



Engineer-In-Training (EIT)

DEFINITION

This technical and/or project management work is supervised by a Professional Member of the Association of Professional Engineers and Geoscientists of Alberta (APEGA), and involves the basic application of engineering knowledge gained through education and limited work experience. Work of this class involves use of all Engineering Technical disciplines including Civil, Electrical, Mechanical and Environmental, etc.

Employees of this class receive training in the various phases of office, operational, field or laboratory engineering work through on-the-job assignments or formal training. Employees use technical skills to support operational decisions made by others; supporting the successful delivery of the assigned projects by implementing engineering principles into practice, developing and/or executing plans, monitoring projects and supporting the licensed professional to deliver projects and programs on time, on budget and within scope. Work involves providing support to contract management, oversight and inspection to ensure adherence to designs, plans, specifications, codes, schedules, and City of Edmonton standards. Employees in this class are responsible for maintaining harmonious relations with contractors, consultants, internal and external engineers, and other stakeholders.

Work is performed under the close supervision of a licensed professional. Work is reviewed for accuracy, quality, and conformance with prescribed procedures by a licensed professional. The nature of the work allows for limited independence of action and judgement in determining engineering requirements and ensuring work is completed by consultants, contractors, or civic staff in accordance with agreed to processes, plans, contracts and standards.

TYPICAL DUTIES *

Preparation of routine plans, designs, calculations, costs, standards, drawings and bills of material in accordance with established codes, standards, drawings or other specifications.

May carry out routine technical surveys or inspections and prepare reports in accordance with established policies and plans.

Few technical decisions called for, and these will be of a routine nature with ample precedent or clearly defined procedures as guidance.

Ensure all project documents are in accordance with the project management policies, processes and procedures, as well as regulatory and legislative requirements.

Review engineering design drawings and document submissions or amendments that have been prepared. All design reviews are to ensure compliance with municipal bylaws, standards, and policies.



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Limited engineering assessments and analysis including but not limited to material, vibration, environmental, structural and maintenance.

Ensure appropriate engineering specifications and standards are used based on technical knowledge.

Research engineering best practices to make recommendations for the development of policies and bylaws.

Prepare quality control and plans including frequency and test parameters, for specific processes, standards and projects.

Coordinating the review of circulations, designs, and acceptance certificates.

Oversee the execution of in-field design and/or re-design to address unforeseen issues.

May assign and check work of engineering technologists or technicians.

Perform project administration functions by coordinating and maintaining budget and cost controls; schedule controls, preparing progress reports completed in accordance to contract specifications.

Support the review type and complexity of design and construction techniques, material required, collect and analyze existing data for further design review.

Review construction estimates and make recommendations to the Senior Engineer.

With oversight from the Senior Engineer, coordinate and track the change management process, including contemplated changes, site instructions and change orders.

Perform routine site inspections of the work for conformance with engineering drawings, specifications and codes.

Inspect for substantial performance and construction completion, ensure completion of work; monitor and report on any variances, alterations and deficiencies to the Senior Engineer or Project Manager.

Monitor corrective action on warranty items; assist with claims management.

Support the Project Manager or Senior Engineer to ensure that the project abides by any applicable City of Edmonton Occupational Health and Safety Standards and Guidelines; ensure the highest standards of performance are maintained according to the safety program or site safety program.



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Participate actively in the development and documentation of project lessons learned and risk management.

KNOWLEDGE, ABILITIES AND SKILLS

Knowledge of the technical and engineering principles and practices related to the work assignments.

Knowledge of applicable bylaws, standards and regulations pertaining to work; including relevant codes, standards, legislation, regulations, policies and procedures.

Project coordination skills including an understanding of project management methods and techniques.

Awareness of limitations due to potential professional liability that could be a conflict of interest.

Ability to meet and deal effectively with contractors, developers and the general public, and ensure compliance with rules and regulations.

Ability to communicate verbally and in writing with preciseness and accuracy.

Ability to read, interpret and design plans, drawings, reports, specifications, diagrams and charts of a routine technical nature.

Physical ability to perform outside work in all types of weather and areas related to the work assignments.

Ability to apply technical computer software to a wide variety of applications including the design, costing and scheduling of projects, as well as the development of routine models and generation of boiler plate reports.

Ability to create accurate and complete job hazard analysis, site reports and other written documentation.



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TRAINING AND EXPERIENCE REQUIREMENTS

Job Level

Completion of a degree in a related engineering field. Field and related experience in the area of specialization and knowledge of relevant codes in the area of specialization. Current registration with APEGA as an E.I.T. and working towards a P.Eng is a requirement.

* *This is a class specification and not an individualized job description. A class specification represents and defines the general character, scope of duties and responsibilities of all positions within a specific job classification. It is not intended to describe nor does it necessarily list the essential job functions for a specific position in a classification. Positions may perform some of the duties listed above but this does not necessarily qualify for placement into this classification.*

Salary Plan	21M	21A	21B	21C
Job Code				3411
Grade				032

Originated:	01/2020
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