



Indonesian Accreditation Board for Engineering Education (IABEE)

At a glance

INTERNATIONAL CONFERENCE

**OUTCOME-BASED
INTERNAL QUALITY ASSURANCE (IQA) SYSTEM**

8-9 August 2018, Pekanbaru-Riau, Indonesia



Higher Education Act No. 12/2012

- ❑ Shifting the role of National Accreditation Agency of Higher Education (BAN-PT) from Program accreditation to HE Institution accreditation.
- ❑ Independent accreditation bodies (LAM-PS) shall be established for each education field, by community or government, for conducting study program accreditation.



Current Accreditation of Engineering Programs by BAN PT

- ❑ 2,500 Bachelor engineering programs
- ❑ 222 (9 %) engineering programs ranked A
 - 139 programs from 24 public universities
 - 83 programs from 19 private universities
- ❑ 5 years accreditation validity



IABEE



- ☐ **An accreditation agency** for engineering higher education program
- ☐ IABEE is **not** a LAM-PS. IABEE accreditation is **voluntary**, unlike the mandatory accreditation by LAM-PS
- ☐ A means to improve **quality** of engineering higher education and **accountability** to the society by implementing **OBE**
- ☐ Currently in the process of applying for the provisional status of the ***Washington Accord*** (WA) in 2019
- ☐ WA is a multilateral agreement between the institutions responsible for engineering higher education accreditation that works together to help the mobility of engineering practitioners



IABEE ...



- ☐ WA requires that the accrediting body be independent of the government (NGO)
- ☐ Therefore, IABEE is established as an autonomous department within the Institution of Engineers Indonesia (PII)
- ☐ IABEE was initiated by DGHE with the support from JICA
- ☐ Declared in November 19, 2015; inaugurated in March 13, 2018



Importance of IABEE Accreditation

- ☐ **For students and graduates**

Gain education basics that meet global standards, in line with science and technology development, support career and professional success, and wider employment opportunities.

- ☐ **For programs and education institutions**

By voluntary nature, programs demonstrate a commitment to provide quality education and global recognition.

- ☐ **For industry, government and stakeholders**

Opportunity to provide feedback on employment needs, facilitate professional mobility, more accountable to the community.



JICA Project for IABEE

ODA (Official Development Assistance)

- ❑ The Indonesian Government requested the Japanese Government to assist Indonesia to establish an international level accreditation body for engineering education in 2013
- ❑ Signing cooperation between DGHE with JICA in 2014
- ❑ JICA (Japan International Cooperation Agency) made a contract with IABEE to prepare and implement a 5-year technical cooperation project (2014-2019)



Scope of Project

- ☐ Development of accreditation criteria
- ☐ Training IABEE key personnels in different countries (evaluator trainers training)
- ☐ Development of program evaluation procedure and instruments
- ☐ Training evaluators in Indonesia (250 evaluators)
- ☐ Socialization to education institutions
- ☐ Pilot accreditations
- ☐ 25 programs accreditation by 2019
- ☐ Provisional status in WA in 2019



