Architectural Engineer Job Description

Duties and Responsibilities:

- Design heating, plumbing, lighting, and ventilation systems to be effective and safe
- Analyze building plans and blueprints to ensure they are accurate and feasible
- Direct and supervise building contractors to ensure compliance with set standards and specifications
- Collaborate with architects, engineers, and project managers to design and implement an efficient system of operation
- Carry out cost estimates of construction materials to determine a project budget
- Oversee the procurement of select materials and component for a construction project
- Ensure building operations are in compliance with government housing laws and building codes
- Sketch and design building plans by hand drafting or with the aid of CAD programs
- Oversee the installation of electrical, structural and fire protection systems to ensure a safe and efficient setup
- Conduct tests to determine the structural integrity of a building against seismic vibrations
- Evaluate the efficiency of fire alarms, lightening protection and other safety add-ons to ensure they are operational
- Adjust a building plan to contain additional components/sections as may be required by clients
- Perform materials testing to verify the quality of procured materials or components
- Ensure adherence to health and safety rules and regulations during work operations

- Attend workshops, seminars and conferences to update job knowledge and expand personal network.

Architectural Engineer Requirements – Skills, Knowledge, and Abilities

- Education and Training: To become an architectural engineer, you require a Bachelor's degree in civil or architectural engineering. State licensing is also required to practice as an architectural engineer
- Communication Skill: Architectural engineers are adept at communicating with project managers and chief architects to develop and implement construction objectives
- Math Skill: They are skilled in making mathematical calculations to determine the specifications of an architectural design
- Observational Skill: They are able to identify inconsistencies or deviation from an established building plan.