

CONTINUOUS PROFESSIONAL DEVELOPMENT SCORING METHOD

Certification Bureau 2015

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1. ACTIVITIES RECOGNIZED BY PKB PROGRAMME

In short, activities recognized in the PKB program are as follows:

- Formal Education and Training
 - o Post-Graduate Education
 - Courses
 - o Formal Job Training
- Non Formal Education
 - o Self Learning
 - Work Related Studies
- Participation in Profession Meetings
 - o Participate in Profession Meeting
 - o Participation in Organizing Committee
- Presentation and Papers
 - o Internal Technical Report
 - Presentation at Technical Meetings
 - Profession Meeting Paper or
 - Magazine Article
 - Book Writing
 - Lecturing
- Supporting Activities
 - o Expert or resource person
 - o Professional Association Governing Board Member
 - o Recipient of Honours; Awards; etc

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1.1. FORMAL EDUCATION AND TRAINING

Formal education and training is described as education that is organized by a program organizer which is:

- a. An Accredited education institution (in accordance with PII regulations), or
- b. A Company that has a structured training program (shown in training schedule and syllabus) for an education similar to Formal Job Training.

1.1.1. Post-Graduate Education

Post-Graduate Education is described as activities to obtain a specialist or master's degree with the subject of the final paper relevant with the field of profession.

Notes:

- a. Accomplishment of Doctor title is not scored in PKB since doctoral program is aimed at enhancing the scientific and academic aspect.
- b. However, research activities to obtain the Doctor title that is relevant with the field of profession can be included in the Self Learning Activity (1.2.1) scoring.
- c. Non-engineering diplomas / post-graduate Education are not given PKB score.

Scoring Regulations:

- 1) Type of activity: recommended option
- 2) PKB maximum score = 100 (in accordance with the total of Study Units in Post-Graduate Education).
- 3) Documents to be enclosed:
 - (a) Diplomas
 - (b) Academic transcript
 - (c) Abstract of Final Paper

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1.1.2. Courses

A course is a one way learning activity (from teacher/instructor to participants), with the subject matter relevant with the field of profession.

Courses material study must be:

- 1. Specific.
- 2. In depth, to enhance knowledge.
- 3. Structured, shown by course schedules and syllabus.

Scoring Regulations:

- 1) Type of activity: obligatory, a minimum of one each year
- 2) PKB score equals to the duration of courses, with a minimum of 7 (seven) hours in 1 (one) day course.
 - (a) 2-3 days, score = **10**
 - (b) 4-5 days, score = **25**
 - (c) 6-9 days, score = **35**
 - (d) 2 weeks or more, score = 50
- 3) Documents to be enclosed:
 - (a) Course schedule and syllabus (or a summary written by the applicant) that reflects the field and depth of course subjects.
 - (b) Information about the course institution/organizer, particularly: name and address of institution / organizer, with name(s) of instructor / lecturer.
 - (c) Certificate or letter informing the accomplishment of the courses with good results.

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1.1.3. Formal Job Training

Formal Job Training is described as a one way training activity (from instructor to participants) with specific subject to enhance the relevant skill with the participant's profession.

Training materials must be:

- 1. Specific.
- 2. In depth to enhance knowledge.
- 3. Structured, shown by training schedule and syllabus.

Scoring Regulations:

- 1) Type of activity: optional.
- 2) PKB score equals to the duration of courses, with a minimum of 7 (seven) hours in 1 (one) day training.
 - (a) 2-3 days, score = **10**
 - (b) 4-5 days, score = **25**
 - (c) 6-9 days, score = **35**
 - (d) 2 weeks or more, score = 50
- 3) Documents to be enclosed
 - (a) Training schedule and syllabus (or a subject summary written by the applicant), which reflects the field and depth of the training subject.
 - (b) Information about the training institution/organizer, especially the name and address of the institution / organizer, and name(s) of instructor / tutor.
 - (c) Certificate or letter informing the accomplishment of training in good results.

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1.2. NON FORMAL EDUCATION

Non-formal education is described as activities to enhance the competency, which is not structured, including activities with or without assignment from workplace. This type of education is not carried out by an education institution.

1.2.1. Self Learning

Self-learning is described as all kinds of individual study activities study with or without the presence of an instructor. However, it must be in accordance with the field of profession. It includes activities in the accomplishment process of a doctoral study, which is not given a score in the Post-Graduate Education item (1.1.1).

