

Continuing Professional Development Guidelines



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Introduction

In its strive to uphold high standards of engineering the Engineers Registration Board has adopted a policy that requires registered engineering professionals to show that they are committed to learning and development throughout their engineering career by undertaking continuing professional development (CPD). This will ensure that engineering professionals keep their skills, knowledge and experience up to date in order to remain relevant in their field of practice and they record what they learn and use to carry out their job.

This guidelines explains the importance of CPD and ways to approach it in order for you to meet annual requirements of renewal of practicing certificates with ERB and to get value out of CPD activities. **This document has to be used with ERB CPD Policy Document ERB/CPD/Po01.** The ERB team is available to offer advice and you can get in touch with them at +267 3914446 or by email at enquiries@erb.org.bw.

Benefits of CPD

Demonstrating professional integrity and pride

- Engineering professionals are able to demonstrate their professional pride and integrity by allocating time to developing and maintaining their knowledge and skills in this competitive field of engineering.
- This culture of learning will enable engineering professionals to take opportunities to keep their professional competence up to date by taking part in briefings, reading relevant publications, attending conferences, presentations and courses just to name a few.
- When engineering professionals apply the CPD cycle of identifying their skills gaps, and planning how to close them, they will be able to demonstrate their commitment to their careers and upholding high professional standards.

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Assurance of competence to Stakeholders

- Engineering professionals will be able to demonstrate their level of expertise in consultancy, planning and delivery of projects to stakeholders through their proficiency and knowledge of current regulations and effective engineering practice.

Career development

Whether an engineering professional is newly qualified or an experienced individual, planning ahead helps one to identify the skills, experience and qualifications needed to keep their career progression. It also helps to maximize on most of learning opportunities. Keeping record of the learning that happens throughout your career will also assist you in demonstrating your suitability for future work roles.

Current practice in CPD

The policy defines CPD as:

“the systematic acquisition of knowledge and skills, and the development of personal qualities, to maintain and enhance professional competence”.

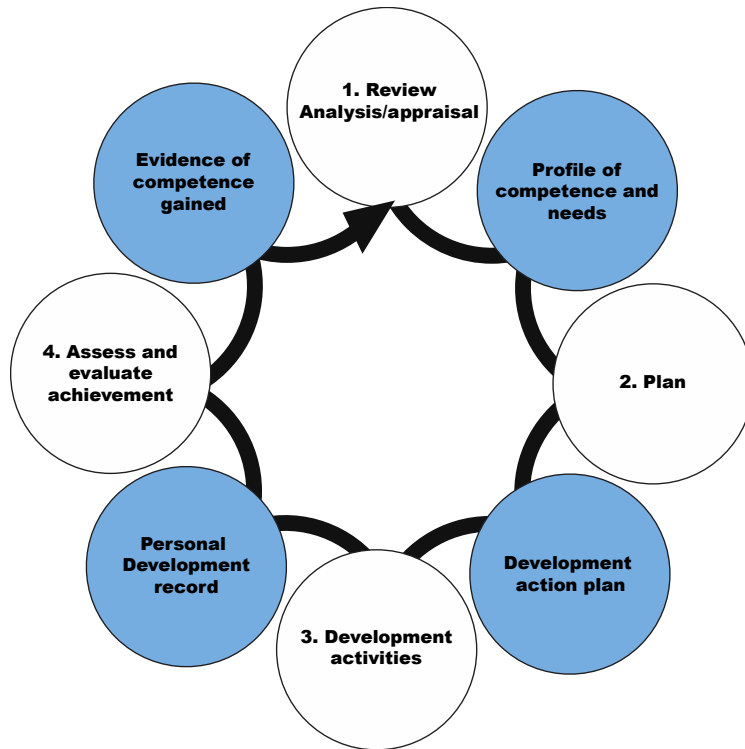
The whole concept involves maintenance, improvement and broadening of knowledge and skills, as well as the development of ones' personal qualities that are required in the execution of professional and technical duties. CPD requires that professional invest their time in their own learning and development for their benefit and progression, therefore, it is imperative for them to ensure that it is effective and value adding.

How much CPD is required?

