Japanese Professional Engineer and The Institution of Professional Engineers, Japan

July. 2018



Brief History of P.E.Jp and IPEJ

- Jun.1951 "*Gijutsushi-kai*" was founded in order to help establishment of consulting engineers' framework in Japan.
- May 1953 The English name "Japan Consulting Engineer Association (JCEA)", for "*Gijutsushi-kai*" was adopted.
- May 1957 The PE Act "Gijutsushi Act" (Act No.124/1957) was enacted.
- Jul. 1958 The first examination of PE was administered.
- Mar.1959 The JCEA was authorized under the PE Act.
- Apr.1983 The PE Act was revised to become the PE Act of 1983 (Act No. 25/1983).
- Feb. 1984 The JCEA was designated as the official national organization with the authority to provide administrative functions for the PE examination and accept registrations for P.E.Jp certification.
- Apr. 2000 The PE Act was partially amended to become the PE Act of 2000 (Act No. 48/2000).
- Nov. 2000 The APEC Engineer assessment and registration was formed.
- Jan. 2001 The JCEA was renamed to "The Institution of Professional Engineers, Japan (IPEJ)".
- Apr. 2006 APEC Engineer assessment and registration was expanded to include all Technical Disciplines and Optional Subjects of P.E.Jp.
- May 2007 IPEJ's new logo mark was established.
- Apr. 2011 IPEJ is officially recognized as a Public Interest Incorporated Institution..
- Jul. 2011 Eight IPEJ branches merged to form the new IPEJ's Regional Headquarters.
- Apr. 2012 IPEJ's prefectural branches were organized.



Administration of Japanese P.E.Jp System

- The Ministry of Education, Culture, Sports, Science and Technology (MEXT), is given jurisdiction over the Professional Engineering organizational structure in accordance with the PE Act (Act No.25/1983).
- the PE Act (Act No.25/1983).
 The Institution of Professional Engineers, Japan (IPEJ), an official Public Interest Incorporated Institution, is able to conduct exanimation and accept registrations for the P.E.Jp certification, as a nationally recognized organization designated by the Japanese







Government.

Professional Engineer, Japan (P.E.Jp)

- Professional Engineer Japan (abbreviated as "P.E.Jp") is the national certification for engineers recognized by the Professional Engineer Act (hereinafter called "PE Act") in Japan.
- P.E.Jp is defined as an engineer who is engaged in the professional practice of providing services for science and technology fields, involved in planning, research, design, analysis, testing, evaluation, and training. Such services require application of extensive scientific and technical expertise.



21 Disciplines of P.E.Jp

- Mechanical Engineering
- Marine & Ocean
- Aerospace
- Electrical & Electronics Eng.
- Chemistry
- Fiber & Textiles
- Metals
- Mining
- Civil Engineering
- Water Supply & Sewerage
- Environmental Engineering

- Agriculture
- Forest
- Fisheries
- Industrial Engineering
- Information Engineering
- Applied Science
- Biotechnology & Bioengineering
- Environment
- Nuclear & Radiation
- Engineering Management



Distribution of Registration in Technical Disciplines





Employment Sectors of P.E. Jp





Range of PE's Activities (Example)

Planning

-Factory Building -Regional Development

Research

-Advanced Material Application -New Products -Pollution Control

Design

-Facilities

- -Advanced Production Lines
- -Advanced Electric Circuits
- -Regional Development

Analysis/Evaluation

- -Market Research
- -Feasibility Study
- -Environmental Assessment
- -Management Analysis
- -Project Evaluation

Testing

-Prototype Models

- -Facilities
- -Advanced Circuits
- -Potential of Earthquake-proof, Fire-proof

Consultation

-New Product Development

- -Production and Assembly Line Improvement
- -Construction management









Obligations of P.E.Jp in accordance with PE Act

Prohibition of Acts to Damage Credibility

No PE nor associated PE shall take action which harms the credibility and/or dishonors the reputation of other PEs and/or associated PEs. (Article 44, PE Act)

Obligation to Observe Confidentiality

No PE nor associate PE shall reveal or misappropriate the confidential information without justifiable reasons that have been caught in one's own business. This obligation shall remain after losing their certification of PE or associated PE. (Article 45, PE Act)