Forms and purpose of self-learning activities:

- a. Reading articles to expand the knowledge on the development of science and technology
- b. Reading articles to extend the understanding of science
- c. Learning information from electronic media
- d. Understanding work procedures (tools and equipments, standard and code, etc.) and software
- e. Research activities to attain the Doctor title which is relevant with the field of profession (see 1.1.1.b).

Topics of self-learning activity must be consistent in order to achieve professional development and updates on science and technology.

Scoring Regulations:

- 1) Type of activity: obligatory, minimum once a year.
- 2) PKB score = maximum **25** per activity
- 3) Assessors Panel will set PKB score based on:
 - a) Accordance with the field of profession (40%)
 - b) Subject depth (20%)
 - c) Updates of science and technology (30%)

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- d) Benefit for the individual working activity (10%)
- 4) Documents to be enclosed:
 - Extended abstract or executive summary, typed in two A4 pages, single space, Times New Roman #12 (or similar).
- 5) If necessary, Assessors Panel may conduct a professional interview

1.2.2. Work Related Studies

Described as an independent activity in order to accomplish working duties that at the same time can provide profession enhancement, including activities as apprentice, assignment at other company, etc.

Scoring Regulations:

- 1) Type of activity: optional.
- 2) PKB score = maximum **25** per activity.
- 3) Assessors Panel will set PKB score independent activity based on:
 - a) Relevance with profession (30%)
 - b) Subject depth (10%)
 - c) Updates of science and technology (10%)
 - d) Benefits for his / her working activity. (50%)
- 4) Documents to be enclosed:
 - Extended abstract or executive summary, typed in two A4 pages, single space, Times New Roman #12 (or similar)
- 5) If necessary, Assessors Panel may conduct a professional interview.

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1.3. PARTICIPATION IN PROFESSIONAL MEETINGS

1.3.1. Participate in Profession Meeting

Participate in Professional Meeting is described as participation in profession meetings, without making presentation, with topics relevant with the field of profession. The meetings are attended by a minimum of 20 (twenty) participants.

Scoring Regulations:

- 1) Type of activity: obligatory, twice in 5 (five) years.
- 2) Maximum PKB score = 1 for each 6 (six) hours.
- 3) Documents to be enclosed: Certificate and other documents (brochure or invitation) that show topics, subject and schedule, also name and address of the organizer

1.3.2. Participation in Organizing Committee

An involvement in Organizing Committee is an activity that drives the development of profession therefore it must be appreciated. Such involvement will increase his / her PKB score.

Scoring Regulations:

- 1) Type of activity: optional.
- 2) PKB score is in accordance to the function and type of activity:
 - (a) Steering committee (as chairperson or active members), score = 4
 - (b) Formulation team (chairperson or active members), score = 4
 - (c) Reviewer or paper committee, score = 4
 - (d) Chairperson and vice chairperson of organizing committee, score = 3
 - (e) Section head of organizing committee, score = 3
 - (f) Member of organizing committee, score = $\mathbf{1}$
- 3) Documents to be enclosed:

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- (a) Topic of profession meetings and subject titles of speakers (meeting agenda).
- (b) Letter of assignment, brochure that shows committee formations or other verifying documents.
- (c) Official certificate, appreciation, or other documents that shows the activity has been accomplished.

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1.4. PRESENTATION AND PAPERS

If a paper is written by two persons or more, then the writer's score are as follow:

- a. Main writer (first name listed): 60%
- b. Next writer: 40% and divided equally among other writers

Writer score is defined as score C in the scoring sheet for each activity of Presentation and Papers

1.4.1. Internal Technical Report

Internal Technical Report is described as an activity of presentation and technical report writings in accordance with the field of profession, and related with work assignment.

Included in this type of activity are:

- a. Problem solving or improvement of performance at the workplace
- b. Profession consultation
- c. Field Inspection

Scoring Regulations:

- 1) Type of activity: optional.
- 2) PKB score is in accordance to the position and subject depth.
 - (a) Technical report writer (as the responsible holder), score = maximum 10
 - i depth and most recent of science and technology = 40%
 - ii innovation and creativity = 40%
 - iii report systematic = 20%
 - (b) Technical report presenter, score = 4
 - (c) Member of technical team, score = 2
- 3) Documents to be enclosed:
 - (a) Letter of Assignment or other documents that verifies it
 - (b) Executive summary, typed in two A4 pages, single space, Times New Roman #12 (or similar) or photocopy of technical report

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1.4.2. Presentation at Technical Meetings

This PKB activity is the participation in technical meetings, such as seminars, symposiums, or workshop, as speaker. The meeting is attended by a minimum of 20 (twenty) participants whose profession is in accordance with the topic of the seminar.