The ERB policy requires that one accumulate 15 credits of CPD over a period of 3 years. The minimum that can be accrued in any one year is 3 credits.

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The CPD Cycle



Development action plan

To come up with the development action plan it is best that engineering professionals carry out steps 1 (review) and 2 (plan) of the CPD Cycle. For effectiveness it is best that this activity be done at least once a year.

Review

This can be achieved by doing the following:

- Review recent performance
- Identify current competencies and areas for further learning and development
- SWOT analysis may be used for this
- In the analysis consider short term and long term development goals; hard (technical) and soft (behavioral) performance
- Use a holistic approach – also consider employer needs, ERB requirements, societal and

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regulatory needs.

- **Appendix D provides examples of other areas that you can consider in developing your plan**

Plan

Following the review and prioritization of need, a plan should be drawn to meet those needs.

Engineering professionals should consider the following:

- Possible activities, resources and timescales

There may be a wide range of resources available to access including 1) advice from colleagues 2) secondments or assignments, books and journals, the internet, open/distance learning material, conferences and courses. The cheapest and effective form of training is on-the-job training.

- Decide on the criteria you will use to evaluate the success of the activity you plan for.
- **Use the template – Development action plan in Appendix A.**

Personal development record

The personal development record combines the last two activities of the CPD Cycle; Step 3 and 4 (record of CPD activities and their evaluation).

Development activities

There are many activities that can be done geared towards putting the development plan into practice. Ideas for subjects and activities may be drawn from the list in **Appendix E**.

In practice there are different types of CPD activities, those that are planned and carried out, and the unplanned CPD opportunities that can be identified during the course of delivery of assignments. Both types of CPD are valuable and engineering professionals are encouraged to explore.

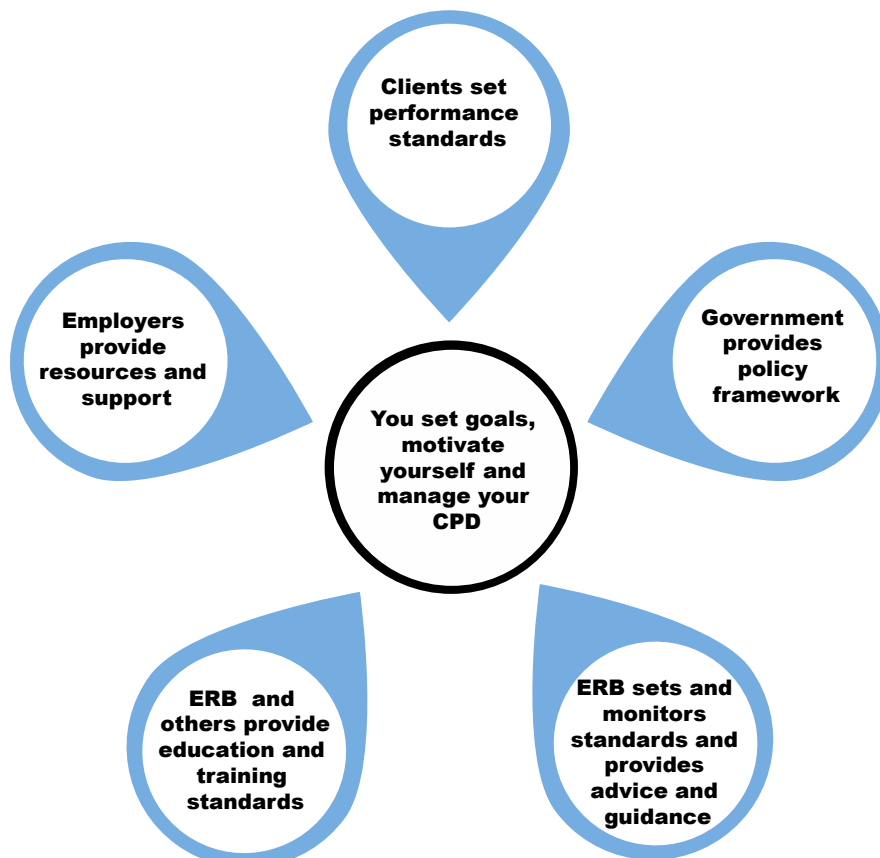
Evaluation

- It is critical that once CPD activities are completed they should be recorded, and more importantly a reflection on what has been learnt and how it has helped you should also be indicated. How is this activity helping you to do your job differently?

