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# PROFESSIONAL ENGINEERS ACT (CHAPTER 253)

# PROFESSIONAL ENGINEERS (APPROVED QUALIFICATIONS) NOTIFICATION 2009

#### ARRANGEMENT OF PARAGRAPHS

# Paragraph

- 1. Citation and commencement
- 2. Definitions
- 3. Qualifications specified in Schedule
- 4. Qualifications not specified in Schedule
- 5. Cancellation
  The Schedule

In exercise of the powers conferred by section 15(1)(a) of the Professional Engineers Act, the Minister for National Development, after consultation with the Professional Engineers Board, hereby makes the following Notification:

#### Citation and commencement

1. This Notification may be cited as the Professional Engineers (Approved Qualifications) Notification 2009 and shall come into operation on 30th December 2009.

#### **Definitions**

2. In this Notification —

"on-campus study", in relation to any qualification, means attendance on the home campus of any university, college or institution specified in the Schedule that awards that qualification, and —

(a) includes attendance on the home campus of any other university, college or institution specified in the Schedule, or on such other campus as may be approved by the Board; but

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- (b) does not include any study through
  - (i) a distance learning programme; or
  - (ii) a twinning programme conducted wholly or partly by a university, college or an institution that is not specified in the Schedule, unless such twinning programme is approved by the Board;
- "post-graduate qualification acceptable to the Board", in relation to a qualification awarded upon graduation after the completion of an undergraduate engineering degree programme, means —
  - (a) a Master degree or an equivalent post-graduate degree in the same branch of engineering from any university, college or institution specified in the Schedule, with relevant majors or electives, and which is awarded upon graduation after the completion of not less than one year of full-time on-campus study, or not less than 2 years of part-time on-campus study; or
  - (b) a degree of Doctor of Philosophy (PhD) in the same branch of engineering from any university, college or institution approved by the Board;
- "undergraduate engineering degree programme" means an undergraduate engineering degree programme with majors or electives relevant to any branch of engineering prescribed under section 10(8) of the Act.

# Qualifications specified in Schedule

**3.**—(1) Any qualification specified in Part I of the Schedule shall be an approved qualification for the purposes of section 15(1)(a) of the Act, only if it relates to a branch of engineering prescribed under section 10(8) of the Act.

- (2) Any qualification specified in Parts II, III, IV and V of the Schedule shall be an approved qualification for the purposes of section 15(1)(a) of the Act, only if it relates to a branch of engineering prescribed under section 10(8) of the Act, and if such of the following conditions as may be applicable are satisfied:
  - (a) in the case of a qualification specified in Part II of the Schedule, the qualification is awarded upon graduation after the completion of a full-time undergraduate engineering degree programme of not less than 4 years, or of an equivalent programme approved by the Board;
  - (b) in the case of a qualification specified in Part III of the Schedule, the qualification
    - (i) is awarded upon graduation after the completion of a full-time undergraduate engineering degree programme of not less than 4 years, or of an equivalent programme approved by the Board (not being a programme referred to in sub-paragraph (ii)); or
    - (ii) is awarded upon graduation after the completion of a full-time undergraduate engineering degree programme of not less than 3 years, and is supplemented by a post-graduate qualification acceptable to the Board;
  - (c) in the case of a qualification alluded to in Division I of Part IV of the Schedule
    - (i) the qualification is awarded upon graduation after the completion of a full-time undergraduate engineering degree programme of not less than 4 years;
    - (ii) the qualification is accredited by the accrediting organisation as fully meeting the academic requirements for registration as a professional engineer; and
    - (iii) the qualification is supplemented by a post-graduate qualification acceptable to the Board, if it is awarded before the date specified in the third column of that

Division, unless it is a qualification specified in Division II of that Part or alluded to in Division III or IV of that Part;

