



BOARD OF ACCREDITATION FOR  
ENGINEERING AND TECHNICAL EDUCATION

# BAETE ACCREDITATION MANUAL 2017 – AN INTRODUCTION

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## Outline

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- Objectives of accreditation
- Shift in paradigm
- Who can apply
- New provisions
- Accreditation procedure
- Accreditation criteria
- Program specific criteria
- Evaluation
- Accreditation decision
- Renewal



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## Objectives of Accreditation

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- a. To ensure that graduates acquire a required set of attributes of national and international standards;
- b. To assist all stakeholders in identifying specific engineering educational programs that meet national and international standards; and
- c. To provide a mechanism for the continual improvement of existing engineering programs through evaluation and feedback.



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## Paradigm shift

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### Old paradigm

- Input based assessment
- Quantitative assessment
- CQI not important
- No formal channel for institution to disagree

### New paradigm

- Outcome based assessment
- Holistic assessment
- Strong emphasis on CQI
- Institution can correct factual errors or can appeal



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## Who can apply?

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- Program approved by an appropriate authority
- Program duration is four years
- Admission after at least 12 years of schooling
- At least one batch has graduated
- **Program follows Outcome-Based-Education**
- Minimum total credit hours is 130
  - (1 credit of lecture  $\geq$  750 minutes of formal contact)
  - (1 credit of lab  $\geq$  1500 minutes of formal contact)



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## New Provisions

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- **Preliminary evaluation of new programs**  
Institution may request BAETE to evaluate strengths, weaknesses, opportunities of a new program when senior most batch in the 2<sup>nd</sup> year. No approval/disapproval
- **Deferment by a short period (< 1 year)**  
Recommended by evaluation team when a deficiency can be corrected quickly

**Accreditation from the date of application**



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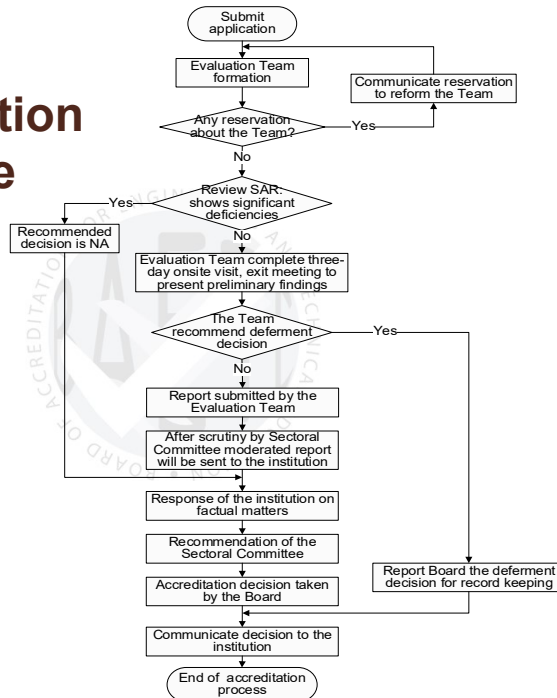
# Steps in Accreditation Procedure

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Steps	Expected time
Formation of evaluation team	3 weeks
Reservation from institution	1 week
On-site visit	12 weeks
Evaluation team report	3 weeks
Scrutiny by sectoral committee	2 weeks
Fact correction by institution	1 week
Recommendation by sectoral committee	2 weeks
Decision of the Board	16 weeks



# Steps in Accreditation Procedure



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## Accreditation Criteria

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1. Organization and governance
2. Financial and physical resources
3. Faculty
4. Students
5. Academic facilities and technical support
6. Curriculum and teaching-learning processes



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## Accreditation Criteria

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7. Program educational objectives
- 8. Program outcomes and assessments**
- 9. Continuous quality improvement**
10. Interactions with the industry

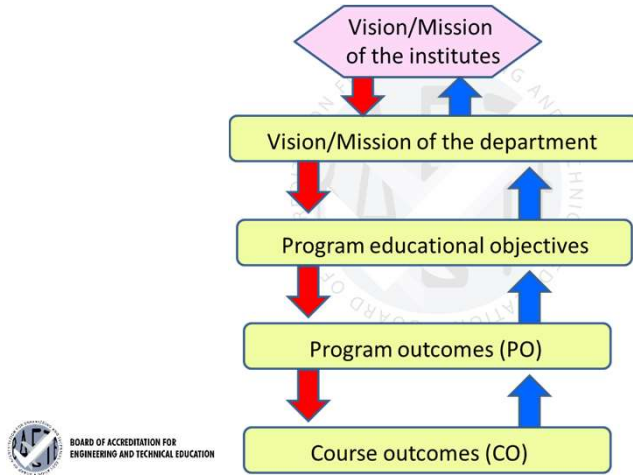


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# Accreditation Criteria

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## Program educational objectives



