

THE ENGINEERS REGISTRATION ACT, 1997

CAP 63

BY-LAWS

Made under Section 34

THE ENGINEERS REGISTRATION BY-LAWS 2009

PART I

PRELIMINARY PROVISIONS

Citation

1. These Bylaws may be cited as the Engineers Registration Bylaws, 2009 and shall come into operation on the date of publication.

Interpretation

2. In these Bylaws, unless the context otherwise requires:

“*Continuing Professional Development*” means systematic maintenance, improvement and broadening of knowledge and skills, and the development of personal qualities necessary for the execution of professional and technical duties throughout one’s working life;

“*Examination*” means Professional Training Report, Professional Interview or Professional Examination or a combination thereof.

“*Professional Development Unit*” means a unit of measure for effort invested in continuing professional development. One Professional Development Unit is equivalent to one contact hour of attendance or involvement in a Structured Continuing Professional Development activity;

“*Professional Award*” means any certificate issued by engineering professional body which is recognised by the Board as furnishing sufficient guarantee of professional experience in engineering;

“*Academic Award*” means any Certificate, Diploma, Degree in engineering and others which is recognised by the Board for registration;

“*Structured Continuing Professional Development Activity*” means a course or activity that has a specific objective and measurable outcome and has been accredited as such by the Board;

“*Unstructured Continuing Professional Development Activity*” means an activity that involves self-directed learning, reading, discussion, participation in a learning activity that is approved by the Board;

“*Structured training*” means a mentored activity with a defined content, method and duration accredited by the Board that involves systematic improvement and broadening of knowledge and skills, and the development of personal qualities necessary for the execution of professional and technical duties

“*Unstructured training*” means a mentored activity without a defined content, method and duration approved by the Board that involves improvement and broadening of knowledge and skills, and the development of personal qualities necessary for the execution of professional and technical duties

“*Bridging Course*” means a course which complements the basic qualification in the form of post-graduate course in engineering to the extent deemed sufficient to that of an engineering degree or its equivalent

3. For the purpose of these By-laws, the objects and functions of the Board shall be:

Objects and functions of the Board

- (a) Professional Training and Awards;
- (b) Professional Examinations;
- (c) Prescribing Fees and
- (d) Reconciliation and Arbitration

PART II

PROFESSIONAL TRAINING AND AWARDS

Engineering training

4. for the purpose of training, the Board shall;
- (a) set and review the minimum content of engineering training;
 - (b) set the mechanism to audit the content delivery of engineering training;
 - (c) certify the academic awards
 - (d) develop special engineering training programmes
 - (e) accredit continuing professional development training programmes
 - (f) carry out any other related training activity

Academic Engineering Training

5. (1). pursuant to provisions of section 10 of the Act, the Board shall recognise the following academic qualifications as sufficing the requirements for registration -

- (a) Academic Engineering training deemed fit to lead to registration as engineering technician, graduate incorporated engineer or graduate engineer; that fulfil the following minimum exit level outcomes.
 - (i) Problem solving;
 - (ii) Application of scientific, research and engineering knowledge;
 - (iii) Engineering Design;
 - (iv) Investigations, experiments, data analysis and report writing;

- (v) Engineering methods, skills and tools, including Information Technology and entrepreneurship;
- (vi) Professional and technical communication;
- (vii) Impact of engineering activities on the social, industrial and physical environment;
- (viii) Individual, team and multidisciplinary working;
- (ix) Independent learning ability;
- (x) Engineering Professionalism;

(b) Academic Programmes which are engineering related or deemed to have engineering content but not adequate for registration, which have bridging courses.

(2) Subject to sub-para (1) (b), the Board shall give guidelines on the contents and duration of engineering programmes necessary to meet the requirements for registration.

Professional
Engineering
Training

6. The Board shall recognise the following professional engineering training modes as detailed in the respective manuals:

- (a) structured training
 - (i) Apprenticeship Programme,
 - (ii) field attachments
 - (iii) professional training approved by the Board
- (b) unstructured training
 - (i) activities under continuing professional development programmes
 - (ii) field work
 - (iii) professional training recognised by the Board.

Professional
Accreditation
Standards

7. (1) The Board shall collaborate with Tanzania Commission for Universities and other relevant institutions on standards and professional accreditation criteria to be used for accrediting engineering programmes offered by institutions.

(2) subject to paragraph (1) and as provided in the Training Manual, accreditation criteria shall include, but not limited to:

- (a) academic and professional qualifications of teaching staff
- (b) training facilities and infrastructure;
- (c) adequacy of professional contents and requirements in curricula;
- (d) training duration;

(3). Subject to paragraph (1), all relevant programmes offered by Engineering Training Institutions shall be accredited and reviewed by the Board once every five years.