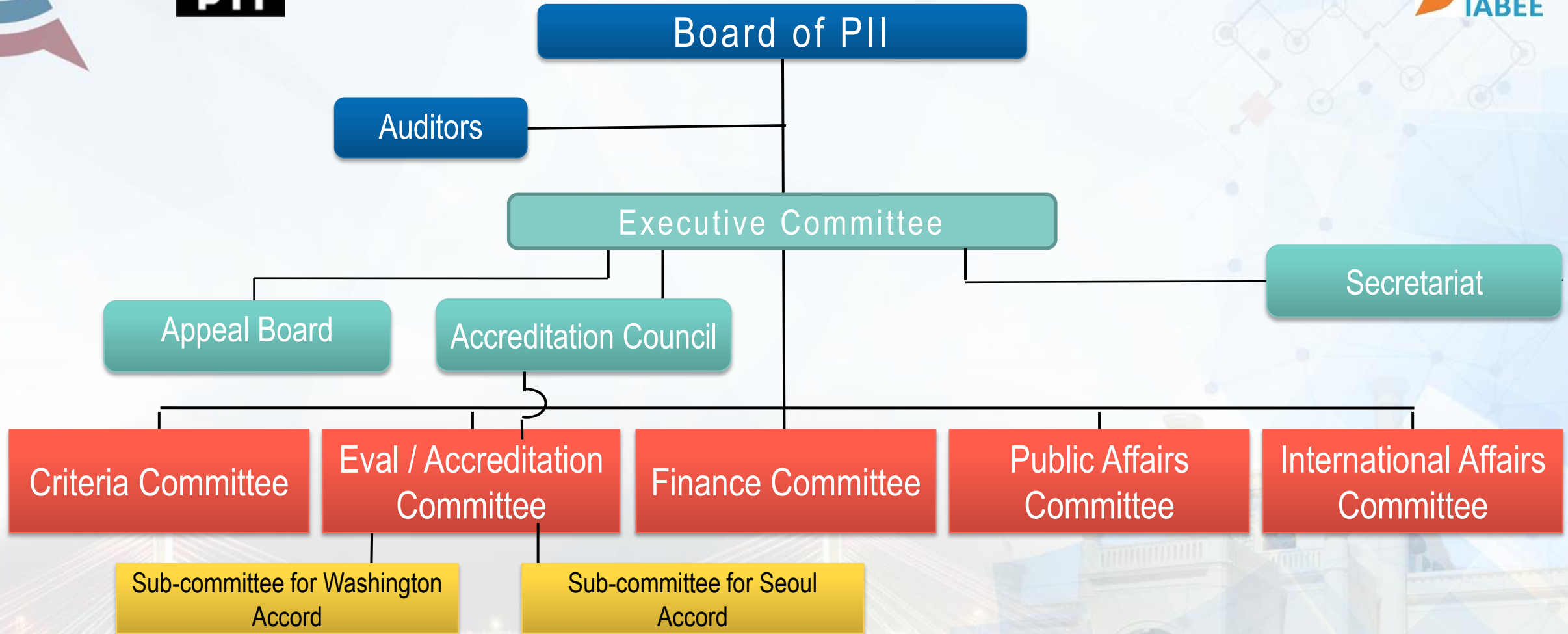
Project Overall Goals

3-5 years after project completion

- ☐ Engineering education in Indonesia will be shifted from input-based teaching to outcome-based learning
- ☐ 10% of 2,500 S1 programs will be accredited at international level
- ☐ Signatory status of the Washington Accord



IABEE Organization





IABEE Accreditation Principles

- ❑ Voluntary, ***internally driven*** (program attitude towards quality); and therefore accreditation is not the purpose, rather a means for improvement
- ❑ Accreditation is based on ***Learning Outcomes***, which is self-determined by the program according to the vision, identity and uniqueness, resources, and user needs; and therefore accreditation is not to rank nor to compare among programs
- ❑ International ***equivalency*** (*IEA graduate attributes*)
- ❑ **Third-party** evaluation (independent, autonomous, NGO)
- ❑ **Accountable** to society (***outcome-based***, answering the need of stakeholders)



Engineering Program Accreditation

BAN PT

- Compulsory
- Input-based evaluation
- One size fits all criteria
- Ranking system
- National level

IABEE

- Voluntary
- Outcome-based
- Field specific criteria
- No ranking
- International level
- Continual improvement



