

**Q1    *What is Engineering Competency Development (ECD)?***

A program offered by the to provide guidance for a proper documentation of graduates practical training, entering the profession of engineering and to ascertain that such training directionally fulfills the requirements of the Professional Interview (PI) by IEM.

The scheme is especially designed for graduate engineers who are not working under the supervision of a Professional Engineer (PE) and a Corporate Member of IEM (MIEM) in the same BEM-registered engineering discipline. This program runs for a minimum of three years for each graduates.

This is also a program for graduate engineers who would like to document their experience in a more systematic way using the competency based requirements from the PI process.

**Q2    *What is the objective of taking ECD?***

The ECD progressively tracks and records the summary of experiential learning activities - on the job, structured practical training, classroom session, open interactive forum, career development program, or self training – and thereof the knowledge and skills acquired/gained and lessons learnt, also the competency elements of the candidates, all towards applying to sit for the Professional Interview (PI).

**Q3    *Where to get the log book and who should maintain it?***

The Log Book can be downloaded at IEM website at no cost

The log book should be maintained by participating graduate engineers for a minimum of three (3) years per the terms stated in the ECD Guidelines

**Q4    *If a candidate could not find a suitable and qualified Mentor to supervise his/her logged training (ECD), how can ECD help?***

The candidate can request for a list of eligible Mentors from the IEM Secretariat. Should you find a suitable candidate from the list, ECD will connect you to the mentor to check for compatibility.

**Q5    *What are the responsibilities of Mentees?***

To prepare a summary on all experiential learning activities - on the job, structured practical training, classroom session, open interactive forum, career development program, or self training – with any pertinent supporting document or information as appendix in to the ECD Log Book. The summary will be submitted every quarterly to the mentor for a prior interactive review and subsequent endorsement. A compilation of four (4) accumulated quarterly reports duly commented and endorsed by the mentor shall be submitted annually to the IEM for verification (ratification); there will therefore be a minimum of three ratified report submission for an ECD participant to be endorsed for PI candidacy

**Q6** *If Mentee work under the same company with his/her mentor, should the candidate undergo the ECD route to PI candidacy?*

It is not required. However, it is advisable that the candidate undergo the ECD which is actually a form of guided training and systematic documentation of experience, to facilitate preparation for the PI as form of the training requirements

**Q7** *How to register as a qualified Mentor and what are the requirements?*

The registration form is available at the IEM ECD website.

To be eligible for registration as Mentors, engineers shall be:-

- a MIEM and a Professional Engineer (PE) for at least 3 years and be in a responsible position of engineering practice.
- a PE who has attended at least two IEM-organized ECD Workshop, as applicable to PEs who are less than three (3) years as MIEM at the time of intent to register as a Mentor. However he must be a PE with BEM for at least 3 years.

**Q8** *What are the responsibilities of Mentors?*

- To ascertain the materials presented in the Log Book meets the ECD requirements towards PI candidacy
- to interactively review with the mentee the experiential learning activities undergone as well as the knowledge and skills acquired/gained every quarter (3 months), and thereof accordingly advise the mentee of any observed experiential learning gap or deficiency that needs to be closed
- to advise Mentee on the relevant copies of document – such as data sheets, drawings, photographs etc —to be submitted with the Log Book submission
- to attest the validity of a mentee's experiential learning activities undergone as well as the knowledge and skills acquired/gained, as presented in the quarterly ECD report, and thereof to endorse with a P.Eng stamp the annual submission of the compiled final (four-quarterly) reports .

**Q9** *How many Mentees can a Mentor supervise?*

The IEM guidelines states a maximum of three mentees per mentor be maintained to achieve perceivable and generally, optimum ECD mentoring engagement. However, any request for engagement above the quota can be considered by the ECD Committee.

The Mentor should be advisably and preferably be the same person for the three consecutive years. The mentee shall notify IEM for ratification before any change of Mentor can be made to render the validity of ECD participation.

**Q10** *Can the Supervisor who is a PE working with the Site Contractor and not directly working with the Mentee become a Mentor?*

The PE need to register with IEM as an IEM Mentor, then he can supervise the mentee even though he is from separate functional.

***Q11 What is Structured Training Programme for Graduates?***

Structure training program is to provide proper training and pupilage scheme to the young graduates in order for them to be more specialised and articulate in terms of their career and engineering profession.

Engineers who are lack of design experience as well as the soft skills will be able to improve themselves to become competent engineers

The programme shall be for six (6) months based on case studies mainly on the design component, by applying standards/code of practice.

***Q12 Would there be guarantee that the graduates who have undergone the Structured Training programme to pass the PI Interview?***

There is no guarantee that the participant who had undergone the Structured Training programme will pass the Professional Interview (PI). This will be up to the candidate's level of capability during the PI and competency gained from the programme.

***Q13 Will IEM impose fee for the Structured Training Programme?***

Yes.

***Q14 Can someone explain what is the meaning of P.Eng Tier 1 & Tier 2. It is not clear on that.***

There is no such thing as Tier 1 or Tier 2. A PE is a professional engineer. A PEPC is also a professional engineer. A PEPC is a professional engineer who needs to endorse and submit drawings to Government and Government Agencies. PEPC certification is required for such approval.

***Q15 How long after you obtained MIEM certificate that you need to submit to BEM for the PE registration?***

You need to submit within 1 year after you obtained your MIEM certificate

***Q16 Does design experience have to include calculations? Can it be just reviewing design?***

Yes, design experience must include design calculations. Reviewing of design is also included in design experience, however the candidate must understand the design that he reviewed and be able to answer any question by the interviewer when asked about the design, just like he/she have done the design themselves.

***Q17 How many project do the logbook required for yearly logbook submission?***

There is no requirement for min/max number of projects. However, a good balance of projects that can feature your engineering experiences would be good.

***Q18 Can my supervisor who is not a PE endorse on the logbooks and later counter endorsed by the PE (mentor)? So there will be 2 endorsement in the logbooks?***

Yes it is acceptable. The supervisor endorses the day to day work by the Candidate while the PE endorses as a qualified person to endorse for submission to ECD Committee. In fact when the ECD candidate passed the PI, the Mentor may need to counter endorse the submission for the BEM submission.