Scoring Regulations:

- 1) Type of activity: obligatory, twice in 5 years, but not on the same year.
- 2) PKB score is in accordance with the role
 - a. As subject writer or main writer, score = 10
 - b. As presenter score =4
- 3) Documents to be enclosed:

Brochure / program which contains the name of speakers, or official certificate / appreciation

1.4.3a Profession Meetings Paper

This activity is described as conveying a paper in profession meetings or public media (magazine). The Profession meeting is attended by a minimum of 20 participants whose professions are relevant with the topic of the meeting. Profession Meeting Paper writing is at the same level with the Magazine Article writing activity

Scoring regulations:

- 1) Type of activity: obligatory, minimum once in 5 years.
- 2) PKB score equals to the relevance with profession field and subject depth:
 - (a) National/local seminars: paper not reviewed, PKB score = 10 (max)
 - (b) National/local seminars: reviewed paper, PKB score = 15 (max)
 - (c) International seminars: paper not reviewed, PKB score = 15 (max)
 - (d) International seminars: reviewed paper, PKB score = 20 (max)
- 3) Assessors Panel will determine the scores of the paper based on:

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- (a) Relevance with profession (20%)
- (b) Subject depth (30%)
- (c) Innovation, creativity, most recent of science and technology (30%)
- (d) Paper systematic (20%)
- 4) Documents to be enclosed:
 - (a) Cover and table of contents of proceeding / journal
 - (b) Photocopy of paper or writings

1.4.3b Magazine Articles

This activity is described as writing a paper in public media (magazine). Magazine means a periodical publication. Magazine Article writing is at the same level with the Profession Meeting Paper writing activity

Scoring regulations:

- 1) Type of activity: obligatory, minimum once in 5 years.
- 2) PKB score equals to the relevance with profession field and subject depth:
 - (a) National journal not accredited, PKB score = 10 (max)
 - (b) Accredited national journal, PKB score = 15 (max)
 - (c) International journal not accredited: PKB score = 15 (max)
 - (d) Accredited international journal, PKB score = 20 (max)
 - (e) Public magazine and newspapers, PKB score = 10 (max)
- 3) Assessors Panel will determine the scores of the paper based on:
 - (c) Relevance with profession (20%)
 - (d) Subject depth (30%)
 - (e) Innovation, creativity, most recent of science and technology (30%)
 - (f) Paper systematic (20%)
- 4) Documents to be enclosed:
 - (g) Cover and table of contents of magazine
 - (h) Photocopy of paper or writings

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1.4.4. Book Writing

Book writing activity includes monograph, standard and code, patent, and seminars proceeding, with \pm 100 (one hundred) pages for book and \pm 20 (twenty) pages for monograph.

Scoring Regulations:

- 1. Type of activity: optional.
- 2. PKB score = 50 (maximum)
- 3. Documents to be enclosed: sample copy or photocopy of book, monograph, standard and code, patent, seminars proceeding
- 4. Assessors Panel will determine the score of the book based on:

	Book	Monograph	Standard	Patent	Seminars	
					Proceeding	
Score Weight Score Weight						
In accordance	30%	40%	50%	20%	30%	
with profession						
Depth of	10%	-	-	-	30%	
subject matter						
Most recent	10%	-	20%	20%	-	
science and						
technology						
Innovation and	10%	20%	-	60%	-	
creativity						
Systematic and	40%	40%	30%	-	40%	
appearance						
	Score Weight Scor					
	100	20				

Table 1 Score Weight for Book Writing

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1.4.5. Lecturing

What is defined as an instructor, lecturer, guest lecturer (not as a permanent profession), mentor and tutor in study / training activities which are attended by a minimum of 10 participants (exclude mentor and tutor). The subject matter must be relevant with the profession.

