



# PHILIPPINE TECHNOLOGICAL COUNCIL

“LEAPS 2020: Leadership, Excellence and Ethics in  
Engineering Education, Accreditation, Practice and  
Services”

# UPDATES ON ADMISSION OF ENGINEERS TO ENGINEERING PRACTICE IN THE PHILIPPINES

Presented during the

CONFERENCE OF THE ASEAN FEDERATION OF ENGINEERING ORGANIZATIONS

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Presented by

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# LEGAL BASES FOR PROFESSIONAL REGULATION

- **PROFESSIONAL REGULATION COMMISSION (PRC) – Regulates the practice of 44 professions (including 12 engineering professions shown below)**

- **12 LAWS ON THE PRACTICE OF ENGINEERING FOR REGULATED DISCIPLINES:**

1. Aerospace/Aeronautic Engineering

2. Agricultural & Biosystems Engineering

3. Chemical Engineering

4. Civil Engineering

5. Electrical Engineering

6. Electronic Engineering

7. Geodetic Engineering

8. Mechanical Engineering

9. Metallurgical Engineering

10. Mining Engineering

11. Naval Architect & Marine Engg

12. Sanitary Engineering



# NON-REGULATED DISCIPLINES

DISCIPLINE	REMARKS
Industrial Engineering	With Peer Certification System
Materials Science and Engineering	With Peer Certification System
Petroleum Engineering	

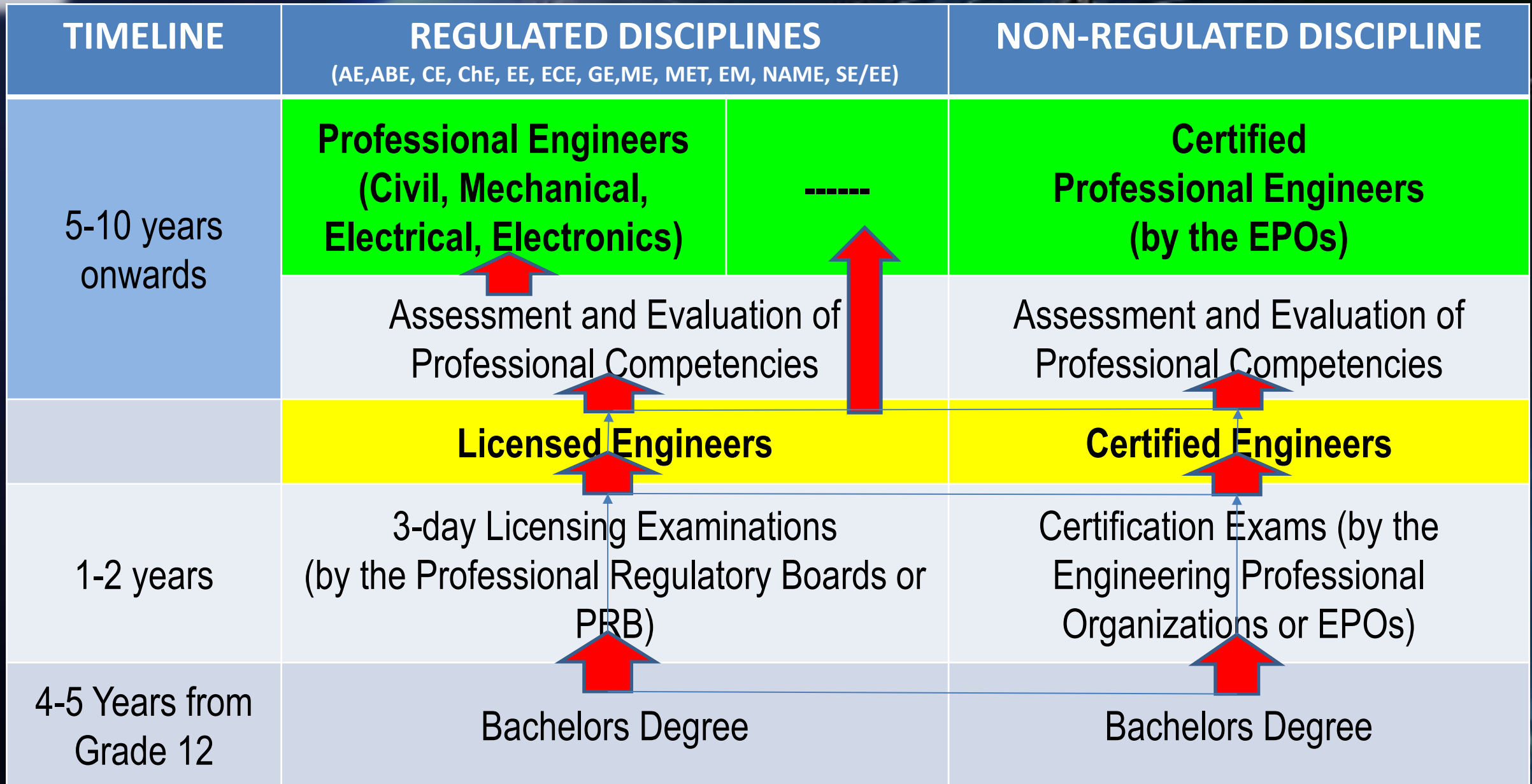


# TYPICAL SCOPE OF THE PROFESSIONAL LAWS

- **ENTRY REQUIREMENTS FOR PRACTICE**
  - Bachelors Degree approved by State Authority (CHED) – 4 to 5 years
  - Passing the Licensure Examinations (3 day examinations on engineering fundamentals)
  - Registration
  - Continuing Professional Development
- **SCOPE OF PRACTICE (PRACTICE AREAS) AND ENGINEERING ACTIVITIES** -  
List of engineering activities covered by the practice of the discipline within the practice area
  - Design
  - Construction and Construction Management
  - Operations and Maintenance
  - Sign and Seal
- **PROFESSIONAL REGULATORY BOARDS (3 Members) – Roles and Organization**
- **RECIPROCITY (mostly sponsored)**