IABEE Accreditation Criteria

To be accredited, a program shall meet

☐ Accreditation Criteria

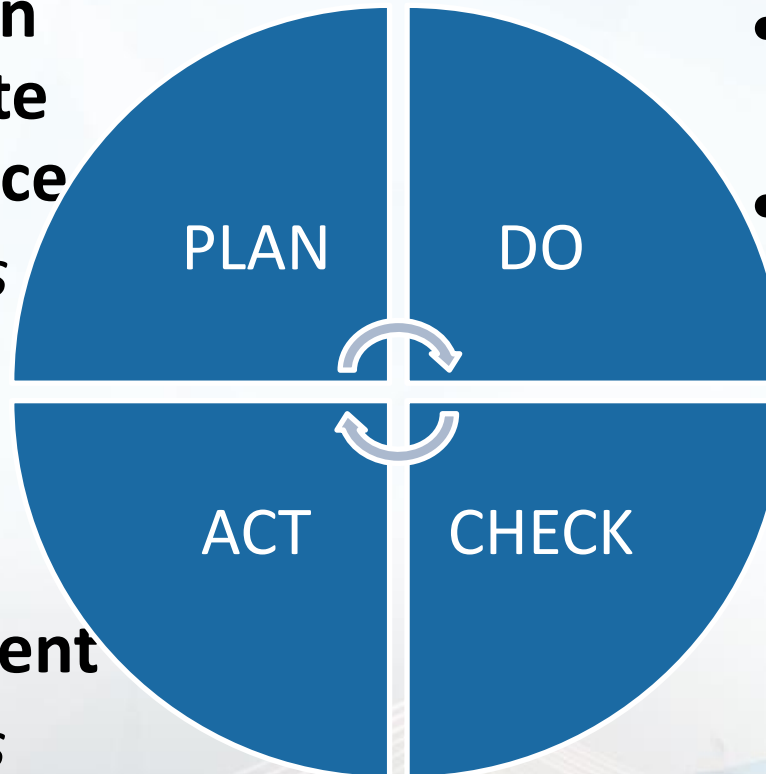
- Common Criteria
- Criteria Guide (13/19 Chapters of PII)
- Discipline Criteria
- Category Criteria (S1, S2 and S3)

☐ Rule and Procedure of Evaluation and Accreditation



IABEE Common Criteria

- **Orientation of Graduate Competence**
- *3 elements*



- **Education Methods**
- *5 elements*

- **Education Improvement**
- *2 elements*

- **Achievement of Learning Outcomes**
- *2 elements*



Discipline Criteria

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Kriteria Bidang Ilmu « IABEE – I

← → ↻ 🏠 <https://iabee.or.id/akreditasi/kriteria-akreditasi-bidang-teknik/kriteria-b> 🔍 Search

Disicpline Criteria for Industrial and Similarly Named Engineering Programs

Leading society :

- Badan Kerja Sama Penyelenggara Pendidikan Tinggi Teknik Industri Indonesia (BKSTI)
- Badan Kejuruan Teknik Industri, Persatuan Insinyur Indonesia (BKTII, PII)

Curriculum

The program shall prepare graduates to be proficient in design, improve, and implement integrated systems that include people, materials, equipment, energy and information. To meet these needs, the curriculum must provide adequate knowledge about the application of mathematics, statistics and probabilistic theory as well as analysis and design engineering as well as knowledge with regard to social sciences. The education program should ensure the provision of an integrated system design experiences to students. The curriculum must include in depth instruction to accomplish the integration of systems using appropriate analytical, computational and experimental practices.

Faculty Members

Faculty members must understand the professional practice and maintain currency in their respective professional areas. Faculty members must be responsible and able to make the definition, evaluation, implementation and improvement on the achievement of learning outcomes in the framework of an continuous improvement of the study program.

Discipline Criteria for Materials, (Metallurgical) Engineering and Similarly Names

Leading society :

- BK Material PII

These program criteria apply to engineering programs including "materials," "metallurgical," "ceramics," "glass", "polymer," "biomaterials," and similar modifiers in their titles.

