

APPLICATION FOR ELECTION / TRANSFER AS MEMBER

INSTRUCTIONS TO APPLICANT

Please read this and comply before completing Forms IEM/PI (1), (2) & (3).

1. Please fill in all particulars requested. This forms can be **typewritten** or **handwritten** in **neat block letters**.
2. Please attach two copies of your recent passport photographs certified on the back.
3. Two Copies of Form IEM/PI (2) must be submitted together with the 2 copies Form IEM/PI (1), to attend the Professional Interview.
4. One copy of each document duly **CERTIFIED** need to be supplied. Copies of the required documents are as follows:
 - i) Birth Certificate.
 - ii) BEM registration letter.
 - iii) Degree(s) in engineering and result slip / academic transcript.
 - iv) All documents and transcript (if any) attained for the entry to Institution of Higher Learning, from the time the applicant completes SPM / STPM.
 - v) SPM / STPM
5. Degree(s) in engineering that do not show the Division/Branch/ Discipline require applicant to submit **ADDITIONAL SECONDARY DOCUMENT** (eg : subject Result slip, Department's letter etc.) to indicate the Discipline.
 - i) Photocopies of engineering certificates from local universities in **Bahasa Malaysia** and **English** version are required. Certificate from overseas universities issued in foreign languages must be accompanied by translation obtained from University Registrar/Embassy Official, etc.
 - ii) Copies of "**Transcript of Academic Record**" or "**details of course and subjects**" to be taken at the University. The document must be issued by the University where the applicant had attained the degree.
6. Applicants who have obtained a first degree which is not recognised by The Institution of Engineers, Malaysia and subsequently obtained a Masters Degree are requested to submit the full transcript of both first and Masters Degree.
7. Graduate engineers are reminded of the requirement of the Registration of Engineers Act. The details are obtainable from

The Board of Engineers, Malaysia
c/o JKR Headquarters,
Jalan Sultan Salahuddin,
50580 Kuala Lumpur
Tel : 03-40407095
8. All Graduates must gain practical experience under MIEM and P.Eng (Professional Engineers) registered with the BEM for their experience to be recognised under the Act, for the purpose of Registration as a Professional Engineer. (See 'How to be a Professional Engineer').
9. Graduates are advised to have their training under MIEM and P. Eng in the same or approved allied discipline so as to avoid problems in getting registration with BEM later.
10. To facilitate prompt processing, all participants are reminded to complete the Forms IEM/PI (3) with reference to the latest copy of the Professional Interview Regulation and submit to the Professional Interviewers upon request.
11. Pre-qualifying experience if any, should be briefly recorded. Please note that only experience obtained from date of graduation as an Engineer to the closing date of application can be entered and accepted for Professional Interview purposes.

ALL CERTIFICATES, DOCUMENTS, ETC. SUBMITTED MUST BE CERTIFIED BY YOUR PROPOSER/SECONDER.

ENCLOSE ONLY PROFESSIONAL INTERVIEW FEE (RM 100.00 FOR GRADUATE MEMBER OR RM 200.00 FOR NON-MEMBER).

PLEASE DO NOT ENCLOSE SUBSCRIPTION / ENTRANCE / TRANSFER FEES. APPLICANTS WILL BE BILLED UPON APPROVAL OF MEMBERSHIP.

FAILURE TO COMPLY WITH ABOVE WILL RESULT IN THE DELAY IN PROCESSING OF YOUR APPLICATION.

FURTHER INSTRUCTIONS TO APPLICANT

ADDITIONAL REQUIREMENT

1. *Verification whether the programme is the twinning programme or a full time programme at the University.*
2. *The name of local colleges that you have completed the programme before pursuing the degree course.*
3. *Number of years spend at the University while following this programme.*
4. *Course Content of your engineering degree course at the College and the University.*
5. *Transcript of Academic Record on details of course and subjects to be taken at the University. The letter must be issued by the University you have attained your degree.*
6. *All entry qualification of University to be indicated in the Application Forms under columns 5 and 6 and enclosed with photocopy of certificate (duly certified)*
7. *All certified photocopies of certificates attained for Higher Education from SPM to be provided with Application Forms.*

FAILURE TO SEND THE NECESSARY DOCUMENT AND INFORMATION WILL CAUSE UNDUE DELAY IN THE PROCESSING OF YOUR APPLICATION.

APPLICATION CHECKLIST

Please check the following and submit together with the application form duly **CERTIFIED** by your Proposer or Seconders to the IEM.

- Form IEM/PI (1) in duplicate
- 2 passport size photos
- Item 2 - Signature of proposer & seconder (1 must be Fellow) / Senior Member
- Signature of applicant
- Signature of 2 engineers at every page
- Working experience & calculation
(Total number of years of experience in item 12 & 13 must tally with item 11)
- Form IEM/PI (2) in duplicate
- Birth Certificate
- Registration letter from Board of Engineers, Malaysia
- Degree (**English & Malay version** for local universities) and Diploma certificates
- Degree and Diploma transcript
- STPM / SPM / GCE (or any other relevant certificates)
- Matriculation certificate (if any)
- Professional Interview fee
 - RM100.00 (for Graduate Member)
 - RM200.00 (for Non-Member)
- All photocopies documents duly **CERTIFIED** by proposer of seconder

BORANG IEM / PI (M)

PERMOHONAN MENJADI / PEMINDAHAN KEPADA AHLI MEMBER

ARAHAN KEPADA PEMOHON

Sila baca dengan teliti sebelum mengisi Borang IEM/PI (1), (2) & (3)