- (d) in the case of a qualification alluded to in Division I of Part V of the Schedule
  - (i) the qualification is awarded upon graduation after the completion of a full-time undergraduate engineering degree programme of not less than 3 years;
  - (ii) the qualification is accredited by the accrediting organisation either as fully meeting the academic requirements for registration as a chartered or professional engineer, or as meeting the academic requirements for registration as a chartered or professional engineer subject to further learning; and [S 819/2013 wef 01/01/2014]
  - (iii) the qualification is supplemented by a post-graduate qualification acceptable to the Board, if
    - (A) it is awarded before the date specified in the third column of that Division, unless it is a qualification specified in Division II of that Part; or
    - (B) it is accredited as meeting the academic requirements for registration as a chartered or professional engineer subject to further learning;
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- (e) at least one-half of the total modular credits or academic units required for graduation in the undergraduate engineering degree programme for the qualification has been obtained through on-campus study; and
- (f) if the qualification has been obtained partly on account of advanced standing credits awarded for any other qualification
  - (i) that other qualification must be approved by the Board; and

(ii) the advanced standing credits must not exceed onehalf of the total modular credits or academic units required for graduation in the undergraduate engineering degree programme for the qualification.

# Qualifications not specified in Schedule

- **4.**—(1) Where a person holds a qualification in any branch of engineering prescribed under section 10(8) of the Act, but the qualification is not specified in the Schedule, the Board may consider him for registration as a professional engineer, if
  - (a) the qualification is awarded upon graduation after the completion of a full-time undergraduate engineering degree programme of not less than 4 years, or of an equivalent programme approved by the Board;
  - (b) the qualification satisfies all applicable conditions set out in paragraph 3(2)(e) and (f);
  - (c) the qualification is supplemented by
    - (i) a Master degree in the same branch of engineering, with relevant majors or electives, from the National University of Singapore or the Nanyang Technological University; or
    - (ii) a degree of Doctor of Philosophy (PhD) in the same branch of engineering from any university, college or institution approved by the Board;
  - (d) the qualification is accredited by a national accreditation organisation or an international accreditation organisation acceptable to the Board;
  - (e) the qualification is recognised for independent professional engineering practice by a local authority of the country or region in which the qualification was awarded; and
  - (f) the undergraduate engineering degree programme for the qualification is preceded by a course of education leading to the award of the Singapore-Cambridge General Certificate of Education 'Advanced' Level Certificate or of an equivalent qualification approved by the Board.

(2) The Board may, if it thinks fit in any particular case, waive all or any of the conditions under sub-paragraph (1)(a) to (f).

# Cancellation

- **5.**—(1) The Professional Engineers (Approved Qualifications) Notification 2005 (G.N. No. S 768/2005) is cancelled.
- (2) Notwithstanding sub-paragraph (1), the Professional Engineers (Approved Qualifications) Notification 2005 shall continue to apply, as if this Notification had not been made, to any application to the Board for registration which is pending immediately before 30th December 2009.

# THE SCHEDULE

Paragraphs 2 and 3

#### PART I

Degrees from the National University of Singapore or the Nanyang Technological University.

#### PART II

First column		Second column	Third column	Fourth column
Country		University, College or Institution	Qualification	Branch of Engineering
INDIA	1.	Indian Institute of Technology, Bombay	BTech	Civil Electrical Mechanical
	2.	Indian Institute of Technology, Delhi	BTech	Civil Electrical Mechanical
	3.	Indian Institute of Technology, Guwahati	BTech	Civil Electrical Mechanical
	4.	Indian Institute of Technology, Kanpur	BTech	Civil Electrical Mechanical
	5.	Indian Institute of Technology, Kharagpur	BTech	Civil Electrical Mechanical

		THE SCHEDULE —	continued	
	6.	Indian Institute of Technology, Madras	BTech	Civil Electrical Mechanical
	7.	Indian Institute of Technology, Roorkee	BTech	Civil Electrical Mechanical
PEOPLE'S REPUBLIC OF CHINA	1.	Tsinghua University	BEng	Civil
	2.	Tianjin University	BEng	Civil
	3.	Southeast University	BEng	Civil
	4.	Tongji University	BEng	Civil
	5.	Zhejiang University	BEng	Civil
	6.	Chongqing University	BEng	Civil
	7.	Harbin Institute of Technology	BEng	Civil
	8.	Hunan University	BEng	Civil
	9.	Xi'an University of Architecture & Technology	BEng	Civil
	10.	Southwest Jiaotong University	BEng	Civil
	11.	Beijing Jiaotong University	BEng	Civil
	12.	Dalian University of Technology	BEng	Civil
	13.	Shanghai Jiao Tong University	BEng	Civil
	14.	Hohai University	BEng	Civil
	15.	Wuhan University	BEng	Civil