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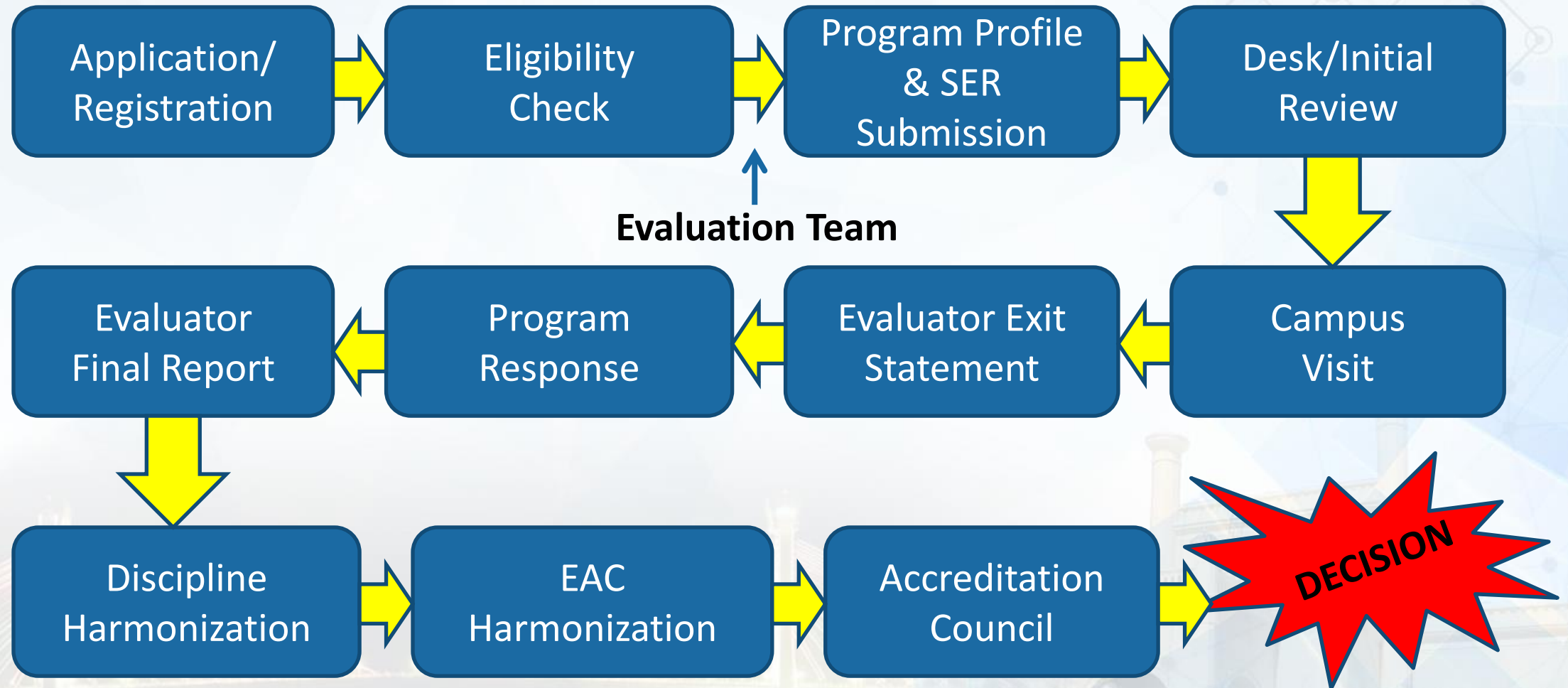


Accreditation Category

- ☐ **General Accreditation**, intended for programs that have implemented outcome-based education system and at the time of the evaluation process has produced graduates with the system
 - *A-accredited program; min B-accredited institution*
- ☐ **Provisional Accreditation**, intended for programs that have implemented outcome-based education system and at least the first year students have completed learning with the system.
 - *Min B-accredited program and institution*