1. Sila isi borang dengan lengkap. Borang ini boleh **ditaip** atau **ditulis** dalam **huruf besar**.
2. Sila sertakan dua keping foto pasport terbaru yang telah disahkan di bahagian belakangnya.
3. Dua salinan borang IEM/PI (2) permohonan hendaklah diserahkan bersama 2 salinan borang IEM/PI (1), untuk menghadiri Temuduga Professional.
4. Satu salinan setiap dokumen yang **DISAHKAN** perlu dikirinkan. Salinan dokumen yang diperlukan adalah seperti berikut:
 - i) Sijil Beranak.
 - ii) Pendaftaran Siswazah Lembaga Jurutera Malaysia.
 - iii) Ijazah Kejuruteraan dan slip keputusan / transkrip pengajian.
 - iv) Semua dokumen dan transkrip (sekiranya ada) yang diperolehi untuk kelayakan kemasukan ke Pusat Pengajian Tinggi, bermula dari SPM/STPM.
 - v) SPM / STPM
5. Ijazah dalam kejuruteraan yang tidak menunjukkan Bahagian/Cawangan/Disiplin dikehendaki menyerahkan DOKUMEN TAMBAHAN (misalnya : slip keputusan, surat dari Jabatan dll) untuk menunjukkan disiplin.
 - i) Salinan ijazah kejuruteraan dan Ijazah dari Universiti tempatan hendaklah dikemukakan dalam **Bahasa Malaysia** dan **Bahasa Inggeris**. Ijazah luar negeri yang menggunakan bahasa ibundanya selain dari Bahasa Inggeris hendaklah dikemukakan bersama terjemahannya oleh Pendaftar Universiti/Pengawai Kedutaan dll.
 - ii) Salinan "**Transcript of Academic Record**" atau "**detail of course and subjects**" yang diambil semasa di Universiti. Salinan ini mestilah dikeluarkan oleh pihak Universiti.
6. Pemohon yang mempunyai ijazah pertama yang tidak diiktiraf oleh Institusi Jurutera Malaysia dan kemudiannya telah memperolehi Ijazah Sarjana adalah dikehendaki menyerahkan kedua-dua transkrip yang lengkap.
7. Jurutera siswazah adalah diingatkan tentang keperluan Akta Pendaftaran Jurutera. Penerangan lanjutan boleh diperolehi daripada:

Lembaga Jurutera Malaysia
d/a Kementerian Kerja Raya Malaysia,
Jalan Sultan Salahuddin,
50580 Kuala Lumpur
Tel : 03-40407095
8. Semua siswazah mestilah memperolehi pengalaman praktik di bawah MIEM dan P. Eng. (Jurutera Profesional) berdaftar dengan BEM agar pengalaman mereka dapat diiktiraf di bawah Akta, untuk tujuan Pendaftaran sebagai Jurutera Profesional. (Lihat "Bagaimana untuk menjadi Jurutera Profesional").
9. Jurutera siswazah dinasihatkan mendapat latihan di bawah seorang Jurutera berkelayakan MIEM dan P. Eng dalam disiplin yang sama atau disiplin yang berkenaan untuk melayakkan diri menduduki Temuduga Professional; salinan Peraturan Temuduga Professional boleh didapati dari Urusetia IJM.
10. Semua pemohon adalah diingatkan supaya merujuk kepada Peraturan Temuduga Professional semasa mengisi borang IEM/PI (3) dan borang ini hendaklah dikemukakan kepada Penemuduga Professional bila diminta.
11. Sila ambil perhatian, hanya pengalaman yang diperolehi semenjak tarikh lulus sebagai jurutera saja boleh diterima untuk tujuan Temuduga Professional.

SEMUA SIJIL, DOKUMEN DLL. YANG DISERAHKAN MESTILAH DISAHKAN OLEH PENCADANG / PENYOKONG ANDA.

SERTAKAN YURAN TEMUDUGA PROFESIONAL (RM 100.00 UNTUK AHLI SISWAZAH ATAU RM 200.00 UNTUK AHLI BUKAN SISWAZAH)

JANGAN SERTAKAN YURAN TAHUNAN / MASUK / PINDAH. PEMOHON AKAN DIKENAKAN BAYARAN SELEPAS KEAHLIAN MEREKA DILULUSKAN.

KEGAGALAN UNTUK MEMATUHI ARAHAN DI ATAS AKAN MENGAKIBATKAN KELEWATAN DALAM PEMROSESAN PEMOHONAN ANDA.

(Nota : Sebarang keraguan jika ada; interpretasi dalam Bahasa Inggeris adalah muktamad)

MAKLUMAT TAMBAHAN YANG DIPERLUKAN

1. Pengesahan sama ada program tersebut adalah program berkembar atau program sepenuh masa di University berkenaan.
2. Nama-nama Kolej tempatan di mana tamatnya program sebelum melanjutkan pelajaran ke peringkat ijazah.
3. Jumlah tahun pengajian di Universiti semasa mengikuti program berkenaan.
4. Kandungan kursus ijazah kejuruteraan di Kolej atau Universiti.
5. Transkrip Rekod Akademik terperinci mengenai kursus dan mata pelajaran yang diambil di Universiti. Surat berkenaan hendaklah dikeluarkan oleh Universiti di mana ijazah dikeluarkan.
6. Semua kelayakan masuk Universiti hendaklah dinyatakan di dalam Borang Permohonan di bawah ruangan 5 dan 6 dan disertakan salinan sijil (yang disahkan).
7. Semua salinan-salinan sijil yang diperolehi untuk Pengajian Tinggi mulai SPM yang disahkan hendaklah disertakan bersama Borang Permohonan.

KEGAGALAN MENGHANTAR MAKLUMAT-MAKLUMAT DAN DOKUMEN YANG DIPERLUKAN AKAN MENYEBABKAN KELEWATAN DALAM PEMROSESAN PEMOHONAN.

BORANG PERMOHONAN

Sila periksa dan pastikan dokumen-dokumen berikut telah lengkap dan **DISAHKAN** oleh penyokong / pencadang sebelum dihantar bersama borang permohonan dihantar ke IEM.

