# Class Concept

This is advanced professional engineering work. Positions in this classification are responsible for complex 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 all levels 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. Positions provides program/project leadership in planning and organizing the work of others. Work requires collaboration to manage issues. Positions evaluate and recommend resource needs. Positions consult with senior level decision-makers on an ongoing basis and may supervise/mentor staff.

# Recruitment Standards

# Knowledge, Skills, and Abilities

- Thorough knowledge and understanding of engineering concepts, practices, and theories used in the engineering specialty area and the ability to use it in practice.
- Thorough knowledge of internal organizational structure, business needs/objectives, budget, planning, legal/public relations considerations, and/or other related factors.
- Ability to make final approval for complex or a broad variety/scope of program/project specifications for completeness, compatibility, compliance with engineering principles, standards, codes, and design needs. Ability to research alternatives and designs or analyze special details for nonstandard items of work for programs/projects.
- Ability to determine program/project priorities, processes and procedures.
- Ability to manage complex or broad variety/scope of programs/projects for completeness, compatibility, compliance with engineering principles and design needs and standards; ability to resolve/approve major project/program changes.
- Ability to independently make final recommendations and may require ability to make decisions that require specialized engineering and/or program knowledge.
- Ability to serve as technical expert in the area of assignment and may require ability to represent the agency/university as an expert with regard to compliance with engineering principles, standards, codes, designs and statutes and address conflicting design constraints.
- Ability to modify delivery, language or content to account for the characteristics and needs of audience.
- Ability to communicate orally and in documents clearly, concisely and organized manner reports addressing novel or complex engineering concepts and facts such as standards/practices/codes/regulations.
- Ability to participate and lead as needed in the development of long-range strategic goals.

## Minimum Education and Experience

Bachelor's degree in an applicable field of engineering from an appropriately accredited institution and four (4) years of progressively responsible experience; 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.

Note: This is a generalized representation of positions in this class and is not intended to identify essential functions per ADA.