

**Job Title: Mechanical Engineer**

This title may also be classified at AES Northeast as one of the following:

- Professional Engineer

**Prerequisites:** -PE License

-Prior work experience using AutoCAD and/or Revit

**Supervisor:** This position reports to the Principal Engineer In Charge of the MEP/Building Systems Group

**Basic Job Description/Duties/Responsibilities:**

MEP Group Team member, providing design assistance to MEP group and other disciplines relating to building systems, water/wastewater treatment systems, mechanical, and/or plumbing system designs, such as, but not limited to:

Water Systems - System modeling, filter systems, well systems, storage tanks, booster pumps, etc.

Wastewater Systems - Preliminary, primary, secondary treatment, solids handling, pumping stations, etc.

Heating Systems - Hydronic and steam piping, piping insulation, boilers, pumps, appurtenances, controls, etc.

Plumbing Systems - Sanitary piping, domestic hot and cold water piping, hot water generation, piping insulation, pump systems, fuel and gas systems, laboratory piping, etc.

Ventilation Systems - Air delivery, fan systems, air handlers, process systems, specialized exhaust systems,

Air Conditioning Systems - Direct expansion, chilled water, refrigerant systems, chillers, pumps, controls, etc.

HVAC System Controls – Development/design of control sequences of operation, schematic control drawings, and understanding of building automation controls.

**Summary of Job Duties:**

- Perform code research, expand knowledge of codes and standards
- System layout and coordination
- Sizing and selection, spreadsheet development
- Basic estimating
- Specification writing
- Preparation of reports
- Understanding of development of Basis of Design
- Understanding of relevant codes and standards
- Code research
- CADD drafting of mechanical and plumbing systems
- Assistance with proposal development, including hourly estimates
- Mentoring of new staff, including some staff training.
- Field/site visits during construction to review installed work and verify design intent.

The above list contains basic duties required of the position. This list may not include all of the duties required of the position. This list may be updated from time to time.