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- The review of the plan can be done considering the effectiveness and updated where necessary. CPD may be recorded and evaluated using the personal development record template in **Appendix B**.
- Evaluation of performance by employers can also be used to provide CPD documentation
- Other activities that are beyond employer requirement (**see Appendix D and E**) can be recorded in the personal development record.
- **Appendix C** shall be used to record overall activities for submission to ERB together with **Appendix A and B**.

It is essential that your CPD records are as effective as possible as they will be required to demonstrate or as proof of continuing competence for various stakeholders as indicated below. The records can also be subjected to audit by the Engineers Registration Board as per the CPD Policy provisions.



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Summary

Engineering professionals are required to maintain and enhance their competence through CPD.

They should:

- Take ownership of their learning and development needs, and develop a plan to indicate how they might meet these, in discussion with their employer, as appropriate.
- Undertake a variety of development activities, both in accordance with their developed plans and in response to other opportunities which may arise.
- Record their CPD activities.
- More importantly reflect on what they have learned or achieved through their CPD activities and record these reflections.
- Evaluate their CPD activities against any objectives which they have set and record this evaluation.
- Review their learning and development plan regularly following reflection and assessment of future needs.
- Support the learning and development of others through activities such as mentoring, and sharing professional expertise and knowledge.

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Appendix A - Template of CPD development action plan

ERB/CPD/FI.0

Please copy and paste this template into a new word document when submitting your CPD record

Name:								
Job role and responsibilities:								
Review of learning needs					Development plan			
Date	Ref	In what area do I need to improve my performance?	How does this link to other objectives (eg employer, ERB, etc)?	What do I need to learn in order to achieve this?	What will I do to achieve this?	What are the likely resources and support that I will need?	How will I evaluate a successful outcome?	What are my deadlines for meeting this target?

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Appendix B - Template of CPD personal development record

ERB/CPD/F2.0

Please copy and paste this template into a new word document when submitting your CPD record

Name:						
Job role and responsibilities:						
Development activity				Evaluation		
Details of CPD activity	Dates	Effective learning time	Dev. Plan ref.	Key Learning Points	Key Benefits/Value added	Further comments: Was the plan successful? How can I improve it in future?

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Appendix C – Overall CPD Submission Form

Please copy and paste this template into a new word document when submitting your CPD record



ERB/CPD/F3.0

CPD Portfolio for the Annual Cycle ending 31st December,

Please complete and return to: Postal Address

P. O. Box 1909,
AAD Poso House
Gaborone
Botswana

Physical Address

Unit 3, Plot 145
Kgale Lakeview, Gaborone
Tel: +267 391 4446
Fax: +267 397 3626

Surname:		ERB Registration No.:
First Names:		Practicing Certificate No.: _____ Date of Issue: _____

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I. CATEGORY I: DEVELOPMENTAL ACTIVITIES: 10 Hours per Credit (Maximum 2 Credits per year)								
Name of Activity	Activity	Date	Provider (If provider is not a recognized voluntary association or accredited institution, provide name of recognized voluntary association approving the activity as well)	Duration			Credits Claimed	Verification (Provide proof of attainment or participation e.g. Certificate or letter)
				From	To	Total hrs.		
Total Credits for this Activity								

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2. CATEGORY 2: WORK-BASED ACTIVITIES:										
Name of Activity	Credit Earning	Hours / Credit	Activity	Date	Provider (If provider is not a recognized voluntary association or accredited institution, provide name of recognized voluntary association approving the activity as well)	Duration			Credits Claimed	Verification <i>(Provide proof of attainment or participation e.g. Certificate or letter)</i>
						From	To	Total hrs.		
Total Credits for this Activity										

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3. CATEGORY 3: Professional Services:										
Name of Activity	Credit Earning	Hours / Credit	Activity	Date	Provider (If provider is not a recognized voluntary association or accredited institution, provide name of recognized voluntary association approving the activity as well)	Duration			Credits Claimed	Verification <i>(Provide proof of attainment or participation e.g. Certificate or letter)</i>
						From	To	Total hrs.		
Total Credits for this Activity										

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Appendix D - Example subject areas for development

This list of subjects and topics will help you identify your development needs. However, this list isn't exhaustive, and you might be able to include other subjects and topics, provided they help your development.