#### PART III

First column Second column Third column Fourth column Country Qualification Branch of University, College or Engineering Institution **BELGIUM** Katholieke Civil 1. Burgerlijk Universiteit Electrical Leuven Mechanical Bouwkundig Ingenieur Burgerlijk Elektrotechnisch – Werktuigkundig Ingenieur – richting mechanica Burgerlijk Elektrotechnisch Ingenieur 2. Universiteit Gent Burgerlijk Civil Electrical Mechanical Bouwkundig Ingenieur Burgerlijk Elektrotechnisch -Werktuigkundig Ingenieur – richting mechanica Burgerlijk Elektrotechnisch

Mechanical

	THE SCHEDULE	— continued	
		Ingenieur	
3.	Vrije Universiteit Brussel	Burgerlijk	Civil Electrical Mechanical
		Bouwkundig	
		Ingenieur	
		Burgerlijk	
		Elektrotechnisch –	
		Werktuigkundig	
		Ingenieur – richting	
		mechanica	
		Burgerlijk	
		Elektrotechnisch	
		Ingenieur	
1.	Rheinisch- Westfälische Technische Hochschule Aachen	DiplIng.	Civil Electrical Mechanical
2.	Technische Universität Berlin	DiplIng.	Civil Electrical
3.	Technische Universität Carolo- Wilhelmina zu Braunschweig	DiplIng.	Civil Electrical
4.	Technische Universität Darmstadt	DiplIng.	Civil Electrical Mechanical
5.	Technische Universität	DiplIng.	Civil Electrical

**GERMANY** 

München

	,	THE SCHEDULE —	continued	
	6.	Universität Stuttgart	DiplIng.	Civil Electrical Mechanical
THE NETHERLANDS	1.	Technische Universiteit Delft	Ingenier (Ir)	Civil Electrical Mechanical
	2.	Technische Universiteit Eindhoven	Ingenier (Ir)	Electrical Mechanical
	3.	Universiteit Twente	Ingenier (Ir)	Electrical Mechanical
SWEDEN	1.	Chalmers University of Technology	Civilingenjor	Civil & Structural Electrical Mechanical
	2.	The Royal Institute of Technology	Civilingenjor	Civil & Structural Electrical Mechanical
	3.	Lund Institute of Technology	Civilingenjor	Civil & Structural Electrical Mechanical
SWITZERLAND	1.	Eidgenössische Technische Hochschule Zürich/Swiss Federal Institute of Technology Zurich	Dipl. Ing.	Electrical & Electronic Mechanical
	2.	École Polytechnique Fédérale de Lausanne/Swiss Federal Institute of Technology Lausanne	Dipl. Ing.	Civil Electrical Mechanical

# PART IV

# **DIVISION I**

Degrees from engineering degree programmes which are conducted within the country or region in the first column and accredited by the accrediting organisation in the second column —

First column	Second column	Third column
Country/Region	Accrediting Organisation	Date
AUSTRALIA	Engineers Australia	1st January 1989
CANADA	The Canadian Engineering Accreditation Board of Engineers Canada	1st January 1989
FRANCE	Commission des Titres d'Ingénieur, France	1st January 1991
IRELAND	The Institution of Engineers of Ireland	1st January1989
JAPAN	Japan Accreditation Board for Engineering Education	1st January 2005
MALAYSIA	Board of Engineers Malaysia	1st January 2009
NEW ZEALAND	Institution of Professional Engineers New Zealand	1st January 1989
REPUBLIC OF KOREA	Accreditation Board for Engineering Education of Korea	1st January 2007
SINGAPORE	Engineering Accreditation Board of the Institution of Engineers, Singapore	1st January 2006
SOUTH AFRICA	Engineering Council of South Africa	1st January 1999
TAIWAN	Institute of Engineering Education Taiwan	1st January 2007