- Borang IEM/PI (1) dalam dua salinan
- 2 keping gambar ukuran paspot
- Tandatangan Pencadang & Penyokong di perenggan 2 (3 ahli Korporat dan 1 Fellow)
- Tandatangan Pemohon
- Tandatangan 2 orang Jurutera yang mengetahui berkenaan latihan dan pengalaman pemohon di setiap mukasurat
- Jumlah Pengalaman Kerja di perenggan 12 dan 13 hendaklah sama dengan jumlah pengalaman yang terdapat di perenggan 11
- Tarikh Permulaan Pengalaman Kerja di perenggan 12 hendaklah bermula selepas tarikh penerimaan Ijazah pertama
- BORANG IEM/PI (2) dalam dua salinan
- Surat Beranak
- Surat Pendaftaran Siswazah dari Lembaga Jurutera Malaysia
- Sijil Ijazah (versi **Bahasa Melayu & Inggeris** bagi Universiti tempatan), dan Diploma.
- Transkrip Rekod Akademik (Ijazah & Diploma)
- STPM / SPM / SAP (atau lain-lain yang setaraf)
- Sijil Matrikulasi (jika ada)
- Yuran Temuduga Profesional
 - RM100.00 (untuk Ahli Siswazah)
 - RM200.00 (untuk bukan Ahli)
- Semua dokumen-dokumen berkenaan telah **disahkan** oleh penyokong / pencadang



INSTITUSI JURUTERA MALAYSIA

The Institution of Engineers, Malaysia

Bangunan Ingenieur, Lots 60/62, Jalan 52/4, Peti Surat 223 (Jalan Sultan), 46720 Petaling Jaya, Selangor Darul Ehsan, Malaysia.
Telephone: 603-79684001/79684002 Email: sec@iem.po.my Fax No : 603-79577678

PERMOHONAN MENJADI AHLI APPLICATION FOR ELECTION AS MEMBER

Sila baca dan patuhi ARAHAN-ARAHAN KEPADA PEMOHON sebelum mengisi borang ini.
Please read & comply with INSTRUCTION TO APPLICANTS before completing this form.

1. BUTIR-BUTIR DIRI PERSONAL PARTICULARS

Nama Penuh :
Name :
(Gunakan huruf besar dan gariskan nama keluarga/bapa)
(Use block letters and underline family/ father's name)

Alamat Tetap :
Address in Full :

Alamat Surat-menyurat :
Postal Address :

Nombor Telefon : Rumah : Pejabat :
Telephone Nos : House : Office :

(Perhatian: Sebarang pertukaran alamat hendaklah diberitahu Institusi dengan segera.)
(N.B. Any change in address must be notified promptly to the Institution)

Tempat lahir : Tarikh lahir :
Place of Birth : Date of Birth :

Umur : Kewarganegaraan : Nombor Kad Pengenalan :
Age : Nationality : I.C. No. :

2. KENYATAAN OLEH PENCADANG DAN PENYOKONG STATEMENT BY THE PROPOSER AND SECONDER

(Pencadang dan Penyokong diminta mengesahkan kenyataan Pemohon berdasarkan sejauh mana anda mengenali mereka)
(Proposer and Seconders are asked to verify the Applicant's statements as far as possible from their personal knowledge)

SETELAH mengenali pemohon selama tahun, setakat pengetahuan saya dalam semua aspek, saya mengesyorkan beliau adalah layak dilantik sebagai Ahli Institusi ini.

HAVING known the applicant for years, I recommended him, from personal knowledge, as in every respect worthy of the distinction of being elected as Member of the Institution.

NAMA PENCADANG :
NAME OF PROPOSER :
(Huruf Besar)
(Block letters)

Gred : Ahli Fellow / Ahli No. Ahli :
Gred : Fellow / Member Membership No. :

Alamat :
Address :

Tandatangan: Tarikh:
Signature Date :

NAMA PENYOKONG :
NAME OF SECONDER :

Gred : Ahli Fellow / Ahli No. Ahli :
Gred : Fellow / Member Membership No. :

Alamat :
Address :

Tandatangan: Tarikh:
Signature Date :

NAMA PENYOKONG :
NAME OF SECONDER :

Gred : Ahli Fellow / Ahli No. Ahli :
Gred : Fellow / Member Membership No. :

Alamat :
Address :

Tandatangan: Tarikh:
Signature Date :

NAMA PENYOKONG :
NAME OF SECONDER :

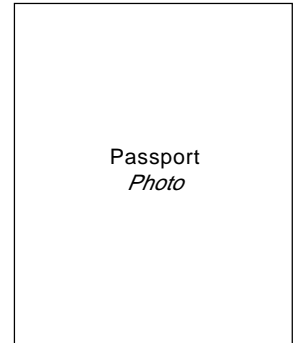
Gred : Ahli Fellow / Ahli No. Ahli :
Gred : Fellow / Member Membership No. :

Alamat :
Address :

Tandatangan: Tarikh:
Signature Date :

(Nota : Salah seorang daripada Ahli Korporat di atas mestilah Ahli Fellow atau Ahli Korporat yang tidak kurang daripada 10 tahun).
Kami, Ahli Korporat yang menandatangani di atas sependapat dengan cadangan ini berdasarkan pengetahuan diri masing-masing.

(NOTE : One of the above Corporate Members must be a FELLOW or a Corporate member of not less than 10 years standing in the Institution.
We, the abovesigned Corporate members concur with the above recommendation from personal knowledge.



