



1938 Harney, Suite 251
Laramie, WY 82072
www.alpenglowinstruments.com

Mechanical Engineering Internship

Alpenglow Instruments is a solutions based company focusing on the design, development and support of in-situ and remote sensing instruments. Specifically, we specialize in producing instrumentation for airborne atmospheric research. Our company was founded in 2013 and we are currently a client of the Wyoming Technology Business Center. We are seeking a third or fourth year mechanical engineering student to work 10-20 hours per week at a rate of \$13-\$15 per hour depending on qualifications.

Mechanical Engineer Job Responsibilities:

- Designs mechanical, optomechanical and electromechanical products through the use of SolidWorks.
- Responsible for leading system design reviews, creating mechanical drawings for manufactured parts and producing engineering compliance reports.

Mechanical Engineer Job Duties:

- Designs, analyzes, builds and tests special-purpose equipment, systems and/or instrumentation for commercial or research purposes.
- Participates in multidisciplinary meetings and consolidates information into useful mechanical design specifications.
- Evaluates mechanical, optomechanical and electromechanical systems and products by applying engineering theory to solve problems.
- Performs static structural analysis and produces stress reports for airborne instrumentation with respect to aerodynamic and inertial loading in various flight conditions.
- Designs, assembles and configures engineering prototype models.
- Prepares documentation on projects including technical drawings, engineering reports, test procedures, test reports, inventories and expense reports.
- Provides engineering information by answering questions and requests.
- Prepares cost estimates and budget recommendations for projects, equipment and supplies; may order supplies as directed.
- Maintains product and company reputation by complying with government regulations.

Mechanical Engineer Skills and Qualifications:

- Intermediate level of knowledge in SolidWorks.
- Strong technical writing skills.
- Excellent oral and written communication skills needed to accurately document work in process.
- Capable of presenting technical information.
- Build and test engineering and/or scientific systems and components.
- Relevant coursework in Statics, Mechanics of Materials, Thermodynamics, Transport Phenomena, Machine Design, and Properties of Materials. Bonus points for Airplane Aerodynamics and Flight.

Please email resume to Nick Mahon (nickmahon@alpenglowinstruments.com) by September 8th, 2017.