UNITED STATES OF AMERICA

The Engineering Accreditation 1st January 1989 Commission of the Accreditation Board for Engineering and Technology, Inc

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# **DIVISION II**

First column		Second column	Third column	Fourth column
Country/Region and Accrediting Organisation		University, College or Institution	Qualification	Branch of Engineering
AUSTRALIA	1.	University of	BE	Civil
Engineers Australia		Adelaide		Electrical & Electronic Mechanical
	2.	Curtin University of Technology	BE	Civil & Construction Electrical Mechanical
	3.	James Cook University of North Queensland	BE	Civil Electrical
	4.	University of Melbourne	BE	Civil Electrical Mechanical & Manufacturing
	5.	University of New South Wales	BE	Civil Electrical Mechanical
	6.	Monash University (Clayton Campus)	BE	Civil Electrical Mechanical

	THE SCHEDULE — continued			
	7.	University of Newcastle	BE	Civil Electrical Mechanical
	8.	University of Queensland	BE	Civil Electrical Mechanical
	9.	Queensland University of Technology (QUT)	BE	Civil Electrical Electrical and Computer Engineering Mechanical
	10.	Royal Melbourne Institute of Technology	BE	Civil Electrical Mechanical
	11.	University of Sydney	BE	Civil Electrical Mechanical
	12.	University of South Australia	BE	Civil Electrical Mechanical Mechanical (Manufacturing option)
	13.	University of Western Australia	BE	Civil Electrical & Electronic Mechanical
	14.	University of Wollongong	BE	Civil Mechanical Electrical
CANADA The Canadian Engineering Accreditation Board of Engineers Canada	1.	University of Alberta	BSc(Eng)	Civil Electrical Mechanical

2.	University of British Columbia	BA Sc(Eng)	Civil Electrical Mechanical
3.	University of Calgary	BSc(Eng)	Civil Electrical Mechanical
4.	Carleton University	BE	Civil Electrical Mechanical
5.	Concordia University	BE	Civil Electrical Mechanical
6.	Dalhousie University (formerly Technical University of Nova Scotia)	BE	Civil Electrical Mechanical
7.	École Polytechnique de Montréal	BSc A	Civil Electrical Mechanical
8.	Lakehead University	BE	Civil Electrical Mechanical
9.	Université Laval	BSc A	Civil Electrical Mechanical
10.	McGill University	BE	Civil Electrical Mechanical
11.	McMaster University	BE	Civil Electrical Mechanical
12.	University of Manitoba	BSc	Civil Electrical Mechanical

13.	Memorial University of Newfoundland	BE	Civil Electrical Mechanical
14.	University of New Brunswick	BSc E	Civil Electrical Mechanical
15.	University of Ottawa	BA Sc	Civil Electrical Mechanical
16.	Queen's University of Kingston	BSc(Eng)	Civil Electrical Mechanical
17.	Royal Military College of Canada Kingston, Ontario	BE	Civil Electrical Mechanical
18.	University of Saskatchewan	BE	Civil Electrical Mechanical
19.	University of Sherbrooke	BSc A	Civil Electrical Mechanical
20.	University of Toronto	BA Sc	Civil Electrical Mechanical
21.	University of Victoria	BEng	Electrical Mechanical
22.	University of Waterloo	BA Sc	Civil Electrical Mechanical
23.	University of Western Ontario	BE Sc	Civil Electrical Mechanical
24.	University of Windsor	BA Sc	Civil Electrical Mechanical