3. KEDUDUKAN MASAKINI <small>PRESENT POSITION</small> Nama Majikan: <small>Name of Employer</small> Alamat: Jawatan: Tarikh Perlantikan: <small>Position Date of Appointment</small> Nama Jurutera Yang Bertanggungjawab: <small>Engineer to whom responsible:</small> No. Ahli IJM: (Jika ada) Disiplin: <small>IEM Membership No: (if any) Discipline</small>			Tandatangan 2 orang Ahli Korporat yang mengetahui berkenaan latihan dan pengalaman pemohon <small>Signatures of any two Corporate Members who have Personal knowledge of Applicant's Training</small>
4. PENDIDIKAN UMUM <small>GENERAL EDUCATION</small>			
Pendidikan Sekolah Menengah & Lokasi <small>Secondary Education School & Locations</small>	Peperiksaan Yang Lulus (Contoh : SPM Gred / STPM Gred) <small>Examinations passed (e.g. SPM Grade / STPM Grade)</small>	Tarikh Sijil Dikeluarkan <small>Dates of Awards</small>	
5. PENDIDIKAN KEJURUTERAAN <small>ENGINEERING EDUCATION</small>			Nama dan Tandatangan <small>Name and Signature</small>
Universiti / Pusat Pengajian <small>Universities / Institution of Higher Learning</small>	Sijil Kejuruteraan diperolehi <small>Diploma obtained</small>	Tarikh Sijil Dikeluarkan <small>Dates of Awards</small>	
6. CARA PENGAJIAN <small>MODE OF STUDY</small>			Nama dan Tandatangan <small>Name and Signature</small>
Tanda (✓) di kotak berkenaan <small>[Please tick (✓) appropriate boxes]</small>			
a Degree Programme : i) Full Residential <input type="checkbox"/> ii) Sandwiched Programme <input type="checkbox"/> b Twinning Programme : i) 3+0 Programme <input type="checkbox"/> ii) 2+1 Programme <input type="checkbox"/> iii) 1+2 Programme <input type="checkbox"/> iv) 3to4yrs Programme <input type="checkbox"/> <small>(Overses/Total)</small> c Distance Learning : i) Correspondence Course <input type="checkbox"/> ii) Video Conferencing <input type="checkbox"/> iii) Engineering Council <input type="checkbox"/> iv) IEM/BEM Exam <input type="checkbox"/> d Franchised Program <input type="checkbox"/>			
i) Name of College: i) Name of University Franchised:			
7. PENGHORMATAN, GELARAN DAN PENGANUGERAHAN: KEAHLIAN BADAN KEHORMAT DAN SAINTIFIK LAIN. <small>HONOURS, DECORATIONS AND AWARDS: MEMBERSHIP OF OTHER ENGINEERING AND SCIENTIFIC BODIES</small>			
8. DISIPLIN KEJURUTERAAN YANG DIPOHON: *Awam / Mekanik / Elektrik / dll. <small>DIVISION OF ENGINEERING APPLIED FOR: *Civil / Mechanical / Electrical, etc</small>			
9. BAHASA PERANTARAAN TEMUDUGA <small>LANGUAGE MEDIUM FOR INTERVIEW</small> <input type="checkbox"/> BAHASA MELAYU <input type="checkbox"/> ENGLISH LANGUAGE <small>(Perhatian: Laporan Pengalaman, Temuduga dan Esei mesti dalam bahasa perantaraan yang dipilih)</small> <small>(Note: The Experience Report, Oral Interview and Essays would be in the chosen language)</small>			
10. SILA NYATAKAN SAMADA PERNAH MEMBUAT PERMOHONAN SEBELUM INI: <small>PLEASE STATE PARTICULARS OF PREVIOUS APPLICATION (if any)</small> Ya / Tidak * <small>Yes / No*</small> *Sebab-sebab tidak berjaya: Dibatalkan / Gagal / Tarik Diri <small>* Reason of leaving: Rejected / Unsuccessful / Resigned</small> Tahun: Gred Keahlian dipohon: <small>Year Grade of Membership applied for</small>			
11. NO. AHLI SISWAZAH IJM (jika ada) : <small>IEM GRADUATE MEMBERSHIP NO: (if any)</small>			
12. JUMLAH TEMPOH LATIHAN PRAKTIK DAN PENGALAMAN SELEPAS LULUS DARIPADA: <small>TOTAL PERIOD OF PRACTICAL TRAINING AND EXPERIENCE AFTER GRADUATION</small> Universiti: Tahun: Bulan <small>University Year Months</small>			



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PERMOHONAN UNTUK MENGHADIRI TEMUDUGA PROFESIONAL dalam tahun 20

APPLICATION TO ATTEND THE PROFESSIONAL INTERVIEW in year 20

Arahan kepada pemohon: 1. Borang ini mestilah diserahkan bersama-sama borang permohonan menjadi Ahli Korporat.
Instructions to Applicant: This form must be submitted together with the Corporate Membership Application.

2. *Sila potong mana yang tidak berkenaan.
**Please delete whichever is not applicable*

Nama Penuh :
Huruf Besar (Nama Keluarga) (Lain Nama)
NAME in full (Surname) (Other Name)
(Block letters)

Alamat penuh :
Address in Full

Tarikh Lahir: Umur pada tarikh permohonan:
Date of Birth Age at date of application

*1. Saya berusia lebih daripada 25 tahun dan
I am not less than 25 years of age and

* (a) Saya menjadi Ahli Siswazah Institusi Jurutera Malaysia sejak
I am a Graduate Member of the Institution of Engineers, Malaysia since

Disiplin Kejuruteraan:- * Awam / Mekanik / Elektrik / dll No. Keahlian:
*(Division of engineering:-) * Civil / Mechanical / Electrical / etc : Membership No.*

atau * (b) Saya memperolehi Ijazah dalam
or I obtained a Degree of in

kejuruteraan *Awam / Mekanik / Elektrik / dll
**Civil / Mechanical / Electrical / etc Engineering*

dari Universiti
at the University of

dan telah mempunyai tahun pengalaman dan
and having had year of responsible experience as

bertanggungjawab sebagai jurutera *Awam / Mekanik / Elektrik / dll
*an Engineer in the *Civil / Mechanical / Electrical / etc*

saya memohon, menghadiri temuduga profesional
I hereby apply to appear for the Professional Interview

2. Saya akan menyediakan dan menyerahkan kepada Penemuduga Profesional yang di calonkan oleh IJM
I shall prepare and submit direct to the Professional Interviewers, nominated by the IEM

(a) Dua salinan laporan latihan dan pengalaman saya, dan
Two copies of my Report and

