

ORDRE NATIONAL DES INGENIEURS DE GENIE ELECTRIQUE NATIONAL ORDER OF ELECTRICAL ENGINEERS

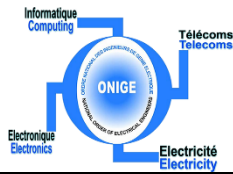
Loi N° 2000/014 du 19 Déc. 2000 / Law N° 2000/014 of 19 Dec. 2000



GRADING OF ELECTRICAL ENGINEERS

Presented by the Littoral Regional Task Force to Council for Consideration

	Grade 1: Engineers of this Grade are able to	Grade 2: Engineers of this Grade are able to	Grade 3: Engineers of this Grade are able to
General Characteristics	<ul style="list-style-type: none"> Apply broad knowledge of principles and practices in a specific practice area. Independently evaluate, select, and adapt standard techniques, procedures, and criteria. Acquire general knowledge of principles and practices of related fields, and ability to function on multidisciplinary teams. Work on multiple projects of moderate size or portions of major projects. 	<ul style="list-style-type: none"> Independently apply extensive and diversified knowledge of principles and practices in broad areas of assignments and related fields. Use advanced techniques in the modification or extension of theories and practices of sciences and disciplines to complete assignments. Work on a major project or several projects of moderate scope with complex features. 	<ul style="list-style-type: none"> Applies a thorough knowledge of current principles and practices of engineering as related to the variety of aspects affecting his or her organization. Applies knowledge and expertise acquired through progressive experience to resolve crucial issues and/or unique conditions. Keeps informed of new methods and developments affecting his or her organization, and recommends new practices or changes in emphasis of programs. Works on programs of limited complexity and scope.
Technical Responsibilities	<ul style="list-style-type: none"> Design a complete project, system, component, or process. Prepare complete project documents. Design and conduct experiments, and analyze and interpret data. Formulate and solve problems 	<ul style="list-style-type: none"> Review complete project documents for conformity and quality assurance. Develop new techniques and/or improved processes, materials, or products. Assist upper level management and staff as a technical specialist or advisor. 	<ul style="list-style-type: none"> Serve as the technical specialist for the organization in the application of advanced concepts, principles, and methods in an assigned area. Keep informed of new developments and requirements affecting the organization for the purpose of recommending changes in programs or applications. Interpret, organizes, executes, and coordinates assignments.
Managerial Responsibilities	<ul style="list-style-type: none"> Assign tasks to and direct engineers, technicians, and administrative staff. Plan and coordinate detailed aspects of the engineering work. Prepare scopes, budgets, and schedules for assignments. Assist with proposals to provide professional services or obtain funding for engineering projects or programs. 	<ul style="list-style-type: none"> Supervise all staff necessary to complete assignments. Review and approve scopes, budgets, and schedules for assignments. Prepare proposals to provide professional services or obtain funding for engineering projects or programs 	<ul style="list-style-type: none"> Supervise a staff of engineers and technicians. Plans, schedules, or coordinates the preparation of documents or activities for multiple major projects, or is responsible for an entire program of an organization. Review operational procedures to ensure compliance with applicable policies and performance measures.
Direction Received	<ul style="list-style-type: none"> Receive general direction on key objectives. Receive guidance when necessary on unconventional or complex problems, direction on modified techniques, and new approaches on assignments with conflicting criteria. 	<ul style="list-style-type: none"> Receive supervision and guidance relating to overall objectives, critical issues, new concepts, and policy matters. Receive direction on unusual conditions and developments. 	<ul style="list-style-type: none"> Receive administrative supervision with assignments given in terms of broad general objectives and limits.
Communication Skills	<ul style="list-style-type: none"> Interact with clients, customers, officials, contractors, and others. Attend project meetings and presents specific aspects of engineering assignments. 	<ul style="list-style-type: none"> Possess advanced oral and written communication skills. Represent the organization in communications and conferences pertaining to broad-aspects of engineering assignments 	<ul style="list-style-type: none"> Routinely interact with clients, customers, officials, contractors, and others. Lead project meetings and makes presentations. Represent the organization and maintains liaison with individuals and related organizations.
Typical Titles	Electrical Engineer, Associate Engineer, Project Engineer, Resident Engineer, Assistant Professor	Senior Engineer, Project Manager, Associate Professor	Principal Engineer, District Engineer, Engineering Manager, Professor
Experience	4+ years	8+ years	10+ years
Education	Bachelor's degree in engineering from an accredited institution, master's degree or equivalent, engaged in life-long learning to maintain knowledge of contemporary issues, doctorate for faculty		
Licensure & Certification	Professional Engineer.	Professional Engineer	Professional Engineer.
Professional Activities	Member of professional practice organization, chair of local program or committee.	Member of professional practice organization, national board member or officer, national technical or policy committee member.	Member of professional practice organization, national board member or officer, national technical or policy committee member.
Community Activities	Organizes and leads community service programs.		