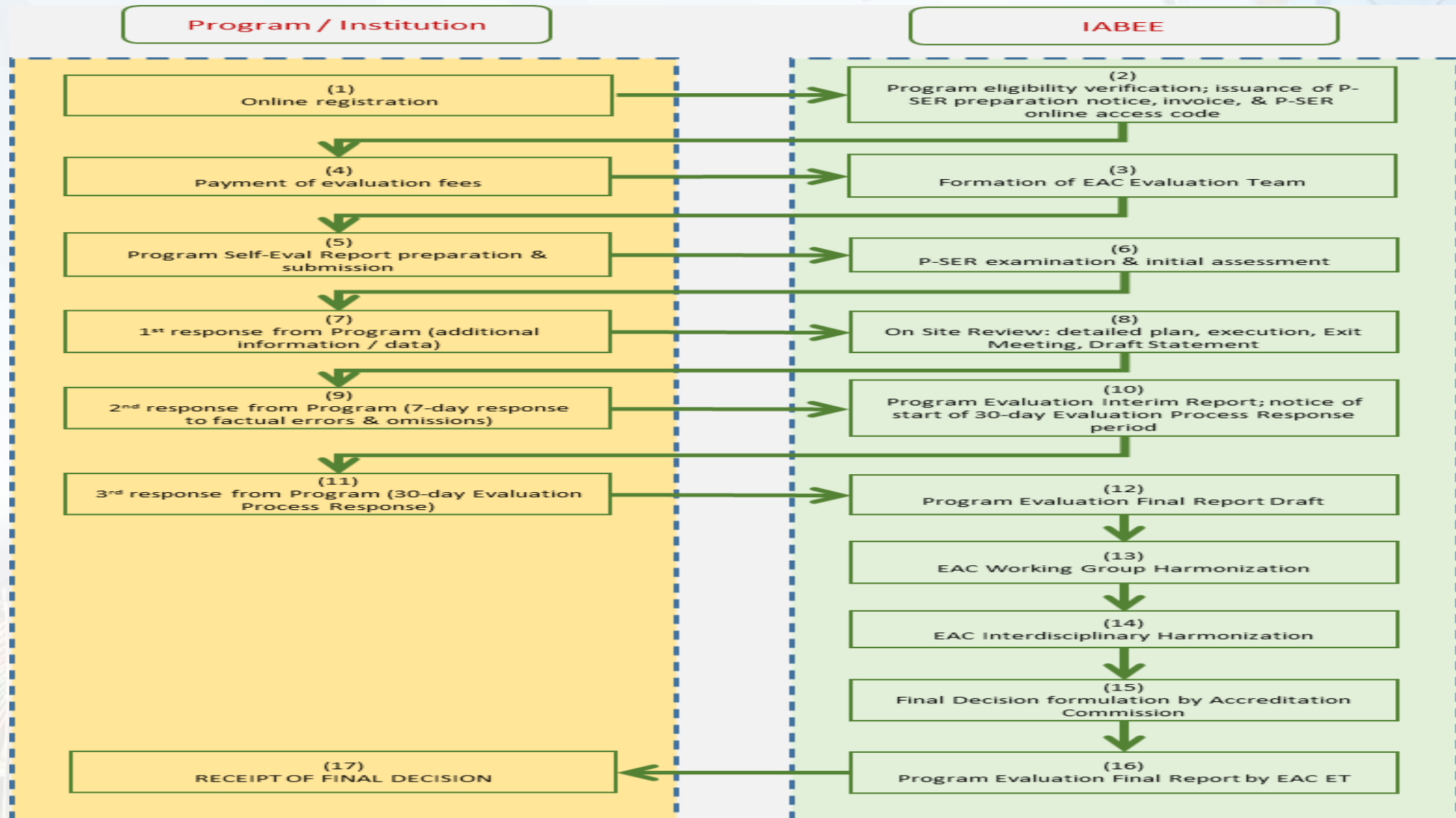


Accreditation Procedure





Online Evaluation System





Evaluation Team

- ☐ Consists of 3 evaluators, typically
 - 2 academics
 - 1 industry/practitioner
 - (optional) observers: evaluator-in-training, interested parties
- ☐ Evaluator competence
- ☐ Ethics (evaluator code of conduct)
- ☐ Conflict of interest



General Accreditation Decision

- ☐ Accredited for a 5-year period
- ☐ Accredited for a 3-year period, followed by interim evaluation without site visit
- ☐ Accredited for a 3-year period, followed by interim evaluation with site visits
- ☐ Not accredited



IABEE Key Personnel International Training

- ☐ 44 experts at 3 training at JABEE
- ☐ 14 experts at 6 training at ABET
- ☐ 5 experts to CAST's on-site evaluation
- ☐ 3 experts to EA's on-site evaluation
- ☐ Observer at 4 pilot accreditations with JABEE

- ☐ *More than 20 socialization seminars on WA, IABEE, and OBE to universities*



Candidate Evaluator Training





Progress of IABEE

Year	Activity
2013	Establish Steering and Criteria Committees
2014	<ul style="list-style-type: none">• Develop Accreditation Criteria• Disseminate OBE, IABEE and WA to universities (> 20)
2015	<ul style="list-style-type: none">• Establish technical committees: EAC, International and Public Affairs, Finance, Accreditation Council• Conduct international training of key personnel (66)
2016	<ul style="list-style-type: none">• Develop Rule and Procedure of Accreditation• Develop Web and Online Evaluation System;• Conduct program accreditation (2 programs GA)• Develop Evaluator Training Materials



Progress of IABEE ...