Self-Development

- Interpersonal skills
- Leadership and team management
- Decision making
- Stress management
- Time management and delegation skills
- Career development and planning
- Foreign languages
- Professional ethics and rules of conduct

Communication

- Report and letter writing skills
- Interview skills
- Negotiating skills
- Managing meetings
- Information management
- Presentation skills
- In house, to clients, at public meetings

Strategic Management

- Establishing practice strategy and developing business plans
- Improving employer's performance - business improvement
- Health and safety legislation, policy and procedures
- Quality assurance and quality management
- Environmental management
- Employee relations and human resource management
- Diversity management
- Training and development of others

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Technical

- Detail design
- Environmental design/technology/impact analysis
- New design skills
- Procurement - estimates, bids and tenders
- Construction management
- CAD
- Energy efficiency/energy conservation
- New building materials
- New forms of contract and partnering

Legislative

- Regulations
- Contract law
- Health and safety legislation
- Environmental legislation
- Employment legislation
- Different forms of contract - adversarial, partnering

Associated professional areas

- Adjudication
- Architecture
- Arbitration
- Facilities management
- Planning supervision
- Project management
- Quality assurance
- Risk

Working with others

- Team leadership
- Motivation skills
- Negotiation skills
- Delegation skills

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- Managing poor performance
- Performance appraisals

Commercial practice

- Client care and management
- Marketing skills and techniques
- Public relations; dealing with media and VIPs

Information technology

- Information Technology:
- In house systems; external computer services; personal computing skills; specialist software

Contract management

- Financial planning and management - reporting systems, establishing a budget, cost control systems, cash flow, profit and loss account, balance sheets, VAT and taxation, project finance, EU and government grants
- Procurement procedures
- Contract management
- Terms of appointment and contract administration
- Risk management
- Disputes resolution
- FIDIC Contracts

Specialist interest areas

- Urban planning and design
- Energy
- Environment and conservation
- Public sector / municipal
- Research and innovation
- Structural and building surveying
- Transport
- Water

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- Virtual design
- Construction and Building
- Air-Conditioning and Refrigeration
- Automobile
- Process Engineering
- Railway
- Electricity generation
- Blasting
- Geotechnics

Health, safety and welfare

- Legislation
- Evaluation of role of Health and Safety Executive
- Personal responsibility for health, safety and welfare
- Confidential Reporting on Structural Safety
- Management of health, safety and welfare in design
- Management of health, safety and welfare on site

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Appendix E - Example development activities

This is a list of example CPD activities. However, it isn't exhaustive, and you may choose to include other activities as long as they contribute towards your development.

- Learning on the job
- Peer guidance and discussions
- In-house presentations
- Attending trade exhibitions and systematically gathering information and knowledge to develop as an engineer
- Structured reading (test your understanding of the reading material)
- Work shadowing to add to your stack of knowledge and expertise for routine tasks
- Promoting engineering in primary and secondary schools
- Technical presentations
- Writing reports and writing for publication
- Preparation of CPD presentations to colleagues and other professionals
- Exposure to new situations at work which require action
- Participating in careers conventions
- Job secondments
- Listening to training CDs for research purposes and technical information
- Participating in ERB activities such as acting as a reviewer, a student liaison officer or joining a committee where new initiatives and ideas are discussed
- Sharing knowledge and expertise with others
- Allied professional events
- Acting as a coach or mentor for a fellow professional
- Lecturing at organized events
- Research both on the job and for further qualification
- Teaching (for those not in teaching post)
- Self-study through reading text books or study packs
- Personal learning from the internet
- Validated and accredited qualifications
- Formal distance and open-learning courses
- Conferences, seminars and workshops



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ETHICAL ENGINEERING PRACTICE

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