

# Senior Engineer

## General Characteristics

A Senior Engineer strives for technical excellence and expertise in one or more particular structural systems or building types. A Senior Engineer is sought internally and externally for consultation in unique and challenging engineering applications within their recognized expertise. This position requires the use of advanced techniques and the modification and extension of theories, precepts, and practices of structural engineering. The knowledge and expertise required for this level of work results from progressive experience. A minimum of 10 years of relevant experience is required for advancement to this position.

## Direction Received

Supervision and guidance related largely to overall objectives, critical issues, new concepts and policy matters. Consults with fellow Senior Engineer's and/or Associates concerning unusual problems and developments.

## Typical Duties & Responsibilities

A Senior Engineer functions in a supervisory capacity directing Engineers, Technicians, and Designers in accomplishing the design of project types of every scope. The SSE works in conjunction with a Project Manager, Senior Project Manager, Associate, or Principal in setting and accomplishing project goals. A Senior Engineer usually performs as a staff advisor and consultant as to a technical specialty or a type of facility.

## Partial List of Responsibilities

- Structural calculations
- Plan layout and detail development
- Detailed knowledge of analysis and plan production software
- Full structural design drawing assembly and specification compilation for projects of most types and scale
- Perform full range of construction administration tasks: RFI's, submittal review, site observation visits
- Be aware of and comply with project schedules
- Maintain orderly paper and electronic files
- Routine client communication
- Assist associates with administrative and development assignments as requested/directed
- Monitor project progress using input from Project Manager
- Responsible charge of major projects from the technical, financial, and schedule perspectives
- Proposal development
- Primary vehicle for communication with clients
- Direct administrative and development assignments as defined by the management team
- Assist in training/mentoring of junior staff

## Responsibilities for Direction of Others

A Senior Engineer supervises, coordinates, and reviews the work of Engineers, Designers, and Technicians on their projects. They are responsible for estimating workforce needs and schedules, and assign work to meet completion dates. Senior Engineers will also be responsible for fostering the technical and professional development of Engineers, Designers, and Technicians assigned to them.



## **Education**

Bachelor's Degree in engineering from an ABET accredited curriculum or equivalent, plus appropriate continuing education. Master's Degree encouraged.

## **Registration**

Registered Professional Engineer (PE). SE required.

## **Typical Professional Attainments**

Member of professional society (Member grade).

Member of technical committees.

Publishes engineering papers, articles, or makes presentations, gives lectures, and provides internal and/or external training, etc.