	TI	HE SCHEDULE — con	ıtinued	
IRELAND The Institution of Engineers of Ireland	1.	Dublin University	BA I	Civil Electrical Mechanical
JAPAN	1.	Chiba University	BE	Electrical
Japan Accreditation Board for Engineering Education				Mechanical
	2.	Hiroshima University	BE	Electrical Mechanical
	3.	Hokkaido University	BE	Civil Electrical Mechanical
	4.	Kobe University	BE	Civil Electrical Mechanical
	5.	Kyoto University	BE	Civil Electrical Mechanical
	6.	Kyushu University	BE	Civil Electrical Mechanical
	7.	Nagoya University	BE	Civil Electrical Mechanical
	8.	Osaka University	BE	Civil Electrical Mechanical
	9.	Tohoku University	BE	Civil Electrical Mechanical
	10.	Tokyo University	BE	Civil Electrical Mechanical

	T	HE SCHEDULE —	continued		
	11.	Tokyo Institute of Technology	BE	Civil Electrical Mechanical	
	12.	Yokohama National University	BE	Civil Electrical Mechanical	
MALAYSIA	1.	University of	BE	Civil	
Board of Engineers Malaysia		Malaya		Electrical Mechanical	
NEW ZEALAND	1.	University of	BE	Civil	
Institution of Professional Engineers New Zealand		Auckland		Electrical Mechanical	
	2.	University of Canterbury	BE	Civil Electrical Electronic Mechanical	&
REPUBLIC OF KOREA	1.	Seoul National University	BSc (Engineering)	Civil	
Accreditation Board for Engineering Education of Korea					
	2.	Hanyang University	BSc (Engineering)	Civil	
	3.	Yonsei University	BSc (Engineering)	Civil	
	4.	Korea University	BSc (Engineering)	Civil	
	5.	Kyungpook National University	BSc (Engineering)	Civil	

6. Pusan National University

BEng Civil

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### **DIVISION III**

Degrees which are accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology, Inc, United States of America.

### **DIVISION IV**

Degrees which are accredited by the Commission des Titres d'Ingenieur, France.

### PART V

### **DIVISION I**

Degrees from engineering degree programmes which are conducted within the country or region in the first column and accredited by the accrediting organisation in the second column —

First column	Second column	Third column
Country/Region	Accrediting Organisation	Date
HONG KONG	Hong Kong Institution of Engineers	1st January 1995
UNITED KINGDOM	Engineering Council UK	1st January 1989

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# **DIVISION II**

First column		Second column	Third column	Fourth column
Country/Region and Accrediting Organisation		University, College or Institution	Qualification	Branch of Engineering
HONG KONG Special Administrative Region, People's Republic of China Hong Kong	1.	University of Hong Kong	BEng (Hons) or MEng	Civil Electrical & Electronic Mechanical

		THE SCHEDULE —	continued	
Institution of Engineers				
UNITED KINGDOM Engineering Council UK	1.	University of Aberdeen	BEng (Hons) or MEng	Civil Electrical & Electronic Mechanical
	2.	University of Aston in Birmingham	BEng (Hons) or MEng	Civil Electrical & Electronic Mechanical
	3.	University of Bath	BEng (Hons) or MEng	Civil Electrical & Electronic Mechanical
	4.	Queen's University of Belfast	BEng (Hons) or MEng	Civil Electrical & Electronic Mechanical
	5.	University of Birmingham	BEng (Hons) or MEng	Civil Electronic & Electrical Mechanical
	6.	University of Bradford	BEng (Hons) or MEng	Civil & Structural Electrical & Electronic Mechanical
	7.	University of Bristol	BEng (Hons) or MEng	Civil Electrical & Electronic Mechanical
	8.	Brunel University	BEng (Hons) or MEng	Electrical & Electronic Mechanical
	9.	University of Cambridge	BA/MEng	Electrical & Information

			Sciences Engineering
			Tripos (Part IB & Part II options in Civil & Structural Engineering)
			Engineering Tripos Parts IA, IB & II)
10.	City University	BEng (Hons) or MEng	Civil Mechanical Electrical & Electronic
11.	Coventry University	BEng (First Class Hons) or MEng	Civil Electrical & Electronic Mechanical
12.	University of Durham	BEng (Hons) or MEng	Civil Electrical Mechanical
13.	University of Dundee	BEng (Hons) or MEng	Civil Electrical & Electronic Mechanical
14.	University of Edinburgh	BEng (Hons) or MEng	Civil Electronics & Electrical Mechanical
15.	University of Exeter	BEng (Hons) or MEng	Civil Mechanical
16.	University of Glasgow	BEng (Hons) or MEng	Civil Electronics & Electrical Mechanical

