# **HVAC Design Engineer**Sain Engineering Associates, Inc.

#### Role

Mid-level engineer serving within an inter-disciplinary team of engineers designing energy and water efficiency upgrades.

#### **Primary Responsibilities**

- Research and design HVAC mechanical equipment to meet client's requirements in both large and small projects.
   Direct, monitor, and control the activities of MEP subcontractor(s) as needed.
- Calculate loads for all types of HVAC systems to include hydronic plant loops, air loops, packaged systems, and split systems.
- Review, modify, and create HVAC system drawings.
- Analyze HVAC systems and equipment when necessary to find inefficiencies or malfunctions and create solutions to
  optimize performance and increase the efficiency of operation.
- Consult on HVAC system and equipment design for a wide range of projects, and work with other engineers, project managers, and construction professionals as needed to create and/or modify design parameters.
- Communicate directly with customers to understand project requirements, goals, design specifications, and operational environments in order to evaluate cost, feasibility, and implementation of new HVAC equipment.
- Review, create, and submit detailed bids outlining costs and timelines for construction or extraction projects in accordance with deadlines.
- Design testing procedures and control equipment to accurately assess products and identify areas that require
  modification and further testing.
- Provide MEP commissioning services for new and existing buildings.

### Qualifications

- Professional Engineer (PE) license required; if license is issued outside of Alabama, must be eligible for licensing in Alabama.
- Certified Energy Manager (CEM) and/or Commissioning Authority (CxA) certifications a plus.
- Bachelor's degree in Engineering, or 10 years of relevant experience.

## Knowledge, Skills and Abilities

- At least four years' experience performing HVAC design work.
- Proficient in researching, interpreting, and achieving code-compliance for any jurisdiction. Thorough knowledge of the International Building Code (IBC), International Energy Conservation Code (IECC), International Existing Building Code (IEBC), International Mechanical Code (IMC), ASHRAE standards, and SMACNA standards.
- Proficient in developing and reviewing construction documents including details, specifications, shop drawings, and submittals.
- · Ability to anticipate potential system conflicts and problems and propose effective solutions.
- Experience performing HVAC system design tests. Knowledge and experience with ASTM testing standards.
- Knowledge and experienced in standard construction procedures and practices.
- Strong written and verbal communications skills.
- Proficient with Autodesk suite, Revit, Microsoft Office suite, Adobe, Bluebeam Revu.
- · Willingness and ability to instruct and coach team members in design standards and processes.
- Ability to work comfortably at height; includes rooftops, elevated platforms, scaffolding.
- Ability to lift and carry large, bulky, or heavy test equipment.

