

## Senior Engineer

### **Definition:**

Under direction, to perform a wide variety of professional duties in support of the engineering function.

The Engineer encompasses entry level to full journey level Registered Engineers with responsibility for performing a broad range of professional duties. Advancement to Senior Engineer is considered on a merit basis and is subject to recommendation of the Department Head.

**Engineer:** This is the entry level of the professional engineering series. The Engineer is responsible for performing professional engineering activities. Incumbents typically work on portions of projects or entire smaller and less complex projects.

**Senior Engineer:** This is the full journey level engineer responsible for performing the most complex work. The Senior Engineer is distinguished from the Engineer II in that incumbents handle larger, more complex and controversial projects. Some positions may serve as a lead to lower level engineers and in a lead capacity may supervise engineering support staff. Some Senior Engineer assignments may require registration as a Professional Civil or Traffic Engineer, Land Surveyor, Architect or Geologist appropriate to the assignment.

### **Essential Functions:**

- Performs project/program management activities which includes: planning and scheduling projects, estimating and tracking costs, monitoring progress, keeping daily logs and reports, ensuring quality control, and preparing change orders.
- Prepares plans, specifications and special provisions; conducts modeling.
- Reviews and signs off on maps and legal descriptions.
- Conducts engineering studies.
- Interprets, communicates and verifies that projects are in compliance with plans, specifications and special provisions. Ensures projects meet safety aspects.
- Reviews projects for errors and/or discrepancies; negotiates and implements corrective actions. Some positions may serve as a plans check engineer.
- Performs engineering calculations.
- Directs survey crews and lab technicians by determining scope and scheduling.
- Prepares a wide variety of technical reports, diaries, correspondence and statements.
- Participates in and leads cross-divisional teams.
- Serves as a liaison with other departments, organizations, agencies and the public in answering questions, explaining projects and resolving complaints.
- Prepares Requests for Proposal, hires consultants, negotiates and administers contracts/agreements.
- Prepares grant applications to secure additional funding.
- Oversees and manages data.

**Essential Functions (continued):**

- In a lead capacity may supervise engineering support staff to include: prioritizing and assigning work; conducting performance evaluations; ensuring staff are trained and makes hiring, disciplinary and termination recommendations.
- Performs other duties of similar nature or level as required.

**Employment Standards:**

- Bachelor's Degree in Civil, Geomatic, Mechanical or Architectural Engineering or directly related engineering discipline or Architecture or Geology, **OR** 120 units or 180 quarter units from an accredited college or university with coursework in Civil, Geomatic, Mechanical or Architectural Engineering or directly related engineering discipline or Architecture or Geology **OR** Possess a valid State of California Engineer In Training (E.I.T.) Certificate, or Land Surveyor In Training (L.S.I.T.) Certificate, **OR** Valid Registration/Licensure in the State of California as a Professional Engineer, Geologist, Land Surveyor or Architect.

**Additional Requirements which may be contingent on assignment:**

- Valid Registration in the State of California as a Professional Civil Engineer
- Valid Registration in the State of California as a Professional Traffic Engineer
- Valid Licensure in the State of California as a Land Surveyor, Architect or Registered Geologist
- Valid State of California Engineer In Training Certificate
- Valid State of California Land Surveyor In Training Certificate (LSIT)
- Possession of a valid California Driver's License

**Knowledge of:** engineering principles and theory; drafting methods and procedures; properties of materials; basic hydrology, geology and soils engineering; construction methods and practices; applicable planning and zoning laws, ordinances and regulations; surveying; research methodologies; and report writing techniques.

**Skill in:** reading and interpreting plans and specifications; designing and preparing plans; mediating conflict; negotiating and administering contracts; interpreting laws, ordinances and regulations; preparing legal descriptions; researching; preparing technical reports and documentation; designing and drafting plans; managing projects; preparing and giving presentations; communicating both orally and in writing sufficient to exchange or convey information and to receive work direction, monitoring and evaluating work; and, prioritizing & assigning projects.

A background check may be conducted for this classification.

All Kern County employees are designated "Disaster Service Workers" through state and local laws (CA Government Code Sec. 3100-3109 and Ordinance Code Title 2-Administration, Ch. 2.66 Emergency Services). As Disaster Service Workers, all County employees are expected to remain at work, or to report for work as soon as practicable, following a significant emergency or disaster.