

ENGINEER 1

GENERAL

This is engineering work at the graduate level performed under the immediate and direct supervision of a Professional Engineer. An incumbent receives on-the-job training in the practical and professional aspects of his work with direct supervision, generally in accordance with established codes, standards and practices. Incumbents assist in and perform technical and engineering work relative to the academic training obtained up to graduation.

TYPICAL DUTIES

Prepares simple plans, designs, costs and bills of material for engineering works.

Performs field engineering duties in connection with above.

Conducts routine surveys, tests, inspections and prepares reports.

Assigns and checks work of small group of technicians or helpers.

Exercises field control over routine work where construction methods are clearly defined and where technical guidance is readily available.

Undertakes and reports on engineering studies.

Performs other duties as assigned.

QUALIFICATIONS

Knowledge, Abilities and Skills

Good knowledge of mathematics, physical sciences and engineering principles and practices.

Ability to deal effectively with fellow employees, contractors and the general public.

Ability to write clear, concise and complete reports on technical subjects.

Education, Training and Experience

Graduation from a university of recognized standing with a Bachelor of Science (Engineering) degree or equivalent qualifications recognized by the Association of Professional Engineers of the Province of Manitoba. Registration as an Engineering Graduate by the Association of Professional Engineers in the Province of Manitoba.

ENGINEER 2

GENERAL

This is professional engineering work on a minor project or a minor phase of the general works of a major project. Under the supervision of a more senior Professional Engineer, an incumbent performs assigned engineering tasks calling for the use of standard engineering methods and techniques for their solution. Engineers at this level undertake independent studies, analyses and interpretations where technical subject matter, usually of limited scope, is involved.

Incumbents are expected to be qualified and registered professional engineers. Promotion to the Engineer 3 level is not automatic but is subject to the recommendation of the Department and approval of the Employing Authority.

TYPICAL DUTIES

Performs engineering tests, prepares designs, detailed estimates, specifications, reports and investigations.

Directs or inspects construction, operations or repairs to ensure established codes, standards and practices are complied with.

Provides technical guidance to junior engineers or technicians assigned to work on a common project.

Undertakes and reports on engineering studies.

Performs other duties as assigned.

QUALIFICATIONS

Knowledge, Abilities and Skills

Good knowledge of mathematics, physical sciences and engineering principles and practices as applied to a wide variety of engineering work.

Ability to deal effectively with fellow employees, contractors and the general public.

Ability to plan, assign and direct the work of subordinates.

Ability to write clear, concise and complete reports on technical subjects in a manner providing adequate support of conclusions and recommendations.

Education, Training and Experience

Graduation from a university of recognized standing with a Bachelor of Science (Engineering) degree or equivalent qualifications recognized by the Association of Professional Engineers of the Province of Manitoba and normally two years' relevant experience following graduation. Registration as a Professional Engineer in the Province of Manitoba.

ENGINEER 3

GENERAL

This is responsible and varied professional engineering work at an advanced working level performed under a minimum of supervision. Incumbents exercise independent engineering judgment in solving problems by use of standard procedures, modifications of established techniques or methods developed in previous assignments.

Incumbents will apply knowledge, usually of more than one general field of engineering or the specialized knowledge of a limited field or phase of engineering.

Incumbents are promoted to the Engineer 3 level upon recommendation by the Department and approval of Management Committee of Cabinet.

TYPICAL DUTIES

Assumes responsibility for design, detailing, checking, estimates, specifications, operation, general maintenance, accounts and inspections.

Assumes responsible supervision of construction repair or alteration of major projects or equipment.

Makes special investigations, reports and evaluations relative to structures, installations, or other engineering works.

May assume responsibility for the technical direction of one or more groups of junior engineers and/or technicians and makes recommendations for the organization of groups under his technical control.

Performs specialized professional engineering work.

Performs other duties as assigned.