*(b) Satu set Lukisan bersama dengan Kerja Rekabentuk, dll.
A set of Drawings together with Design Calculations, etc

atau *(c) Satu set *Dokumen / Tesis atas Kerja Penyelidikan /
*or A set of *Documents/Thesis on Research Work/*

dan *(d) Satu Sijil Temuduga Profesional, Borang IEM/PI (3) yang ditandatangani oleh Majikan / Jurutera.
Sepertimana yang diperlukan dan memohon untuk ditemuduga serta menulis karangan mengenai tajuk yang ditentukan.
*A Professional Interview Certificate, Form IEM/PI (3) duly signed by the *Employer / Engineer as required and wish to be interviewed thereon and to write Essays on subject to be specified.*

3. Saya sertakan yuran RM 100.00 untuk ahli siswazah
I tender herewith fee of RM 100.00 for Graduate Member of the Institution
RM 200.00 untuk bukan ahli
RM 200.00 for Non-Member

4. Tarikh temuduga yang lepas (jika ada)
Date of previous sitting (Write NIL not applicable)

Tarikh :
Date

Tandatangan :
Signature

NEW IEM AND BEM TRAINING REQUIREMENT

The Institution of Engineers, Malaysia and The Board of Engineers, Malaysia will implement new training requirements for all Graduate Engineers who register from January 1, 1998.

The Institution of Engineers, Malaysia (IEM) will implement the new training requirement for all Graduate Engineers as follows:

- (a) Young engineer graduating prior to 1.1.1998 - at least 3 years working experience.
- (b) Young engineer graduating after 1.1.1998 - at least 4 years working experience.
- (c) Young engineer to be registered under Category R will require at least 6 years of working experience regardless of year of graduation.

The Board of Engineers, Malaysia and The Institution of Engineers, Malaysia have decided to implement revised training requirements for graduate engineers who desire to become professional engineers. This is in view of the fact that engineering students follow varied routes in their pursuit for an engineering degree. The requirements include, besides extended training period, compulsory courses to be undertaken, participation in professional development programmes and involvement in continuing engineering education programmes. With these measures, it is hoped that we will improve the quality of our Professional Engineers who will be able to serve globally.

For graduates who do not follow a fulltime engineering course in a university environment, the training period is further extended.

The revised training requirements will be effective for graduates from accredited university programmes registered after 1st. January 1998 and for graduates through other programmes from 22nd. May 1997. The detailed requirements are as follows:

GRADUATE FROM ACCREDITED UNIVERSITY PROGRAMMES

The practical experience that a registered Graduate Engineer is required to obtain under Section 10 (l)(b) of the Act in order to be entitled to apply for registration as a Professional Engineer shall be carried out in a manner satisfactory to the Board for a period of not less than FOUR years covering the following:

- (a) General Training, which should link the conceptual analytical abilities developed during the degree course with its wide application in industry and give a sound base for professional development, for a period of not less than TWO years of which up to twelve months of relevant, accredited and recognised industrial training during the undergraduate course may be credited.
- (b) Professional Career Development Training, which will provide exposure to skills awareness, management, responsibility, teamwork, logical approach etc. for a period of not less than TWO years.
- (c) Satisfactory Attendance in the following course conducted by BEM or institutions approved by BEM.
 - (i) code of ethics 12 hrs
 - (ii) occupational safety and health at work, relevant bylaws / regulations 12 hrs
 - (iii) engineering management practice 12 hrs
 - (iv) topics related to branch of engineering 24 hrs
- (d) Completion of not less than 30 units of professional development which includes attendance at talks, seminars, meetings and community services.

GRADUATE FROM APPROVED TWINNING, PART-TIME, DISTANCE LEARNING PROGRAMME

The practical experience that a registered Graduate Engineer is required to obtain under section 10(l)(b) of the Act in order to be entitled to apply for registration as a Professional Engineers shall be carried out in a manner satisfactory to the Board for a period of not less than SIX years covering the following:

- (a) General Training, which should link the conceptual analytical abilities developed during the degree course with its wide application in industry and give a sound base for professional development, for a period of not less than THREE years of which up to twelve months of relevant, accredited and recognised industrial training during the undergraduate course may be credited.
- (b) Professional Career Development Training, which will provide exposure to skills awareness, management, responsibility, teamwork, logical approach etc. for a period of not less than THREE years.
- (c) Satisfactory Attendance in the following courses conducted by BEM or institutions approved by BEM.
 - (i) code of ethics 12 hrs
 - (ii) occupational safety and health at work, relevant bylaws / regulations 12 hrs
 - (iii) engineering management practice 12 hrs
 - (iv) topics related to branch of engineering 24 hrs
- (d) Attendance in Continuing Engineering Education Programmes totalling 24 days.
- (e) Completion of not less than 45 units of professional development which includes attendance at talks, seminars, meetings and community services.

One unit of professional development is equal to one hour's participation in the above activities subject to a maximum of four units in a day.

Training as prescribed in (a) and (b) must be supervised by a Mentor/Professional Engineer in the same branch although Mentor/Professional Engineers in other disciplines are acceptable, with prior approval from the BEM.

At least one year of the professional experience shall be obtained in Malaysia. It is recommended that engineers maintain a log book of training endorsed by the mentor at quarterly intervals. The log book should also contain details of involvement

PETIKAN DARIPADA PERATURAN UNTUK DOKUMENTEMUDUGA PROFESIONAL

2. Dokumen yang perlu dihantarkan.

2.1 Semua calon dikehendaki menghantar:

- (a) Dua salinan laporan latihan dan pengalam mereka dan
- (b) Lampiran projek dan / atau dokumen lukisan lain yang disahkan dan memenuhi salah satu daripada alternatif berikut:-
- (c) Untuk calon di bawah skim latihan, buku latihan (log book)

2.1.1 Sekurang-kurangnya dua dan tidak lebih daripada empat lukisan kerja, hitungan rekabentuk terperinci berkaitan dengan lukisan yang dihantar oleh calon, dan spesifikasi serta satu set kuantiti terdiri daripada abstrak dan helaian "taking off" samada berkaitan dengan salah satu lukisan yang dihantar. Seseorang calon boleh menghantarkan lukisan tambahan yang tidak semestinya disediakan oleh beliau, untuk menunjukkan pengalaman dalam kerja kejuruteraan;