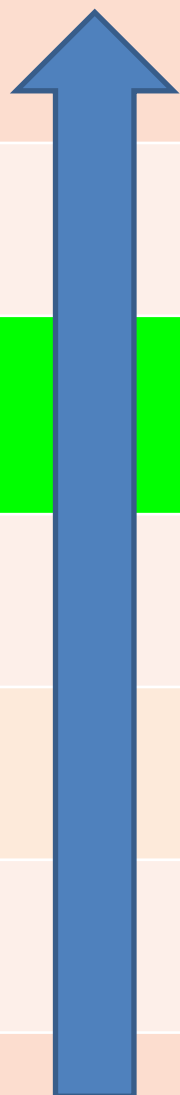
# ENTRY TO ENGINEERING PRACTICE





# CURRENT ENGINEERING EDUCATION SYSTEM

LEVEL	NO. OF YEARS
UNIVERSITY DOCTORATE DEGREE PROGRAM	3-4
UNIVERSITY MASTERS DEGREE PROGRAM	2
<b>UNIVERSITY BS DEGREE PROGRAMS</b>	<b>4-5</b>
SECONDARY-SENIOR HIGH GRADES 11-12	2
SECONDARY – JUNIOR HIGH SCHOOL GRADES 7-10	4
ELEMENTARY GRADES 1-6	6
PRE-SCHOOL/KNIDERGARTEN	1-2





# FOREIGN ENGINEERS ENTERING PRACTICE IN THE PHILIPPINES

- Normally sponsored - company doing projects in the Philippines
- Company submits names/credentials of engineers being proposed to the PRC
- PRC thru the PRB seeks comments from the appropriate engineering professional organization (EPO)
- PRC thru the PRB issues the permit – normally 3 to 6 months and renewable depending on the project – when there are no adverse comments/remarks from EPO.





**THANK YOU  
FOR YOUR KIND  
ATTENTION!**



# HISTORY OF PTC AND ITS ACCREDITATION WORKS

YEAR	MILESTONE
1979	Established in 1979, one of the founders of ASEAN Federation of Engineering Organizations
2003	Became APEC Authorized Member Agreement
2010	Established its Accreditation Body - Accreditation and Certification Board for Engineering & Technology
2012	Launched its Accreditation with EA & IEET as nominators, 4 programs from State University and a Private University
2013	Became Provisional Member of Washington Accord
2015	Visited by WA Review Panel (ABEEK, ABET, IEET)/(Visit by IES/IEM-2015/2017 )
2015	Mentor appointed by WA (EA)
2018	Initiated General Review of Accreditation System including its Criteria
2019	Launched the Exposure Draft of Accreditation System, 2 <sup>nd</sup> Ed.
2020	New Edition of Accreditation System (Criteria, Policy, Procedures, etc)



# CURRENT ACCREDITATION STATISTICS

- Current Program Offerings:
  - 1600++ total number being offered
  - about 200 programs estimated to be of the type for WA recognition
- Current Accreditation Statistics
  - 88 total programs reviewed since 2012 (17 higher edu. institutions)
  - 50 programs accredited
  - 20 programs for interim review
  - 18 programs on-going assessment and evaluation (4 institutions)
  - 04 programs have gone through second cycle accreditation



# PROJECTIONS OF ACCREDITATION ACTIVITIES

Type of Review	AY 2019-2020	AY 2020-2021	AY 2021-2022
Initial Comprehensive Review	10	20	20
Comprehensive Review- 2 <sup>nd</sup> Cycle	0	44	0
Interim Review	20	10	20



# MAJOR CHALLENGES AND IMPERATIVES

- All engineering programs have adopted the WA Graduate Attributes as baseline reference for outcomes and have been mandated by the CHED for implementation beginning 2018-2019;
- PTC-ACBET has reviewed Accreditation Criteria – Exposure Draft already in circulation among PTC stakeholders. Latest WA Graduate Attributes used as reference in the establishing learning outcomes. Target: January 2020
- PTC Accreditation Criteria and Accreditation System are being reviewed to reflect these national changes and other requirements of WA in time;
- Strengthening the accreditation organization:
  - 4 x 3-day Re-Training Sessions for all accreditation volunteers, Accreditation Board members, new and old program evaluators and PTC Board of Trustees, for 2018 and another set of 4 sessions in 2019 - 200 evaluators;
  - Organization – training and inclusion of more evaluators from the industry
  - Improvement in the organization (EAC, PET, EDO) and IT system for the moderation process



## AFTER THE IEA MEETINGS 2019

- There is an apparent acceptance of our K to 12, being one of two major requirements for FULL SIGNATORY
- PTC has been asked to push for FULL SIGNATORY by IEAM 2020:
  - K to 12 status
  - Organization - robust and operational
  - More program evaluators
- Implementation of a Tier System



# LOOKING FORWARD – BEFORE DEC 2019

- PREPARATIONS AIMING FULL SIGNATORY BY 2020
- FINALIZE CASEE 2<sup>ND</sup> EDITION
- 4 CASEE SESSIONS WITHIN 2019
- ACCREDITATION VISIT OF AT LEAST 1 STATE AND 1 PRIVATE