(4). The Board shall determine the accreditation category of each academic engineering programme.

(5) The Board may at any time, audit and review accreditation status of the, programmes offered by engineering training institutions.

(6) The Board may withdraw the professional accreditation status of the programmes offered by Engineering training institutions which have failed to maintain the standards set by the Board

Evaluation of awards and submission

8. (1) The Board shall evaluate the following awards from professional engineering applicants:

- (a) Certificates from institutions and programmes accredited by relevant academic accreditation boards;
- (b) Foreign awards recognised by academic accreditation bodies in country of origin;
- (c) Certificates from Institutions offering engineering training programmes to compliment the engineering training type under paragraph 4 (1) (b);

(2) the applicant shall submit for evaluation of awards the following:

- (a) Original certificates and academic transcripts.
- (b) Evidence in terms of programme handbook or courses' outlines or curriculum.
- (c) Proof of payment of evaluation fee

Methods and tools of evaluation

9. (1) Evaluation of the awards shall be undertaken by the Board using methods and tools of evaluation set by the Board.

(2) The outcome of the evaluation as provided by the Board shall determine requirements of the academic engineering training achieved by the applicant as provided under paragraph 4.

(3).The results of evaluation shall be communicated to the applicant within 90 days from the date of application.

Review of the decision

10. (1) The Board may review the decision of the evaluation made under paragraph 7 upon request by the applicant.

(2) The decision of the Board in respect to evaluation of the awards shall be final.

Specialized content in engineering field

11. (1) An engineering professional short course shall have a specialised content in one of the engineering fields as recognized by the Board.

(2) Any engineering professional short course of specialized content in one of the engineering fields which is recognised as contributing to continuing professional development shall be as provided in the Continuing Professional Development Manual.

(3). The Board shall register and accredit all professional engineering short courses and allocate Professional Development Units.

Objectives of
the CPD
Programmes

12. The objectives of the Continuing Professional Development programmes are to:-

- (a) reinforce the need for life-long learning among engineers through Continuing Professional Development;
- (b) provide a framework through which practicing engineers can systematically maintain and enhance their professional competence;
- (c) assist practicing engineers to increase capacity for learning so as to be more capable, confident and adaptable when faced with change; and
- (d) encourage practicing engineers to broaden knowledge, skills and experience in order to improve work performance and enhance career prospects.

Key Subject
Areas

13. The key subject areas or topics of Continuing Professional Development shall include, but not limited to, the following:

- (a) Engineering knowledge in relevant disciplines.
- (b) Emerging and new technologies
- (c) Technical skills
- (d) Creativity, Adaptation and Innovation
- (e) Communication skills
- (f) Management
- (g) Marketing and business development
- (h) Relevant knowledge in associated professional areas

management of
Continuing
professional
development

14. (1)The Board shall conduct Continuing Professional Development programmes for all practising engineers as a key strategy for enhancing professional competence and competitiveness of both engineers and engineering firms.

(2) Every engineer shall commit himself to the process of lifelong learning in order to maintain update and enhance professional competence on a continuous basis by participating in structured and non-structured Continuing Professional Development Programmes.

(3) Every practicing engineer shall obtain a minimum of 30 Professional Development Units in every Calendar year which shall comprise a minimum of 20 Professional Development Units in structured activities and the remainder may be obtained from either structured or unstructured activities as shall be determined by the Board annually.

(4) Where an Engineer exceeds the annual requirement of 30 Professional Development Units in the year under review, a maximum of 15 excess Professional Development Units obtained from structured activities may be carried forward into the following year.

(5) An engineer who has not obtained sufficient Professional Development Units in the year under review will be allowed to carry over the shortfall into the following year, provided that he has accumulated a minimum of seventy (70) Professional Development Units in the past three consecutive years.

(6) Where an engineer fails to meet the prescribed Professional Development Units requirements or has not submitted his returns for three consecutive years, the Board shall lapse his registration.

(7) An engineer whose registration has lapsed is required to obtain 60 Professional Development Units within one year before he can be reinstated. These 60 Professional Development Units must comprise at least 40 Professional Development Units obtained from structured activities.

(8) An engineer may be exempted from Continuing Professional Development requirements if he experiences disabilities, prolonged illness or other extenuating circumstances which prevent him from practicing.

(9) There shall be a Continuing Professional Development logbook for every engineer to enter the Continuing Professional Development activities and their durations.

(10) All Engineers shall submit to the Board Continuing Professional Development logbooks annually, not later than three (3) months following the end of the calendar year under review for assessment.

(11). The Board shall conduct random audit of engineers at any time of the year to verify their Continuing Professional Development participation during particular periods.

(12) The Continuing Professional Development programme shall also apply to Engineering Technicians as specified in Program Implementation Document established by the Board.