ATAU

2.1.2 Sebahagian daripada kajian awal projek, atau kajian ekonomi rekabentuk awal untuk suatu struktur / sistem atau satu kajian aspek rekabentuk teknik susun atur;

- i. sekurang-kurangnya satu lukisan berkaitan yang mengandungi ciri-ciri atau perincian penting suatu struktur atau sistem.
- ii. sekurang-kurangnya tiga dan tidak lebih daripada enam lakaran mengandungi perincian yang memadai untuk membolehkan pelukis pelan membuat lukisan penganalisa.
- iii. analisa awal tegasan atau penganalisa sistem;
- iv. analisa kualiti, kos atau ekonomi yang sesuai,

ATAU

2.1.3 Seorang calon, yang pada masa permohonannya terlibat dalam penyelidikan kejuruteraan, boleh hantarkan sebagai alternatif, satu laporan atau kertas kerja yang diterbitkan sebagai bukti penyelidikan yang dijalankan oleh beliau. Tesis untuk ijazah lanjutan tidak diterima, tetapi seorang calon boleh menghantar satu laporan yang mengandungi sebahagian daripada kandungan tesis ijazah lanjutan, bersama merupakan tambahan kepada laporan latihan dan pengalaman. Laporan ini boleh juga dilengkapi dengan lukisan dan mesti menerangkan kerja yang benar-benar diusahakan oleh calon.

Satu tinjauan mengenai pengetahuan masakini terhadap suatu topik tidak memadai. Seorang calon akan diuji atas pengetahuannya terhadap perkara yang timbul daripada penyelidikan dan kemahirannya menguasai kaedah-kaedah yang perlu untuk melakukannya. Tesis, kertas terbitan atau laporan hendaklah disahkan.

ATAU

2.1.4 Seorang calon yang berumur melebihi 45 tahun dengan sekurang-kurangnya 15 tahun pengalaman, yang tidak dapat mengeluarkan lukisan dan dokumen yang disediakan olehnya boleh menghantarkan satu laporan terperinci beberapa kerja utama penglibatannya, bersama dengan tidak lebih daripada enam lukisan tidak semestinya disediakan olehnya untuk menjayakan kerja-kerja tersebut. Laporan ini, yang merupakan tambahan kepada laporan latihan dan pengalaman, hendaklah di antara 3000 hingga 4000 perkataan

EXTRACTS FROM THE RULES FOR SUBMISSION OF PROFESSIONAL INTERVIEW DOCUMENTS

2. Documents to be Submitted

2.1 All candidates are required to submit:

- (a) two copies of a typewritten Report on A4 paper, giving an account of their training and experience, prepared in accordance with Section 4: and
- (b) Single copies of other documents and / or drawings duly certified and conforming to one of the alternatives in 2.2 Candidates are required to indicate under which alternatives they wish to apply.
- (c) For candidates under the IEM training scheme, their training log books.

2.1.1 At least two and not more than four working drawings, detailed design calculations relating to one or more of the candidate's own submitted drawings, and specifications and a set of quantities, comprising abstract, take of sheets or shop list relating either to one of the submitted drawings or to another drawing. A candidate may submit an additional drawing not necessarily prepared by him, to illustrate his experience in the engineering works; **OR**

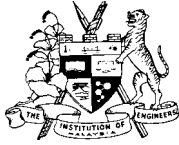
2.1.2 A part of a feasibility study involving functional and economic comparison of preliminary designs of an engineering system, **OR** a comprehensive report of a major engineering project, **OR** a system design of a major engineering works. The above documents should include the following:

- i. at least one relevant drawing conveying essential features of details of a structure or systems:
- ii. At least three and not more than six sketches containing sufficient details to enable a draughtsman to work them up into drawings without further guidance.
- iii. preliminary stress or systems analysis;
- iv. quantity, cost or economic analysis as appropriate; **OR**

2.1.3 A candidate, who at the time of his application is engaged in engineering research work, may as an alternative submit, in duplicate, a report or published papers, evidence of research carried out by him. A thesis for a higher degree may not be acceptable but a candidate may submit a report incorporating a reasonable proportion of the matter for a higher degree thesis, together with evidence of new matters in extension of his research work. This is in addition to the Report on training and experience. The subject of his research should be related to the practice of engineering. The report may be illustrated by drawings, and must describe work actually carried out by the candidate, or for which he was substantially responsible. A survey of existing knowledge of the subject will not be considered adequate. A candidate will be tested on his knowledge of matters arising out of his research, and his command of the methods appropriate to the handling of them. A thesis, published papers or report must be certified, **OR**

2.1.4 A candidate whose experience lies in the maintenance of an electrical/mechanical plant or engineering system, can submit a detailed description of the operations of the plant or system together with the maintenance schedule which he has formulated. In his submission he should clearly indicate his contributions which would show sound applications of engineering principles. A critical appraisal of the design of the engineering system which may not be the work of the candidate, should be included. Details of modifications made to the existing system which are the work of the candidate should also be submitted, **OR**

2.1.5 A candidate over 45 years of age with at least 15 years experience, who is unable to produce drawings and documents prepared by him within recent years, may submit a detailed report of some of the major work(s) upon which he has been engaged, preferably accompanied by not more than six drawings (not necessarily prepared by him) to illustrate this work. This report, which is in addition to the Report of training experience should be of 3000 to 4000 words.



INSTITUSI JURUTERA MALAYSIA

The Institution of Engineers, Malaysia

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Telephone: 603-79684001 / 79684002 Email: sec@iem.po.my Fax No: 603-79577678

TEMUDUGA PROFESIONAL – SIJIL PERAKUAN DOKUMEN UNTUK TEMUDUGA PROFESIONAL PROFESSIONAL INTERVIEW – CERTIFICATE

Nota Penting: Jurutera yang menandatangani Borang ini perlulah diingatkan bahawa beliau bertanggungjawab untuk mengesahkan bahawa lukisan / dokumen yang diserahkan telah dilukis dilaksanakan oleh calon semasa pekerjaannya.

