

Class Concept

This is professional engineering work. Positions in this classification are responsible for consultation, investigation, evaluation and planning, design, design review and approval, and/or determination of environmental and safety impacts of work processes and products (buildings, utilities, systems, sites, mapping, or infrastructures); provide project management oversight, which may include supervision of lower level administrative and technical staff; oversee or review environmental, infrastructure and geomatic projects; and manage implementation of projects/plans according to codes and regulations, which may include approval authority. Work assignments may involve unique factors and be lacking in precedence on which to base decisions and may be technically complex as evidenced by a high number of variables and inter-related considerations. Work is often performed independently requiring professional knowledge of complex and/or detailed technical procedures. Work may require considerable public contact to explain standards and regulations, or appearance before a regulatory/judicial body, provide consultation and technical assistance, and may require negotiation to determine the feasibility of project implementation or continuation. Work may require professional licensure or other certifications. Work performed includes exercising judgment and decision-making that directly impacts life, health, safety and/or the environment. Positions may serve as a member on a program/project team and helps develop project solutions and may serve as a team leader.

Recruitment Standards

Knowledge, Skills, and Abilities

- Basic knowledge and understanding of concepts, practices, and theories used in the engineering specialty area and the ability to use it in practice.
- Ability to understand and apply the basic engineering concepts, practices, and theories involved in the design/development/review/permitting, construction, maintenance, operations, or repair of, projects/sites and their potential environmental and safety impacts.
- Ability to prepare/review small or less complex engineering/technical plans and/or data for completeness, compatibility, compliance with engineering principles, standards, codes and design needs; ability to make recommendations to higher level engineers or managers on project concerns/issues.
- Ability to ensure sufficient coverage/resources for proposed program/project, under the guidance of a higher-level engineer or manager.
- Ability to make recommendations to approve routine engineering/technical designs and/or program/project specifications of other engineers to meet desired compliance with engineering principles, standards, codes, designs and statutes.
- Ability to write clear, concise and organized documents and reports addressing basic engineering concepts and facts.
- Ability to present detailed technical information, guidelines and standards to seek compliance and/or approval.
- Ability to apply mathematical, physical, and engineering sciences to routine services or creative work as consultation, investigation, evaluation, planning, and design of engineering/geomatic projects using appropriate planning methods and resources.

Minimum Education and Experience

Bachelor's degree in an applicable field of engineering from an appropriately accredited institution; or an equivalent combination of education and experience.

Necessary Special Qualification

May require registration as a professional engineer by the North Carolina Board of Examiners for Engineers and Surveyors.