QUALIFICATIONS

Knowledge, Abilities and Skills

Considerable knowledge of engineering principles and practices applicable to a wide variety of engineering problems.

Ability to establish and maintain co-operative working relationships with fellow employees, contractors, and the general public.

Ability to plan, assign and supervise the work of subordinates.

Ability to write clear, concise and complete reports on technical subjects in a manner providing adequate support of conclusions and recommendations.

Education, Training and Experience

Graduation from a university of recognized standing with a Bachelor of Science (Engineering) degree or equivalent qualifications recognized by the Association of Professional Engineers of the Province of Manitoba and normally seven years' relevant experience following graduation. Registration as a Professional Engineer in the Province of Manitoba.

ENGINEER 4

GENERAL

This is professional engineering work involving continuing supervisory responsibility of professional engineers or specialization at a major level in a field of engineering.

Under general direction and with considerable latitude for independent action and decisions, an incumbent acts as a principal assistant to the head of a major unit. This is the first level of full supervision with a considerable administrative responsibility.

OR

As an engineering specialist, has achieved recognition as an authority in an engineering field of major importance to the organization. An incumbent engages in research and advanced technical studies calling for approaches that are creative and innovative and advises on policy matters.

Normally only one specialist will be found in a particular field or phase of engineering in a Department. Assignment of "Specialist" classification will be recommended by the Department and approved by Management Committee of Cabinet.

TYPICAL DUTIES

Supervises the organization and technical aspects of the work of one or more groups of professional engineers and technicians, involving recommendations concerning selection, training, rating and discipline of staff.

Assists in the preparation of budgets.

Devises methods of unit financial control and assists in the formulation of modifications to policy.

Plans or assists in planning unit programs and scheduling of work priorities.

Performs specialized professional engineering work and advises the Department on technical and policy matters.

Performs other duties as assigned.

QUALIFICATIONS

Knowledge, Abilities and Skills

Considerable knowledge of engineering principles and practices applicable to a wide variety of engineering problems.

Ability to plan, assign and supervise the work of professional and technical subordinates.

Ability to establish and maintain co-operative working relationships with subordinates and the general public.

Education, Training and Experience

Graduation from a university of recognized standing with a Bachelor of Science (Engineering) degree or equivalent qualifications recognized by the Association of Professional Engineers of the Province of Manitoba and normally eight years' relevant experience following graduation Registration as a Professional Engineer in the Province of Manitoba.

ENGINEER 5

GENERAL

This is professional engineering work involving major supervisory responsibility and basic managerial obligations. Under general direction, an incumbent supervises the organization and technical aspects of the work of a large group of professional and technical employees, or a smaller group of highly qualified professional personnel engaged in technical applications involving major financial expenditures. Engineers at this level participate in short and long range planning. They make responsible independent decisions on work methods and procedures within an overall program, usually not subject to technical review.

Engineers at this level supervise one or more positions at the Engineer 4 level.

TYPICAL DUTIES

Relates directly with local government authorities, other government agencies and private organizations on operational matters.

Participates in short and long range planning.

Makes independent decisions on methods and procedures within an overall program.

Prepares budgets, ensures financial control and makes recommendations on modifications to policy.

Co-ordinates the work of the section with that of other sections, the general public and other organizations or individuals.

Performs other duties as assigned.

QUALIFICATIONS

Knowledge, Abilities and Skills

Considerable knowledge of engineering principles and practices applicable to a wide variety of engineering problems.

Ability to plan, assign and supervise the work of a major engineering unit.

Ability to establish and maintain effective working relationships with superiors, subordinates and the general public.

Skill in the area of organization and management.

Education, Training and Experience

Graduation from a university of recognized standing with a Bachelor of Science (Engineering) degree or equivalent qualifications recognized by the Association of Professional Engineers of the Province of Manitoba and normally three years' related experience at the Engineer 4 level. Registration as a Professional Engineer in the Province of Manitoba.