Scoring Rules:

- 1) Type of activity: optional.
- 2) PKB score = a maximum of 5 for each activity / subject, in accordance to:
 - (a) Activity hours: minimum of 4 hours / activity (including preparation), weight = 50%
 - (b) Depth of subject matter, weight = 50%
- 4) Documents to be enclosed:
 - (a) Letter of Assignment.
 - (b) Lecturing schedule
 - (c) Syllabus.

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1.5. SUPPORTING ACTIVITIES

Includes service to community / profession.

1.5.1. Expert or Resource Person

Included in this activity are: expert witness in courts, speaker in talk show etc with topics in accordance with the field of profession.

These duties are as:

- 1. Expert witness in court
- 2. Speaker in talk show
- 3. Member of an expert council in a professional organization
- 4. Member of a team of specialist in technical activity

Scoring Regulations

- 1) Type of activity: optional.
- 2) PKB score = 2 for each activity.
- 3) Documents to be enclosed: certificate, letter of assignment (invitation), and letter of appreciation or other documents.

1.5.2. Professional Association Governing Board Member

Scoring Regulations:

- 1) Type of activity: optional.
- 2) PKB score are as follow:
 - (a) Board member of a profession organization = 4 per years
 - (b) Chairperson of institution that is relevant with profession = 4 per years
 - (d) Chairperson of institution that is not relevant with profession = 2 per years
- 3) Documents to be enclosed: certificate or letter of assignment.

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1.5.3. Recipient of Honours; Awards; etc

Scoring Regulations:

- 1) Type of activity: optional.
- 2) PKB score = 2 (max) for each honour received, not included in this category are achievement in sports, arts, etc.
- 3) Documents to be enclosed: Certificate of honours, award, etc.

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2. EVALUATION PROCEDURE

2.1. PKB FORM

At the end of the validity period of a Professional Engineer Certificate, the certificate holder may want to renew the certificate. For that purpose the certificate holder must apply for a certification review through self assessment of the person CPD activity during the certificate validity period of 5 years. The self assessment result documented by using the Continuing Professional Development (PKB) Form.

The filled Continuing Professional Development (PKB) Form has to be submitted to the respective College, for assessment and recommendation, prior to the end of the present certificate validity period.

The final score are calculated on the PKB form, based on the assessment of College Assessor Panel of the requester filled PKB Form.

2.2. SCORING METHOD

The general term in PKB scoring is that each activity is only <u>scored once</u>. If the activity is eligible for two criteria or more, then the activity with a higher score will be used in PKB.

An exemption is activity item 1.5.3. (As recipient of honours or award, etc.), which can be given additional score i.e. for the activities in achieving the honour / award.

If the required enclosed documents are not complete, then the related activities cannot be scored.

All the standard CPD activities are scored based on 3 (three) categories designated by A, B, and C, as provided in the left columns of PKB Form. The scores for each of them are based on:

A. Relevancy with the field of profession selected on his/her Professional Engineer Certificate (stated as score A)

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The score is a number between 0 and 1, with:

Not in accordance, scored = 0, except for Professional Association Governing Board Member In accordance, scored = 1

If relevancy with profession is already included in PKB scoring, then A = 1.

- B. Scoring of each activity that is recognized by PKB program, based on PII CPD Activity Standard. Scoring is in accordance with the standards defined on the articles of this Scoring Guideline Chapter 1 (Score is stated as score B)
- C. Score C = 1, except for: Presentation and Papers Activities (see Article 1.4), in which C = score of writer specifically for
 - o Internal Technical Report
 - o Presentation at Technical Meetings
 - o Profession Meeting Paper and Magazine Article or Magazine Articles

Results of A, B and C scores are used to acquire the Final CPD score. The filling of CPD forms and its evaluation is to be conducted on a per year basis. For each year, the evaluation is to be done through the following process:

1. Determining each activity score

Score per-Activity =
$$A \times B \times C$$
 (rounded up)

2. Determining each activity category sub totals, which may consist of several activities in the same activity category

Sub Total Score of all Activities on that particular activity type

3. Determining the total CPD score, which is

The Total Score = Total of all types of activities

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2.3. SCORING REPORT FORMAT

Scoring report format is a format for filling in the accumulative yearly score of A x B x C from each activity. The format is provided with required minimum score so that the result of accumulative score can immediately be checked against:

- 1. Fulfilments of required minimum score for obligated activities with minimum score, and
- 2. Fulfilments of total score for all PKB activities against minimum total score, which is the minimum requirement each year for Professional Engineer Certificate renewal.

