelor's Degree	Business
<b>Aerospace Engineering &amp; Operations Technicians</b> <i>Operate, install, calibrate &amp; maintain integrated computer/communications systems consoles, test/measurement instruments &amp; equipment to launch, track &amp; evaluate air &amp; space vehicles.</i>	\$30.08 / \$62,558	Associate Degree	Aerospace Engineering, Aerospace Operations, Pre-Aerospace Engineering Technology
<b>Industrial Engineering Technicians</b> <i>Apply engineering theory &amp; principles to problems of industrial layout or manufacturing production, usually under the direction of engineering staff.</i>	\$25.11 / \$52,233	Associate Degree	Engineering Science, Industrial Maintenance Technology
<b>Computer Support Specialists</b> <i>Provide technical assistance to computer system users.</i>	\$24.53 / \$51,027	Associate Degree	End User Support Specialist, Computer Service/Network Technology, Computer Support Technician/Information Systems
<b>Aircraft Structure, Surfaces, Rigging &amp; Systems Assemblers</b> <i>Assemble, fit, fasten &amp; install parts of airplanes, space vehicles or missiles.</i>	\$18.54 / \$38,567	At least 1 year of on-the-job training	Airframe Mechanics, High Tech Manufacturing, Advanced Manufacturing/Machining
<b>Machinists</b> <i>Set up &amp; operate a variety of machine tools to produce precision parts &amp; instruments. Includes precision instrument makers who fabricate, modify or repair mechanical instruments.</i>	\$18.57 / \$38,624	At least 1 year of on-the-job training	Machine Technologies, Advanced Manufacturing/Machining
<b>Inspectors, Testers, Sorters, Samplers &amp; Weighers</b> <i>Inspect, test, sort, sample or weigh products, looking for defects, wear &amp; deviations from specifications. May use complex test equipment &amp; instruments.</i>	\$17.70 / \$36,826	1-12 months on-the-job training	Advanced Manufacturing/Machining, High Tech Manufacturing
<b>Structural Metal Fabricators &amp; Fitters</b> <i>Fabricate, lay out, position, align &amp; fit parts of structural metal products.</i>	\$17.86 / \$37,145	1-12 months on-the-job training	Structural Engineering Technology



## A Day in the Life of...

### Mari Gravlee

Advanced Programs Engineer  
for United Launch Alliance in  
Centennial, CO

On any given day, Mari could be reviewing test results from a rocket engine thruster or traveling to NASA to discuss the development of a test setup for cryogenic propellants. Her days can be hectic, but they are never dull. Although she has a Bachelor's Degree in Mechanical Engineering, Mari says that communication – oftentimes an Engineer's weakest point – is one of the most important skills for her job. Being able to explain things to others and gain their support is very important.

Although she enjoys her day to day duties, nothing is as exciting as launch day. Mari says it's incredible to see all the rocket systems working together to deliver a satellite into space.

To learn more about occupations & resources, visit [www.MetroDenverCareers.com](http://www.MetroDenverCareers.com)



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