

## EDITED KSAPC LISTING

**CLASSIFICATION: SENIOR MECHANICAL ENGINEER**

**NOTE: Each position within this classification may perform some or all of these KSAPCs.**

<b>KSAPC Statements</b>	
<b>Knowledge of:</b>	
K1.	Comprehensive knowledge of design of plans, specifications and estimates for heating, ventilating, air-conditioning, refrigeration, plumbing, sanitary, water, water purification and drainage systems and steam generating plants to provide information to institutions, contractors, suppliers, etc. for quality construction work and accurate as-built drawings.
K2.	Comprehensive knowledge of hydronic piping systems pertaining to the design of hot water, chilled water, boilers, chillers, cooling towers, steam and condensate piping and pumps to provide design, construction support and design review.
K3.	Comprehensive knowledge of various codes, safety orders and regulations governing the design and installation of mechanical equipment in order to provide design, construction support and design review.
K4.	General knowledge of cost estimates for mechanical engineering aspects (e.g. heating, ventilation, air-conditioning, instrumentation, pumping, lubrication, piping, etc.) in order to provide cost effective design work in preparation of plans and specifications.
K5.	Basic knowledge of electrical engineering, structural engineering and architectural elements as related to buildings in order to properly coordinate mechanical aspects in relation to multi-discipline design work.
K6.	<del>General knowledge of the principles of effective supervision and personnel management practices in order to direct all aspects of mechanical engineering projects.</del>
K7.	<del>General knowledge of the Department's Equal Employment Opportunity objectives to effectively direct staff.</del>
K8.	<del>General knowledge of a Supervisor's role in the Equal Employment Opportunity Program and the processes available to meet these objectives as it relates to the supervision and management of mechanical engineering projects and to effectively direct staff.</del>

## EDITED KSAPC LISTING

CLASSIFICATION: SENIOR MECHANICAL ENGINEER

**NOTE:** Each position within this classification may perform some or all of these KSAPCs.

<b>KSAPC Statements</b>	
<b>Ability to:</b>	
A1.	Manage the preparation of plans, specifications and estimates for heating, ventilating, air-conditioning, refrigeration, plumbing, sanitary, water, water purification and drainage systems and steam generating plants to provide information to stakeholders to ensure quality construction work and accurate as-built drawings.
A2.	Plan and manage the work of others to ensure conformity to plans and specifications during construction phase of project.
A3.	Make field inspections and surveys to ensure conformity to plans and specifications during construction phase of project.
A4.	Direct or inspect field construction operations to ensure conformity to plans and specifications during construction phase of project.
A5.	Check drawings and specifications to ensure conformity to plans during construction phase of project.
A6.	Establish and maintain cooperative relations with those contacted in the work in order to provide direction, information, and recommendations on a wide variety of issues.
A7.	Analyze situations accurately and adopt an effective course of action in order to prioritize and organize multiple projects and assignments and effectively meet deadlines.
A8.	Prepare and maintain mechanical engineering records, notes, data, etc. to provide direction, information and recommendations on a wide variety of issues.
A9.	<del>Promote equal opportunity in employment to maintain a work environment free of discrimination, harassment and violence.</del>