Year	Activity
2017	<ul style="list-style-type: none">• Conduct program accreditation<ul style="list-style-type: none">➤ 3 programs GA➤ 6 programs PA• Conduct Evaluator Training (11 participants)
2018	<ul style="list-style-type: none">• Conduct program accreditation<ul style="list-style-type: none">➤ 27 programs GA➤ 22 programs PA• Conduct Evaluator Training (59 participants)• Prepare proposal for WA membership
2019	<ul style="list-style-type: none">• Apply for Provisional Membership of WA• Conduct accreditation and Evaluator Training



IABEE Accredited Programs

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IABEE - Digital Evaluation System X +

https://evaluation.iabee.or.id/#/accreditation-summary

Search

Institution ^	Study Program ^	Discipline ^	Status ^	Valid Until	Detail
Institut Pertanian Bogor	Teknik Mesin dan Biosistem	Agricultural Engineering	Accredited	2023	VIEW
Institut Teknologi Sepuluh Nopember	Teknik Kelautan	Ocean Engineering	Provisional	-	VIEW
Telkom University	Teknik Telekomunikasi	Electrical, Computer, Communications, Telecommunication Engineering	Provisional	-	VIEW
Telkom University	Teknik Industri	Industrial Engineering	Provisional	-	VIEW
Universitas Indonesia	Teknologi Bioproses	Chemical Engineering	Accredited	2024	VIEW
Universitas Indonesia	Teknik Kimia	Chemical Engineering	Accredited	2024	VIEW
Universitas Islam Indonesia	Teknik Sipil	Civil Engineering	Accredited	2023	VIEW
Universitas Islam Indonesia	Teknik Lingkungan	Environmental Engineering	Accredited	2023	VIEW
Universitas Surabaya	Teknik Industri	Industrial Engineering	Provisional	-	VIEW
Universitas Surabaya	Teknik Elektro	Electrical, Computer, Communications, Telecommunication Engineering	Provisional	-	VIEW

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IABEE Website


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IABEE

Tentang IABEE IABEE ku – login Daftar Prodi Terakreditasi Pelatihan Internal Berita

Site Search 

AKREDITASI ▾ **PELATIHAN DAN SOSIALISASI** ▾ **JEJARING** ▾ **MANFAAT** ▾

Akreditasi IABEE untuk menghasilkan lulusan yang memenuhi standar kualitas profesi

Persaingan global dan regional yang tak terelakkan dan keterbukaan masyarakat dunia mengharuskan kesiapan tenaga kerja Indonesia untuk bersaing secara global. Akreditasi IABEE memastikan program studi menyiapkan lulusan yang memenuhi standar dan kualifikasi internasional untuk memasuki dunia profesi melalui proses pendidikan yang mengacu pada hasil capaian pembelajaran. Akreditasi bukanlah tujuan, namun sarana untuk memastikan perbaikan kualitas pendidikan teknik terus menerus.

Indonesian Accreditation Board for Engineering Education (IABEE) ini didirikan oleh Persatuan Insinyur Indonesia (PII) yang merupakan satu-satunya organisasi profesi tempat berhimpun insinyur yang melaksanakan penyelenggaraan keinsinyuran di Indonesia. PII telah berdiri sejak tahun 1990. Di dalam Undang-Undang No 11 tahun 2014 tentang Keinsinyuran, Pasal 6 ayat (2) bahwa standar layanan insinyur ditetapkan oleh menteri yang membina keinsinyuran atas usul PII. Hal ini menunjukkan pentingnya peran PII dalam menjamin kualitas pelayanan. Lulusan program studi teknik dan teknologi diarahkan untuk bekerja di bidang penyelenggaraan

Visi dan Misi
Latar Belakang dan Sejarah
White paper
Hubungan Kelembagaan
Dasar Hukum
Kode Etik

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THANK YOU



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