# Accreditation Criteria

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## Program outcomes and assessments

### BAETE graduate attributes

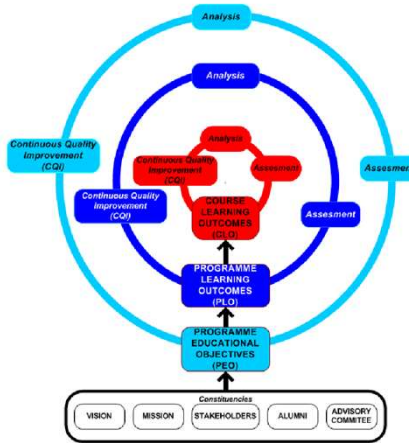
(a) Engineering knowledge	(g) Environment & sustainability
(b) Problem analysis	(h) Ethics
(c) Design	(i) Individual and team work
(d) Investigation	(j) Communication
(e) Modern tool usage	(k) Project management & finance
(f) Engineer and society	(l) Life-long learning



# Accreditation Criteria

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## Continuous quality improvement (CQI)



# Accreditation Criteria

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## Interactions with the industry

- Industry must participate in curriculum Development and CQI processes. Department should have an Industrial Advisory Panel
- Students must have opportunities to gather industrial experience



## Program Specific Criteria

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Curriculum for each program must satisfy the requirements stated in Chapter 6, *Program Specific Criteria*, of the manual. The list of programs in this chapter will be periodically updated as new programs are introduced by academic institutions



## Evaluation

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- Based on the 10 criteria mentioned in Chapter 4 of the manual.
- Each criterion is holistically judged against the benchmark requirements in terms of
  - Compliance – satisfies requirement. No corrective measure needed
  - Concern – Broadly in compliance but needs improvement to avoid potential non-compliance
  - Weakness – Lacks strength of compliance. Requires corrective measures
  - Deficiency – Does not exist or is in an elementary stage. Compliance is required





## Accreditation Decisions

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- No deficiency, no weakness in any criterion
  - Accreditation for 6 years
- No deficiency, weakness not in more than 3 criteria
  - Accreditation for 3 – 5 years
- Deficiency in 1 or more criteria or weakness in more than 3 criteria
  - No accreditation (NA)

An NA program may reapply after 1 year



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## Renewal

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- An accredited program needs to reapply at least 6 months before the expiry of current accreditation
- Application and evaluation processes for renewal are the same as the processes for new application
- SAR needs to describe how shortcomings identified in the previous evaluation have been addressed, particularly through CQI

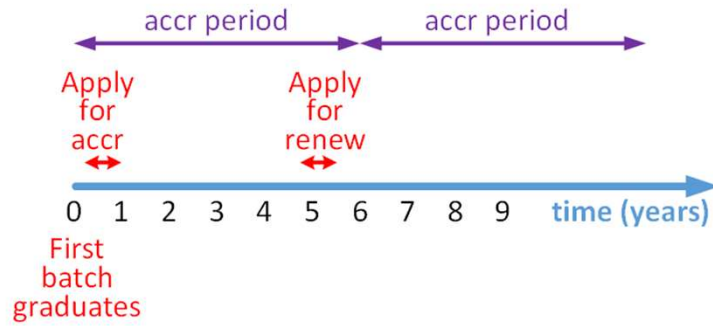
Failure to apply/reapply on time may lead to graduation of non-accredited batches



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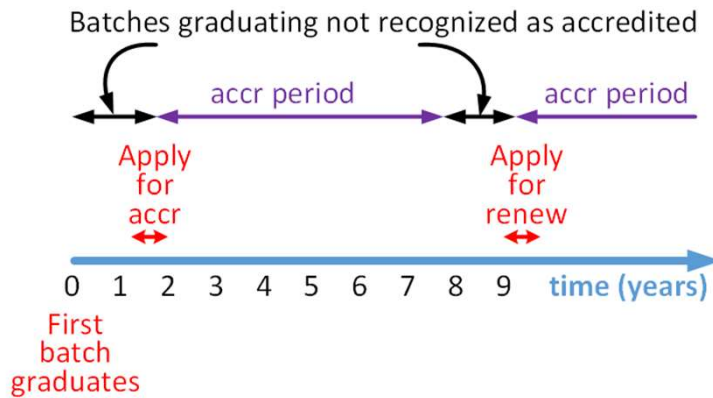
### Example of all batches graduating with accreditation

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### Example of some batches graduating without accreditation

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# Implementation

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- New accreditation manual becomes effective from July 1, 2017.
- All programs applying for new accreditation or renewal after June 30, 2017, are required to apply as per the new manual.

Institutions requiring assistance in transition to OBE may request BAETE to organize workshops at their respective institutions

