What You Will Do

The Mechanical Design Engineer position within the Engineering Project Delivery Group of ES-DO will be responsible for design services and maintaining the Conduct of Engineering (CoE) program implementation at LANL. The ENG 1/2 will work with a team of engineering professionals responsible primarily for LANL facilities design and review of LANL construction projects to ensure compliance with LANL and nationally recognized codes and standards. The ENG 1/2 shall be responsible for the development of mechanical and plumbing system designs, calculations, drawings and specifications required for assigned projects.

This position will be filled at either the Mechanical Engineer 1 or 2 level, depending upon skills and attributes of the selected candidate. Additional job responsibilities (outlined below) will be assigned if the candidate is hired at the higher level.

**Mechanical Design Engineer 1:**
The successful candidate will be expected to perform duties that include, but are not necessarily limited to:

- Ability to communicate well, both verbally and in writing.
- Proficiency with personal computers and typical office software.
- Ability to work as part of a design team.
- Adherence to quality and schedule requirements.
- Advocate leadership, quality, and safety values, to external partners including vendors, construction companies, and subcontractors.
- Provide designs for new facilities, maintenance, retrofit, and upgrades to mechanical systems at the LANL site including ventilation, process, power, machine, rotating equipment and systems.
- Prepare technical reports and studies.
- Collect the application, process, safety, and other requirements for the systems and design the system and prepare design concepts that meet the requirements.
- Perform calculations for things such as duct pressure loss, pipe pressure loss.
- Develop design drawings and specifications including details, P&IDs, schedules and schematics that incorporate the applicable design requirements including nuclear safety requirements.
- Obtain and evaluate equipment selections from manufacturer’s representatives.
- Interface and coordinate with other engineering disciplines and the customer’s representative during design and construction.
- Support associated safety analyses and hazards evaluations.
• Develop construction/maintenance installation instructions.
• Define maintenance requirements.
• Implement the LANL Conduct of Engineering (COE) Program.

Mechanical Design Engineer 2:
In addition to key position requirements listed for Engineer 1, the Engineer 2 candidate will also meet the following:

• Ability to work with deployed engineers, and works with ES-DO in guidance for activities linked to the mechanical designs and modifications.
• Responsible for leading and developing mechanical designs.
• Demonstrate Knowledge of Conduct of Engineering implementation.
• Provide consultation to Facility Engineering and Engineering Services management related to mechanical design needs.
• Ability to execute mechanical engineering tasks with supervision.
• Ability to apply fundamental knowledge of mechanical engineering, principles, design guides codes and standards.

What You Need
Minimum Job Requirements:

• Demonstrated knowledge of HVAC and plumbing buildings systems.
• Demonstrated knowledge of engineering work planning and design coordination.
• Demonstrated knowledge of mechanical engineering principles, design guides, codes and standards.
• Demonstrated knowledge of Project Engineering Practices
• Awareness of IBC, UMC and UPC requirements.
• Excellent Communication skills.

Desired Skills: Demonstrate sound knowledge of DOE standards applicable to facility design, operation, and maintenance.

Education:

• Bachelor of Science in Mechanical Engineering from an ABET-accredited program.
• 3-5 years of relevant work experience for a level 2)

Where You Will Work
Located in northern New Mexico, Los Alamos National Laboratory (LANL) is a premier national security research institution, delivering scientific and engineering solutions for the nation’s most crucial and complex problems. LANL is primarily responsible for monitoring the safety and reliability of the nation’s nuclear stockpile and conducting research in fundamental science, defense and energy programs. It is a center for research in a wide range of scientific disciplines, including space exploration, geophysics, renewable energy, supercomputing, medicine, and nanotechnology. Engineering Services Division (ES-DO) of LANL develops, maintains, and applies a diverse set of engineering capabilities to provide innovative engineering solutions that enable LANL to meet its mission.

Additional Details:

Clearance: Q (Position will be cleared to this level). Applicants selected will be subject to a Federal background investigation and must meet eligibility requirements* for access to classified matter.
*Eligibility requirements: To obtain a clearance, an individual must be at least 18 years of age; U.S. citizenship is required except in very limited circumstances. See DOE Order 472.2 for additional information.

New-Employment Drug Test: The Laboratory requires successful applicants to complete a new-employment drug test and maintains a substance abuse policy that includes random drug testing.

Regular position: Term status Laboratory employees applying for regular-status positions are converted to regular status.

Internal Applicants: Please refer to Laboratory policy P701 for applicant eligibility.

Equal Opportunity:

Los Alamos National Laboratory is an equal opportunity employer and supports a diverse and inclusive workforce. All employment practices are based on qualification and merit, without regards to race, color, national origin, ancestry, religion, age, sex, gender identity, sexual orientation or preference, marital status or spousal affiliation, physical or mental disability, medical conditions, pregnancy, status as a protected veteran, genetic information, or citizenship within the limits imposed by federal laws and regulations. The Laboratory is also committed to making our workplace accessible to individuals with disabilities and will provide reasonable accommodations, upon request, for individuals to participate in the application and hiring process. To request such an accommodation, please send an email to applyhelp@lanl.gov or call 1-505-665-4444 option 1.