17.	University of Greenwich	BEng (First Class Hons) or MEng	Civil Electrical & Electronic Mechanical
18.	Heriot-Watt University	BEng (Hons) or MEng	Civil Electrical & Electronic Mechanical
19.	University of Hertfordshire	BEng (First Class Hons) or MEng	Civil Electrical & Electronic Mechanical
20.	University of Hull	BEng (Hons) or MEng	Mechanical
21.	University of Lancaster	BEng (Hons) or MEng	Mechanical
22.	University of Leeds	BEng (Hons) or MEng	Civil Electrical & Electronic Mechanical
23.	University of Leicester	BEng (Hons) or MEng	Electrical & Electronic Mechanical
24.	University of Liverpool	BEng (Hons) or MEng	Civil Electrical Electrical & Electronic Mechanical
25.	Liverpool John Moores University	BEng (First Class Hons) or MEng	Civil Mechanical
26.	University of London Imperial College	BEng (Hons) or MEng	Civil Electrical & Electronic Mechanical

27.	University of London King's College	BEng (Hons) or MEng	Electronic & Electrical Mechanical
28.	University of London — Queen Mary and Westfield College	BEng (Hons) or MEng	Civil Mechanical
29.	University of London — University College	BEng (Hons) or MEng	Civil Electronic & Electrical Mechanical
30.	Loughborough University of Technology	BEng (Hons) or MEng	Civil Mechanical Electronic & Electrical
31.	University of Manchester	BEng (Hons) or MEng	Civil Electronic & Electrical Mechanical
32.	University of Newcastle-Upon- Tyne	BEng (Hons) or MEng	Civil Electronic & Electrical Mechanical
33.	University of Northumbria at Newcastle	BEng (First Class Hons) or MEng	Electrical & Electronic Mechanical
34.	University of Nottingham	BEng (Hons) or MEng	Civil Electrical & Electronic Mechanical
35.	University of Oxford	BA (Hons) or MEng	Engineering Science (Civil) Engineering Science (Electrical) Engineering Science (Mechanical)

36.	University of Portsmouth	BEng (First Class Hons) or MEng	Civil Electrical & Electronic Mechanical
37.	University of Plymouth	BEng (First Class Hons) or MEng	Civil Electrical & Electronic Mechanical
38.	Reading University	BEng (Hons) or MEng	Mechanical
39.	University of Salford	BEng (Hons) or MEng	Civil Electronic & Electrical Mechanical
40.	University of Sheffield	BEng (Hons) or MEng	Civil & Structural Electrical Mechanical
41.	Sheffield Hallam University	BEng (First Class Hons) or MEng	Civil
42.	University of Southampton	BEng (Hons) or MEng	Civil Electrical Mechanical
43.	South Bank University	BEng (First Class Hons) or MEng	Civil Electrical & Electronic Mechanical
44.	University of Strathclyde	BEng (Hons) or MEng	Civil Electrical & Electronic Mechanical
45.	University of Surrey	BEng (Hons) or MEng	Civil Electronic & Electrical Mechanical

	THE SCHEDULE —	- continued	
46.	University of Sussex	BEng (Hons) or MEng	Electrical & Electronic Mechanical
47.	University of Wales College of Cardiff	BEng (Hons) or MEng	Civil Electrical & Electronic Mechanical
48.	University of Wales Swansea	BEng (Hons) or MEng	Civil Electronic & Electrical Mechanical
49.	University of Westminster	BEng (First Class Hons) or MEng	Civil Mechanical.

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Made this 28th day of December 2009.

# BENNY LIM

Permanent Secretary, Ministry of National Development, Singapore.

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