The following Table 2 and Table 3 is scoring report format for Professional Engineer Certificate Renewal.

2.4. SCORING GUIDELINES

Insinyur Profesional Pratama (IPP) / junior PE Certificate holder can obtain certificate renewal, if their PKB activities during the 5 years of which the certificate is valid can achieve a minimum score of 50 (fifty) / year for as long as 5 years. See Table 2.

Insinyur Profesional Madya (IPM) / Sr. PE Certificate holder can obtain certificate renewal, if his / her PKB activities during the 5 years of which the certificate is valid can achieve a minimum score of 60 (sixty) / year for as long as 5 years. See Table 3.

The validity of the score results is also checked against the required mandatory activity frequency. Failure to full fill the requirement will fail the Professional Engineer Certificate Extension request.

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	TYPE OF ACTIVITY	1 st	year	2^{nd}	year	3 rd	year	4 th	year	5 th	year
	THEOFACIIVIII	Achieved	Required								
1.	FORMAL EDUCATION AND TRAINING		10		10		10		10		10
1.1.	Post-Graduate Education		-		-		-		-		-
1.2.	Courses (once / year)		-		-		-		-		-
1.3.	Formal Job Training		-		-		-		-		-
2.	NON FORMAL EDUCATION		20		20		20		20		20
2.1.	Self Learning (once / year)		-		-		-		ı		-
2.2.	Work Related Studies		-		-		-		-		-
3.	PROFESSIONAL MEETINGS PARTICIPATION		5		5		5		5		5
3.1.	Participate in Professional Meeting (twice / 5 years)		-		-		-		ı		-
3.3.	Participation in Organizing Committee		-		-		-		-		-
4.	PRESENTATION AND PAPERS		10		10		10		10		10
4.1.	Internal Technical Report		-		-		-		1		-
4.2.	Presentation at Technical Meetings (twice / 5 years)		-		-		-		-		-
4.3.	Profession Meeting Paper / Magazine Articles (once / 5 years)		-		-		-		-		-
4.4.	Book Writing		-		-		-		-		-
4.5.	Lecturing		-		-		-		-		-
5.	SUPPORTING ACTIVITIES		-		-		-		-		-
5.1.	Expert or Resource Person		-		-		-		ı		-
5.2.	Professional Association Governing Board Member		-		-		-		-		-
5.3.	Recipient of Honours, Award etc.		-		-		-		-		-
	Total Score		-		-		-		-		-
	Total Score Required	50	-	50	-	50	-	50	-	50	-

Table 2. Scoring Report Format for Insinyur Profesional Pratama (IPP) / PE Certificate Renewal

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	TYPE OF ACTIVITY	1 st years		2 nd year		3 rd years		4 th year		5 th year	
		Achieved	Required /activity	Achieved	Required /activity	Achieved	Required /activity	Achieved	Required /activity	Achieved	Required /activity
1.	FORMAL EDUCATION AND TRAINING		-		-		-		-		-
1.1	Post-Graduate Education		-		-		-		-		-
1.2	Courses (once / year)		10		10		10		10		10
1.3	Formal Job Training		-		•		-		-		-
2.	NON FORMAL EDUCATION										
2.1	Self Learning (once / year)		20		20		20		20		20
2.2	Work Related Studies		-		-		-		-		-
3.	PROFESSIONAL MEETINGS PARTICIPATION										
3.1	Participate in Professional Meeting (twice / 5 years)		5		-		5		-		-
3.3	Participation in Organizing Committee		-		-		-		-		-
4.	PRESENTATION AND PAPERS										
4.1	Internal Technical Report		-		•		-		-		-
4.2	Presentation at Technical Meetings (twice / 5 years)		5				5				
4.3	Profession Meeting Paper / Magazine Articles (once / 5 years)		10		10		10		10		10
4.4	Book Writing		-		-		-		-		-
4.5	Lecturing		-		-		-		-		-
5.	SUPPORTING ACTIVITIES										
5.1	Expert or Resource Person		-		-		-		-		-
5.2	Professional Association Governing Board Member		-		-		-		-		-
5.3	Recipient of Honours, Award etc.		-		-		-		-		-
	Total Score		-		-		-		-		-
	Total Score Required	60	-	60	-	60	-	60	-	60	-

Table 3. Scoring Report Format for Insinyur Profesional Madya (IPM) / Sr. PE Certificate Renewal

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