Important Note: The Engineer signing this Form (preferably a Corporate Member of the Institution of Engineers, Malaysia) is reminded that he is responsible for confirming that the drawings/documents submitted have been executed by the candidate in the ordinary course of his employment.

- * Sila potong mana yang tidak berkenaan
- * Please delete whichever is not applicable
- ** Sekiranya lukisan dalam bentuk foto atau lakaran daripada lukisan asal, maka Majikan / Jurutera mesti juga menandatangani salinan itu.
- ** If any drawing is a photo print or a tracing from an original drawing, then the Employer / Engineer must also signed the Second Certification

Nama Penuh:, seorang calon untuk Temuduga
NAME in Full, who is a candidate for the

Profesional masih / telah *bekerja di bawah penyeliaan saya dalam jawatan
Professional Interview is / has been *employed under me in the capacity of

..... dari ke
from to

Saya telah menyemak dan menandatangani Lukisan **dan / atau* Dokumen seperti tercatat di bawah yang dihantar oleh beliau untuk Penemuduga.
I have inspected and signed the Drawings **and / or* Documents described below which he proposes to submit to the Interviewers.

KENYATAAN LUKISAN ** dan / atau * DOKUMEN

DESCRIPTION OF DRAWINGS ** and / or * DOCUMENTS

.....
.....
.....
.....

I PENGESAHAN LUKISAN / DOKUMEN ASAL OLEH MAJIKAN / JURUTERA

CERTIFICATION OF THE ORIGINAL DRAWINGS / DOCUMENTS BY THE EMPLOYER / ENGINEER

Saya mengesahkan bahawa lukisan* dan / atau dokumen telahpun dilukis / dilaksanakan oleh calon sepanjang pekerjaannya di bawah penyeliaan saya.

I hereby certify that these drawing **and / or* documents have been executed by the candidate in the ordinary course of his employment under my general supervision.

Tandatangan:
Signature

Tarikh:
Date

Nama Jurutera:
Name of Engineer

Gred : Ahli Fellow / Ahli:
Grade : Fellow / Member*

Jawatan :
Official or other Position

No. Ahli:
M'ship No

II PENGESAHAN LAKARAN / FOTO OLEH MAJIKAN / JURUTERA

CERTIFICATION OF THE TRACING / PHOTOPRINT BY THE EMPLOYER / ENGINEER

Saya mengesahkan bahawa lakaran / foto* tersebut di atas adalah:

I hereby certify that the tracing / photoprint* referred to above is:

- *(a) satu foto daripada lakaran lukisan yang dibuat oleh calon sendiri.
a photo print from a tracing made by the candidate of a drawing also made by him.
- *(b) satu foto daripada lakaran atas kertas lakaran yang dibuat oleh calon sendiri.
a photo print from a drawing made by the candidate on tracing paper (or cloth).
- *(c) satu lakaran lukisan yang dibuat oleh calon sendiri.
a tracing made by the candidate or a drawing also made by him.

Tandatangan:
Signature

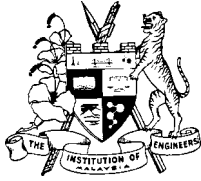
Tarikh:
Date

Nama Jurutera:
Name of Engineer

Gred : Ahli Fellow / Ahli:
Grade : Fellow / Member*

Jawatan :
Official or other Position

No. Ahli:
M'ship No



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THE PROFESSIONAL INTERVIEW QUESTIONS

Questions applicable to Section B of the Essay as at 1.1.2001

Code of Ethics Questions

The main purpose of these questions is to manifest professionalism of a candidate. A candidate should have gained some understanding of the Professional Code of Ethics and conduct before entering for the Professional Interview. The questions selected by the Examiners may be expected to be familiar.

A candidate would be expected to demonstrate:-

- (a) That he has thought sufficiently about the role of the engineer in the society vis-a-vis his professional Code of Ethics.
- (b) That he can write in clear and concise manner that is intelligible to laymen.

Candidate would be expected to answer only 1 question out of 2 selected by the Examiners from among the 15 questions listed below:-

1. Discuss the dilemma engineers face in balancing capital expenditure versus optimum design for efficient operations and maintenance, bearing in mind the impact of capital expenditure on the engineer's fees.
2. Technological and economic efficiencies in providing service to the public are the expected benefits from the privatisation of public utilities companies in Malaysia. Discuss with examples whether the technological benefits of privatisation have been achieved.
3. Are the present safety practices of your industry adequate? What steps do you consider should be taken by the industry to address the present situation?
4. The manifestation of professionalism among engineers occurs through their interactions with other segments of the society, which can be viewed essentially as an exercise in group dynamics. In this regard, the Institution of Engineers, Malaysia (IEM) is ideally constituted to serve this purpose. Discuss the various functions that can be provided by IEM in promoting professionalism.
5. In this technological age, the power of the engineers in shaping the society and environment in all pervading and can profoundly affect the lives of many members of the society. Enumerate, from your personal experience, how largely positive impacts have accrued from the contributions of engineers.
6. "He shall not under any circumstances solicit advisory or consultative work, either directly or by an agent, nor shall he pay, by commission or otherwise any person who may introduce clients to him". Discuss the ways in which an engineer, especially one that is a newcomer to the field, can project him/herself as a responsible professional to the society without being guilty of violating the above.
7. Engineers are often entrusted with the responsibility of implementing large-scale projects involving millions of dollars. In view of the large amount of money changing hands, the integrity and ethical standards of engineers are being put to test. What measures can an engineer take to prevent corruption and unethical practice of cutting corners in order to safeguard the good image of the engineering profession?