• Responsibility for Public Interest

No PE nor associated PE shall engage in operations which harm the public interests. Such interests include public safety, environmental preservation, etc., during normal business operations. (Article 45-2, PE Act)

• Obligation when Indicating Title of P.E.Jp

When PEs use the title P.E.Jp in their business, they are also required to clearly indicate their registered technical discipline. No PE shall indicate any discipline(s) which they have not registered under. (Article 46, PE Act)

• Responsibility for Developing the Professional Competence

PEs shall, at all times, endeavor to continually increase their knowledge and develop their skills with regard to their profession. (Article 47-2, PE Act)



Code of Ethics for Professional Engineers

The Institution of Professional Engineers, Japan (IPEJ) (Adopted: March, 1961) (Revised: March, 1999) (Revised: March, 2011)

Preamble

As professional engineers, we fully recognize that application of scientific technology brings about critical impacts to society and environment. Based on the recognition we contribute to the achievement of sustainable society through practicing our profession.

So as to fulfill our professional missions, we will continuously improve our competence and fairly and faithfully conduct ourselves with a global outlook while observing this code of ethics.

Canons

In practicing our duties as professional engineers, we will:

- 1. Consider to hold paramount the safety, health and welfare of the public.
- 2. Endeavor to protect sustainability of the society for future generations through taking measures including those for conservation of the global environment.
- 3. Undertake tasks in areas of competence and be not engaged in tasks without confidence.
- 4. Make reports, explanations or statements using objective information based on facts.
- 5. Faithfully perform our entrusted tasks on the basis of impartial analyses and judgment.
- 6. Not reveal confidential information obtained in our professional activities nor divert it to another use without justifiable reason.
- 7. Retain dignities and avoid acts to lose our confidence such as deceptive conducts and accepting or giving compensation other than fair remuneration.
- 8. Endeavor to trust in, respect the position of and cooperate with each other.
- 9. Observe laws and regulations and respect the cultural values of the society in which we carry out our assignments.
- 10. Endeavor to improve our professional competence and knowledge in social affairs related to engineering and to nurture human resources.



Declaration of Profession

We, P.E.Jp, as the professionals endorsed by the national qualification, do individually observe the principles of conduct (mentioned bellow). And also, we, being members of the Institution of Professional Engineers Japan, mutually cooperate to maintain and upgrade our own competency and to follow the autonomous rule set by ourselves. We declare thus to gain the trust of the society and to contribute to sound industrial development and to the public welfare.

Principles of conduct

 Responsibility to maintaining professional competence: Professional Engineers shall maintain knowledge and ability required as high-grade experts of technology and to follow the progress of technology.

2. Responsibility to the client:

Professional Engineers shall faithfully perform services to fulfill the client's requirements on quality and others, observing confidentiality obligation.

3. Responsibility to the society:

Professional Engineers shall take into consideration impacts on society and environment caused by their works and cope with them appropriately not to harm the public interest such as safety and welfare.

January 1, 2007



Continuing Professional Development (CPD)

Requirement of CPD

The amendment to the PE Act was promulgated on April 26, 2000.

The PE Act with the latest revisions clearly stipulates that every professional engineer shall have sufficient knowledge about professional ethics and shall continue his/her professional development, after acquiring the P.E.Jp qualification. This is one of his/her obligations, which is to improve his/her competence of the professional skills.

In response to the amended PE Act, IPEJ started implementation of CPD programs and defined the purpose of CPD as follows:

Every P.E.Jp shall continue his/her professional development with emphasis on the following points:

- Awareness of engineering ethics
- Contribution to the advancement of science and technology
- Adaptation to changes in social environments
- Improvement in the ability to make better decisions as professional engineers

Expected CPD hours

It is strongly recommended that every certified P.E.Jp engineer completes at least 50 hours of CPD programs annually, and 150 hours within three years (for APEC engineers, the completion of 250 hours within five years is required). CPD hours are calculated by multiplying the actual hours spent for CPD program with a weight factor specified for each CPD type.

Types of CPD programs for Professional Engineers:

Many types of CPD programs are available, and every P.E.Jp should voluntarily choose the programs most suitable for his/her professional development and complete these chosen programs. However, in the case of choosing a CPD program, it is desirable for each P.E.Jp to select such CPD programs, which are recognized by any third party organizations.