Documentary
Evidence

15. (1) The engineer may be required to submit documentary evidence at any time within two years from the date of submission of the Personal Development Record.

(2) without prejudice to sub-paragraph (1), the engineer shall be required to retain the documentary evidence for at least two years from the date of submitting the returns.

(3)The Board may conduct random checks during annual audits, and identify engineers who shall be required to submit documentary evidence of their Continuing Professional Development participation

(4) The documentary evidence may consist of any of the following but not limited to:

- (a) Diary records or logbook showing the activities claimed;
- (b) Course enrolment records;
- (c) Receipts of course fees;
- (d) Certificate of attendance;

- (e) Attendance list from course organizer;
- (f) Employer’s report or certification; or
- (g) Statutory declaration

Self-Assessment

16. every practicing engineer shall plan and assess own participation in Continuing Professional Development activities on a self-regulatory basis and maintain a Development Action Plan in the format described in Continuing Professional Development personal development form as prescribed by the Board.

Submission of Personal Development Records

17. (1) every engineer shall submit Personal Development Record annually to the Board, not later than three months following the end of the calendar year under review.

(2) subject to sub-paragraph (1) annual record shall be prepared in a manner that clearly demonstrates how the engineer fulfilled the prescribed requirements of the Board’s Continuing Professional Development Programme.

Review by the Board

18. (1) The Board shall review the engineer’s participation in Continuing Professional Development activities once every three years.

(2) Subject to sub-paragraph (1), such review shall assess compliance with submission of annual returns and attainment of the prescribed minimum Professional Development Units of the Board’s Continuing Professional Development Programme.

De-registration

19. (1) where an engineer fails to meet the prescribed Professional Development Unit requirements for three consecutive years, his registration shall be lapsed.

(2) The provision of sub-paragraph (1) shall apply to an engineer who, for whatever reasons, has not submitted his Continuing Professional Development returns for a period of three consecutive years,

Reinstatement of Deregistered Engineers

20. (1) An engineer whose registration has lapsed under the provision of paragraph 18 shall be required to obtain 60 Professional Development Units within one year, before being reinstated

Exemptions

21. where an engineer experiences physical disabilities, prolonged illness or any other extenuating circumstances, may be exempted from Continuing Professional Development requirement subject to review and approval by the Board

Recommended Continuing Professional Development Activities

22. (1) The Board shall recognize the following structured activities as contributing to the professional development of practicing engineers as prescribed by the Board from time to time:

- (a) Relevant postgraduate degree, diploma or certificate courses
- (b) Lectures, short courses, conferences, symposia, workshops and seminars on technical, management or professional development matters relevant to engineers
- (c) In-house courses on technical, management and professional development matters relevant to engineers
- (d) Conducting accredited courses, lectures, seminars, conferences, symposia and workshops
- (e) Writing or editing technical articles or papers published in reputable journals, conference proceedings or books
- (f) Registering an engineering patent

(2) The Board shall recognize unstructured activities as contributing to the professional development of practicing engineers as prescribed by the Board and may include but not limited to the following:

- (a) Membership of professional societies, boards, and technical committees
- (b) Reading relevant technical or management literature
- (c) Viewing training videos, CD ROMs and Television programmes, listening to training tapes, or taking distance and open learning courses
- (d) Attending informal in-house training and presentations
- (e) Conducting informal in-house training and presentations
- (f) Attending organized technical site visits and exhibitions
- (g) Attending professional and technical courses which are not Accredited

Administration of Structured Engineers Apprenticeship Programme

23. (1) The Board shall administer a Structured Engineers Apprenticeship Programme to graduate incorporated engineers and graduate engineers
 (2) The Structured Engineers Apprenticeship Program shall be administered in accordance to Rules and Regulations and other provisions as provided for in the Structured Engineers Apprenticeship Program Implementation Document.

Objectives of Structured Engineers Apprenticeship Program

24. The objective of Structured Engineers Apprenticeship Program is to enable graduate incorporated engineers and graduate engineers acquire sufficient professional competence to be able to register as Incorporated engineers or Professional Engineers after a period of three years as stipulated in the Act.

Rules and regulations

25. The Structured Engineers Apprenticeship Program shall be administered in accordance to Rules and Regulations and other provisions as provided for in the Structured Engineers Apprenticeship Program Implementation Document.