8. As an engineer responsible for the development of a new project, your first task according to the planning schedule is to clear the land and prepare the site for construction. To do so, you will need to clear vast stretches of land that will undoubtedly cause land erosion and subsequently contaminating of streams and rivers around the site. You are under tremendous pressure to finish the task as the job is already behind schedule. Given the constraints that you have with regards to deadline, limited technical solutions and the preservation of the environment, discuss the ethical considerations, which confront you under the circumstances.
9. In recent years, there is stronger awareness by the public at large for better quality works in a construction project. How can a professional engineer ensure better quality construction without conflicting with the profit objectives of both the owner and the contractor?
10. 'Conflict of professional interest frequently arises in the working environment of an engineers'. Discuss the statement and propose the appropriate solutions for overcoming the problem.
11. Recent years have seen increased national and international Protocols and Regulations and national Acts and Legislation on the control of many forms of pollution. Discuss the needs and consequences of observing these regulations with special reference to the particular industry you are involved in.
12. "In today's dynamic marketplace, many organisation/industries are initiating cost reduction measures to remain competitive". Discuss the contradictory demand of cost reduction programmes and the need to invest to enhance the standards of Health, Safety and Environment (HSE) in the industry. Is it possible to be cost-effective yet meeting the ever-increasing HSE requirements?
13. Engineers are increasingly playing a significant role in the nation's fast pace development. Please suggest how engineers can make greater contributions with awareness in safety, health and environment and how engineers can keep abreast with the development of technology without confining to one's specific roles or disciplines.
14. In a turnkey project, the turnkey contractor requested you as a consultant to put up irregular (i.e. non-conforming to current engineering practice) proposals to maximise profits from the project. Discuss the key points that you must address so as not to compromise on your professional ethics.



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Training Scheme

1.0 INTRODUCTION

- 1.1 The objective of the Institution of Engineers, Malaysia is the advancement of engineering profession. Before becoming a Corporate member of the Institution and/or being registered under the Registration of Engineers Act, 1967 a person must have received engineering education and advanced training to standards determined by the Institution and the Board of Engineers, Malaysia.
- 1.2 The Institution and the Board are two separate bodies. However, their representatives work together in committees of the Institution to establish common standards of education and training and the Board normally accepts the standards of the Institution as satisfying its requirements. Professional Interviews are conducted by the Institution for Corporate membership of the Institution.

2.0 THE INSTITUTION TRAINING

- 2.1 The Institution Training Scheme is drawn up by the Institution to provide for the proper practical training of young graduates entering the profession of engineering and to ensure the such training conforms to the Institution Rules concerning the admission of Corporate Members.
- 2.2 Although not obligatory, it will normally be advantageous for a candidate appearing for the Professional Interview to obtain his practical experience under a formal training scheme of the Institution supervised by a Corporate Member of the Institution.
- 2.3 The Professional Interview Regulations state that a Candidate shall have had at least 4 to 6 years (depending on training requirements) of approved experience in planning, design, execution or management of such works as stipulated and relevant to the profession of an engineer. Candidates can apply for P.I. after having undergone 4 to 6 years of practical training - either through the log book training scheme or working experience.
- 2.4 Other training scheme(s) bearing similar provisions as the Institution training scheme may be accepted as its equivalent. Prior approval of the Institution is required for such scheme to be accepted. Please check with Secretariat.

3.0 ADMINISTRATION OF TRAINING SCHEMES

- 3.1 The Institution shall prepare, maintain and keep under review, a register of Corporate Members who are willing to act as mentors to candidates for approved practical training as set out in the IEM Professional Interview Regulations.
- 3.2 Applicants for inclusion in the register may be made to the Honorary Secretary of the Institution on a prescribed Form. The requirements are as follows:
- (a) The Corporate Member shall be in such a position of responsibility as will enable him, in the opinion of the council, to ensure that the Candidate obtains adequate and relevant practical training in the field, office and on works, and to exercise such supervision that he can sign the certificate required by the Institution on the completion of the training period.
 - (b) He shall have been a Corporate Member for at least three years.
 - (c) He shall not act as mentor to more than three candidates at any one time.
 - (d) He shall undertake to report any change of circumstances which may prevent him from providing proper training to the Candidate.
- 3.3 The Candidate shall perform this practical training under the Institution Training Scheme on a prescribed Institution Log Book available at a prescribed fee of RM10/- per copy.
- 3.4 On satisfactory completion of the period of training, the Candidates shall prepare the necessary documents to be signed by the Corporate Member and shall submit this with his application to sit for the Professional Interview.

HOW TO BE A PROFESSIONAL ENGINEER

The IEM Secretariat receives numerous enquiries almost daily from graduate engineers as to how they can qualify as professionals.

To help these anxious engineers, we list below the steps which are necessary to enable them to be registered by the Board of Engineers, Malaysia (BEM) as Professional Engineers (P.E).

First they should register themselves with the Board of Engineers upon graduation as it is compulsory under the Engineers Act 1967 for all practising engineers to register with the Board.

After registration with the Board, the engineers could approach towards their objectives of obtaining P.E. either on their own or through the IEM Log book scheme.

If they intend to complete their training on their own they will have to undergo 3 years or 4 years to 6 years (depending on requirements) training stints as far as possible under a P.Eng. who is in the same discipline.

If they opt for the IEM log book scheme, training will take 4 to 6 years for those graduating after 1.1.1998 and three years for those who graduated prior to this date.

Once the candidates complete their training (either on their own or through the IEM Log Book scheme), the next step for them is to sit for the Professional Interview conducted by IEM. Once they pass this interview (which consists of oral questions and essay writing) they could be admitted as Corporate Members of IEM and are then eligible to apply to be registered as P. Eng.

Training Requirements with effect from 1st Jan, 1998

For Graduate Engineer who register with BEM from 1st Jan, 1998 please note:-

GRADUATE (A)

The practical experience that a registered Graduate Engineer (A) is required to obtain under section 10(1)(b) of the Act in order to be entitled to apply for registration as a Professional Engineer shall be carried out in a manner satisfactory to the Board for a period of not less than FOUR years.

GRADUATE (B)

The practical experience that a registered Graduate Engineer (B) is required to obtain under section 10(1)(b) of the Act in order to be entitled to apply for registration as a Professional Engineer shall be carried out in a manner satisfactory to the Board for a period of not less than SIX years