Number of IPEJ Members





Activities of IPEJ

Enlightenment of PEs' and Engineers' Ethics

Advancement of PE's Professional Competencies

Development and Promotion of PE's Business Field

International Relations and Foreign Corporations

Engineers' Mobility

Promotion of the Professional Engineer System

Fostering Human Resources through Engineering

Social Contribution through science and technologies

PE Exam and Registration for the P.E.Jp

Public Relations

And other activities to achieve IPEJ objectives

















Organization to Promote CPD





CPD Guideline

- Issued by Professional Development Committee of IPEJ
- Available from IPEJ website

(Japanese version only)

 3rd Edition was issued in April, 2017





How to keep your CPD record





CPD Certified Membership

IPEJ certifies our member's continuing professional development to clarify as the IPEJ CPD member for the period of 3 years and renewal application for the clarification is necessary for extension.





Seminars











Some previous lectures can be seen on IPEJ's website (Screen: IPEJ National Convention)





Fostering Human Resources with Engineering Background

- Seminars and exchange opportunities for Engineers-in-Training
- PE system for college students from Washington Accord accredited programs
- Career development seminars for Engineers-in-Training
- Career development seminars for female college students in engineering courses / new female employees in engineering professions (Photo)





Development and Promotion of PE's Business

Creation and development of new business models for PEs
Business matching services between potential clients and member PEs



Guide book for consulting engineers

Promotion of Social Contribution

- •Technical assistance for national administrative organs and local governments in policy implementations
- •Support for scientific and technological activities
- •Approach in reducing natural disasters risks.



Brochure for disaster management consultations



Publications





What is PE? (For children)



International Relations





International Relations



Visited CAST, May 2011 July, Beijing, China



IEA2016 in Kuala Lumpur, Malaysia



Japan-Korea PE Symposium 2016 in Tochigi, Japan



FEIAP 2008GA in Hanoi, Vietnam



APEC Engineer, IntPE-Jp



http://www.ieagreements.org/



JABEE, JSEE and IPEJ

MEMORANDUM OF UNDERSTANDING among

Japan Accreditation Board for Engineering Education (JABEE) and

The Institute of Professional Engineers, Japan (IPEJ) and Japanese Society for Engineering Education (JSEE)

Whereas:

- (A) JABEE acknowledges its commitment to enhance the quality of engineering education and has experience in engineering education accreditation;
- (B) IPEJ acknowledges its commitment to promote engineers mobility and has experience in professional engineers' international register;
- (C) JSEE acknowledges its commitment to actively develop creative engineers and has experience in research and development of engineering education,

Sharing an interest in promoting the mobility worldwide in particular in Southeast and East Asia of engineering students and teaching staff as well as professional engineers, JABEE, IPEJ and JSEE agree to collaborate in the following items:

- Share information amongst the three parties in setting up periodical meetings of the representatives of the three parties. The chair is to be rotated among the three parties;
- 2. Set up joint strategies;
- 3. Exchange information of the three parties prior to meetings held in foreign countries;
- 4. Make effort to get supports from the Governments in line with the strategy referred to in 2);
- Implement joint researches and, wherever possible, projects assisting developing countries, for which joint efforts shall be made for fund raising from ODA and others;
- 6. Organize, wherever possible, joint workshops, seminars and/or conferences;
- 7. Any other items, which the three parties consider as necessary.

This Memorandum of Understanding is valid for four years from the day it is signed by all three parties. The extension for other four years shall be made based on the confirmation in writing of all three parties. The Memorandum of Understanding shall be terminated by any one of parties with a three-month advance notice in writing to the other parties.

The Memorandum of Understanding shall be reviewed at any time any one of parties wishes to make substantial changes to the terms contained herein.

Signed on Signed on Signed on 22 May 2010 201 mian Katsue KOJIMA Tsutomu KIMURA Osamu TAKAHASHI President President President. The Institute of Professional Japan Accreditation Board for Japanese Society for Engineering Engineering Education Engineers, Japan Education



Engineers Australia (EA) and IPEJ





AGREEMENT OF ORGANISATIONAL CO-OPERATION

BETWEEN

ENGINEERS AUSTRALIA

AND

THE INSTITUTION OF PROFESSIONAL ENGINEERS, JAPAN

September 2015

