



## Senior Engineer

### **General Characteristics:**

The Senior Engineer will manage/coordinate projects with other team members. Applicant must have practical experience and demonstrated competence in the following areas:

- A strong background in the design and operation of mechanical heating, ventilation, and air-conditioning (HVAC) systems and knowledge of the specialized HVAC requirements of highly technical facilities; understanding of building electrical systems.
- Evaluating state-of-the-art building energy-efficiency technologies and managing sustainable design and sustainable design assistance projects;
- Using hourly simulation software programs and industry-accepted engineering methods for evaluating energy performance;
- Providing quality assurance review of analysis methods, simulation results, and project deliverables;
- A team player willing to contribute to and build sustainable design methods, knowledge, and capabilities;
- Working within the architectural design process and understanding design team members' roles, perspectives, and analysis needs;
- A holistic understanding of whole building and mechanical systems and a strong commitment to state-of-the-art design innovations.

### **Direction Received:**

The Senior Engineer should be fully capable of managing all aspects of whole-building energy analysis associated with completing sustainable design projects for both new and existing buildings. Additionally, be capable of designing start-to-finish mechanical and/or electrical design projects, and completing construction field observation and construction administration activities. The position requires strong management and client interaction skills to develop and carry out a tailored evaluation approach well-suited to the project and design team objectives. S/he must be able to coordinate work responsibilities and manage other staff and our outside consultants to complete tasks.

### **Typical Duties and Responsibilities:**

Employee will manage/coordinate projects with other team members. Typical duties may include (but are not limited to) the following:

- Provide technical services and management for sustainable design assistance projects;
- Manage detailed energy modeling, mechanical and electrical design, evaluation of complicated building systems, and life-cycle-cost analysis;
- Provide clear and well-written memorandums, and reports to various clients (building owners, architects, engineers) regarding project specific energy performance and modeling results;
- Conduct quality assurance reviews to ensure engineering quality and accurate technical content of project-related documents;
- Meet / contact clients as appropriate to discuss energy analysis methods, results and recommendations;
- Prepare analyses, calculations and reports to support energy-related & LEED components;
- Prepare mechanical and/or electrical engineering construction documents and construction-phase administration support on design projects;

- Assist in writing proposals and identifying and attracting potential clients and new projects;
- Assist to monitor the business operations of the team as they relate to the overall economic health and viability of the PCD team;
- Travel to in-state and out-of-state projects as required. Minimal travel required.

**Skills & Background Required:**

A candidate for this position must have the following skills / background:

- Excellent communication skills — oral, written, and presentation — and facility with necessary supporting software (Microsoft: Word, Excel, PowerPoint);
- Expertise in complex building mechanical systems and state-of-the-art energy efficiency technologies/ applications;
- Project management experience; including people and time management skills;
- Working knowledge of and experience with the architectural design process and all phases of design and construction from pre-design to construction administration;
- Working knowledge of the USGBC's LEED certification rating systems (NC, EB, CI, etc.);
- Working knowledge of building and energy codes and standards;
- Undergraduate-level engineering degree & PE registration;

**Skills and Background Recommended (Preferred):**

A preferred candidate for this position may also have the following skills / background:

- 7+ years experience in a building related field, preferably experience in mechanical engineering, HVAC design and building energy analysis.
- Experience in commissioning for both new and existing buildings.
- Experience in designing/evaluating state-of-the-art sustainable design technologies for commercial and industrial new construction and remodel/retrofit.
- Understanding of building automation systems.
- Recent energy modeling experience with DOE-2 and/or Energy Plus or other detailed hourly simulation;
- LEED AP status;
- Commissioning Certification;
- Experience with "Integrated Systems" planning and design.

PCD Engineering is a leading firm headquartered in beautiful Boulder County on the base of the Rocky Mountains. With offices in Longmont, CO, Cheyenne, WY and Roanoke, VA, PCD Engineering designs and implements collaborative engineering solutions that produce high performance buildings.

This position is for our Longmont, CO or Cheyenne, WY office. We have found what we offer in contrast to the medium to large company culture is unsurpassed. We function more as a team than as a hierarchy of management. Our customer-focused, award-winning solutions are meaningful to us and we take great pride in our work.

If you are interested, we'd love to hear from you. Please email resume and salary history to [jobs@pcdengineering.com](mailto:jobs@pcdengineering.com). No phone calls please.