ORDRE NATIONAL DES INGENIEURS DE GENIE ELECTRIQUE NATIONAL ORDER OF ELECTRICAL ENGINEERS

Loi N° 2000/014 du 19 Déc. 2000 / Law N° 2000/014 of 19 Dec. 2000



	Grade 4: Engineers of this Grade are able to	Grade 5: Engineers of this Grade are able to
General Characteristics	<ul style="list-style-type: none"> Use creativity, foresight, and mature judgment in anticipating and solving unprecedented problems. Make decisions and recommendations that are authoritative and have an important impact on extensive organizational activities. Set priorities and reconciles directions from competing interests. Works on programs with complex features. 	<ul style="list-style-type: none"> Make decisions with broad influence on the activities of his or her organization. Make authoritative decisions and recommendations that are conclusive and have a far-reaching impact on the organization. Demonstrate a high degree of creativity, foresight, and mature judgment in planning, organizing, and guiding extensive programs and activities of major consequence
Technical Responsibilities	<ul style="list-style-type: none"> Develop standards and guidelines. Leads the organization in a broad area of specialization or in a narrow but intensely specialized field. 	<ul style="list-style-type: none"> Perform advisory or consulting work for the organization for broad program areas or an intensely specialized area with innovative or important aspects.
Managerial Responsibilities	<ul style="list-style-type: none"> Supervise several organizational segments or teams. Recommends facilities, personnel, and funds required to carry out programs. Oversee the technical, legal, and financial issues of an entire program. Determine program objectives and requirements. Develop standards and guidelines. 	<ul style="list-style-type: none"> Lead an entire program of critical importance. Decide the kind and extent of engineering and related programs needed for accomplishing the objectives of an organization.
Direction Received	<ul style="list-style-type: none"> Receive administrative supervision with assignments given in terms of broad general objectives and limits. 	<ul style="list-style-type: none"> Receive general administrative direction from a board of directors or regional council.
Communication Skills	<ul style="list-style-type: none"> Possess exceptional oral and written communication skills. Routinely interact with organization leaders, clients, customers, officials, contractors, and others. Initiate and maintain extensive contacts with key engineers and officials, or other organizations and companies. Demonstrate skills in persuasion and negotiation of critical issues. 	<ul style="list-style-type: none"> Negotiate critical and controversial issue with top-level engineers and officers of other organizations and companies. Conduct presentations and may participate in media interviews. Represent his or her organization at important functions or conferences, including media interviews as required.
Typical Titles	Director, Program Manager, City Engineer, County Engineer, Division Engineer, Department Head, Vice President	Director, Dean, President
Experience	15+ years	20+ years
Education	Bachelor's degree in engineering from an accredited Institution, master's degree or equivalent, engaged in life-long learning to maintain knowledge of contemporary issues, doctorate for faculty	
Licensure & Certification	Professional Engineer, advanced credentials such as specialty certification.	Professional Engineer, advanced credentials such as specialty certification.
Professional Activities	Member of professional practice organization, national board member or officer, recognized expert on statewide activity, resource for national activities and organization.	Member of professional practice organization, recognized expert on national activity or spokesperson for the profession
Community Activities	Serves on local planning or policy boards.	Serves on state or national boards.

Task Force

Members	Contributors
Engr. Raph Manyi - Chairman	Engr. Pr. John Egbe
Engr. Emmanuel Basso –Secretary	Engr. Marcus Mukete
Engr. Thomas Tchemeube	Engr. Gabriel Kum
Engr. Alain Bading	