PART III

PROFESSIONAL EXAMINATIONS

- Examinations
26. (1) The Board shall administer
- (a) Level I Examinations for the Professional Competence for Graduate Incorporated Engineers for registration as Incorporated Engineers.
 - (b) Level II Examinations for Professional Competence leading to registration as Professional Engineers to:-
 - (i) Graduate Engineers;
 - (ii) Incorporated Engineers who have undergone a bridging course
- (2) The Board shall administer examinations in different disciplines of engineering and in accordance with the requirements as prescribed in the examinations guidelines.
- (3) for Professional Training Report, the candidate shall be evaluated based on criteria as provided in the Registration Manual
- Mode of Examinations
27. (1) The mode of examinations shall be in the form of:
- (a) Written examination for level I or
 - (b) detailed professional training report as may be determined by the Board or
 - (c) Professional Interview.
- (2) The Board may refer any applicant to do additional practical training.
- Eligibility for examinations
28. (1) An applicant wishing to sit for Level I Examinations shall satisfy the following conditions:-
- (a) hold National Technical Award Level 7 or equivalent considered by the Board as not equivalent to the first engineering degree of a University or Institution recognised by the Board or;
 - (b) hold a degree in engineering related fields/engineering affiliated fields with inadequate engineering content and;
 - (c) have been engaged in engineering works for not less than 3 years;.
 - (d) have paid necessary examination fees set by the Board;
 - (e) be a Registered Graduate Incorporated Engineer.
- (2) An applicant wishing to undergo level II exams which shall be in the form of written report, an interview or both, shall satisfy the following conditions:-
- (a) be a Graduate Engineer who has a minimum of three years post registration experience or;
 - (b) be an Incorporated Engineer who has a minimum of two years post registration experience and has undergone and passed a bridging course whose award is recognised by the Board.

Application fee	<p>29. (1) A candidate wishing to sit for the examinations shall apply to the Board by completing the application form as specified in the Training Manual to these Bylaws upon payment of application and registration fees prescribed by the Board.</p> <p style="padding-left: 40px;">(2) except for any reasons approved by the Board, the application and the fees paid to sit for the examinations shall be valid only for the scheduled examinations applied for</p> <p style="padding-left: 40px;">(3) Subject to sub-paragraph (2), a candidate who does not appear for the examinations applied for, shall be required to make a fresh application.</p>
Examination procedures and general information	<p>30. (1) All reports forming part of examinations shall be written in English.</p> <p style="padding-left: 40px;">(2) Professional Interviews shall be conducted in English.</p> <p style="padding-left: 40px;">(3) During Professional Interviews, all original certificates, design drawings, design calculations and any other relevant documentation shall be presented.</p>
Examination fees	<p>31. (1) Every eligible candidate shall pay a non refundable examination fee to be determined by the Board.</p> <p style="padding-left: 40px;">(2) The Board shall prescribe fees for application, registration, and any other fees related to professional examinations.</p>
Information for examination	<p>32. (1) Information on the date, time and venue of the examinations shall be given to the candidates not later than four weeks before the examinations.</p> <p style="padding-left: 40px;">(2)The Board shall inform the candidates on the results within ninety days after the examination.</p>
Cheating in examination	<p>33. a candidate found to be cheating shall be disqualified and disciplinary action taken against him as may be determined by the Board</p>
Decision of the Board	<p>34. (1) The Board shall make a decision on examination results</p> <p style="padding-left: 40px;">(2) The Board may review its decision on examination results upon appeal by the applicant</p> <p style="padding-left: 40px;">(3) The Board's decision after the appeal shall be final and binding</p>

PART IV

GENERAL PROVISIONS

Fees to be
Charged

35.(1) Subject to Engineers Registration Regulations the fees to be charged by Board shall be prescribed in the First Schedule to these By-Laws

(2) The following fees shall be charged by the Board:

- (i) Professional fees;
- (ii) Fees for admission to any course offered by the Board;
- (iii) Fees payable by the candidate for any professional interview or examination held or conducted by the Board;
- (iv) Fees payable by applicant on application;
- (v) Fees payable by applicant on registration;
- (vi) Fees payable by applicant on issuance of renewal certificate of registration;
- (vii) Fees payable by applicant for rubber stamp;
- (viii) Fees payable by engineers, engineering consulting firms and engineering technicians annually;
- (ix) Fees payable by engineering consulting firms for sticker and site instructions books;
- (x) Fees payable on extract, copies and lists of entries from register;
- (xi) Fees for meetings /conferences/seminars organised by the Board;
- (xii) Fees payable for any other services rendered by the Board

Engineers or
Engineering
Consulting
Firms to charge
fees

36. The Engineers or Engineering Consulting Firms shall charge fees for engineering services rendered as specified in the Second Schedule to these By-Laws.

Reconciliation
and arbitration

37. (1) The Board shall reconcile parties in dispute and conduct arbitration for parties under dispute whose contracts or agreements stipulate that the Board shall arbitrate their cases.

(2) the Board shall prepare Alternative Dispute Resolution rules.

Dar es Salaam,

NINATUBU MBORA LEMA

_____, 2009

CHAIRMAN