

MANAGEMENT ENGINEER I

DESCRIPTION OF WORK

This is professional work in the application of management engineering techniques and principles to management and administrative systems within State Government. Employee is responsible for performing systems analysis on specific assignments including in-depth probing studies of current use of manpower materials, space, equipment, scheduling of personnel and equipment, and evaluation of methods, policies, and procedures for the purpose of improving the quality of the output and/or the efficiency with respect to cost. Employee may be required to propose modifications or redesign work methods and flow, establish time standards, define critical paths, and quantitatively evaluate the proposed or accomplished changes. Work also includes providing assistance in program implementation, developing of controls and follow-up review of the new procedures or system. Employee must use interpersonal skills in seeking ideas from line workers and professionals, utilizing their input, and selling the proposed change to them for their positive acceptance. Work is usually performed in large and complex organizations under the general supervision of a higher-level management engineer. In less complex or smaller organizations employee may work under the general direction of either an agency director or director of a systems management division.

EXAMPLES OF DUTIES PERFORMED

Observes records, and measures work processes through the use of industrial engineering techniques such as work sampling, flow process charting and other motion and time study tools.
Analyzes raw data in order to devise improved methods through simplification, distribution, and scheduling of work activity and through conservation of supplies and equipment.
Assists operating personnel in the installation of new methods and procedures or systems. This includes explaining the methods to the operating personnel and the reasons requiring the changes.
Studies regulations, policies, building layouts, staffing, equipment, materials, and supplies involved in a project area and compares similar processes from other sources.
Makes recommendations to the supervisor of the management engineering program regarding potential problem areas and ways in which methods and procedures can be improved.
Keeps abreast of the latest technical developments in the field of management and industrial engineering by way of periodicals, institutes, textbooks, formal training, information from company representatives, etc.
Performs related duties as required.

RECRUITMENT STANDARDS

Knowledges, Skills, and Abilities

General knowledge of the principles and techniques of industrial engineering, management engineering or management operations, and the ability to apply them effectively.
General knowledge of statistical methods and control techniques for cost, inventory, production, quality, etc.
General knowledge of principles of equipment and space utilization and design.
Working knowledge of applications of electronic computer processing.
Ability to plan, understand new tools and apply them for practical uses.
Ability to work effectively with agency personnel at all levels.
Ability to express ideas in both oral and written form.

Minimum Education and Experience

Graduation from a four-year college or university with a bachelor of science degree in industrial engineering, operations research, or a closely related field and two years of practical experience; or a master's degree in industrial engineering, operations research, or a closely related field; or a master's degree in industrial engineering, operations research, or a closely related field and one year of practical experience; or graduation from a four-year college or university with a bachelor of science degree in business administration or personnel management including at least two courses in statistics and two courses relating to the management of capital or personnel resources and two years of practical experience; or an equivalent combination of education and experience.

Minimum Education and Experience for a Trainee Appointment

Graduation from a four-year college or university with a bachelor of science degree in industrial engineering, operations research, or a closely related field; or an equivalent combination of education and experience.

Special Note: This is a generalized representation of positions in this class and is not intended to identify essential functions per ADA. Examples of work are primarily essential functions of the majority of positions in this class, but may not be applicable to all positions.