



# **The Big Picture Perspective of Programme Evaluation and Decision Recommendations**

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## **Presentation Highlights**

These presentation highlights the big picture perspective of programme evaluation and decision recommendations.



## PROBLEM STATEMENT

Programme Evaluators and leader were dedicated and hard-working, but often obsessed with auditing (referred to as 'bean counting'). It became increasingly difficult to recruit innovative, technically active evaluators from industry and research universities.  
(Prados et al. 2005)

Wan Hamidon, 2016



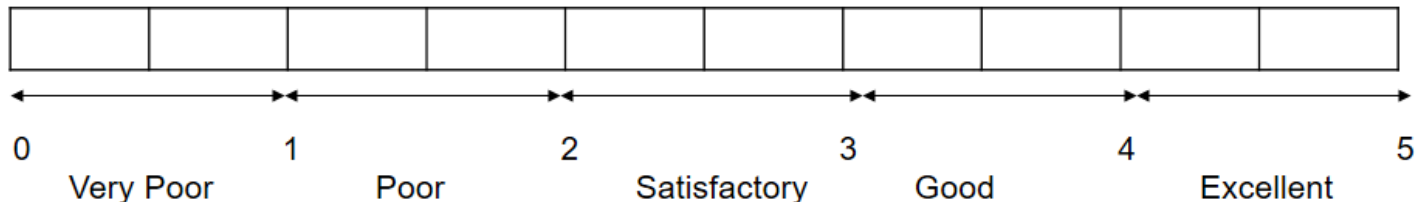
## PROBLEM STATEMENT

Institutions that attempted to develop more flexible and innovative programmes were increasingly harrassed in accreditation reviews and were forced to make their curricular requirements more restrictive to avoid loss of accreditation.  
(Prados et al. 2005)



## Performance of evaluation panels

### Contrasting performance



‘Very unsatisfactory  
to  
Very capable panels’

- Lack of consistency in performance

## *2004 WA Mentoring Visit: Key Findings*



- Need for training of the evaluation team:
  - ✓ Training and mentoring of new panel members and panel chairs is critical in order to develop a full engagement with the outcomes based approach to accreditation, the resources provided within the accreditation manual, the processes of assessment and the requirements for reporting.
  - ✓ The training process needs to be rigorously applied and panel performance evaluated by monitoring or survey analysis to ensure a balanced approach and parity of outcomes.

## 2004 WA Mentoring Visit: Key Findings



- Balance of emphases – evaluation panels:
  - ✓ A significant variance in approach was noted between the panels in 3 separate evaluation exercises, and also between the approach of individual panel members as they conducted separate interview sessions with academic staff, students and graduates.
  - ✓ In these interview sessions the questioning of panel members was directed at the accreditation criteria, but in almost every case lacked balance so that elements of the criteria were either untested or received disproportionate attention.

## 2015 Draft WA Review Findings



- Well documented accreditation criteria and accreditation procedures.
- Comprehensive pre-visit documentation for the preparation of the Self-Evaluation Reports.
- Well trained programme evaluators who are familiar with the evaluation tools and are rigorous at following the evaluation process.
- Very knowledgeable EAD officials to direct the accreditation process.
- Well-structured accreditation procedure to ensure consistency.

# THE BIG PICTURE



To migrate from  
Trivial Many  
(penny wise)  
to  
Significant Few  
(pound foolish)  
  
mindset

## Reminder of Accreditation Objectives



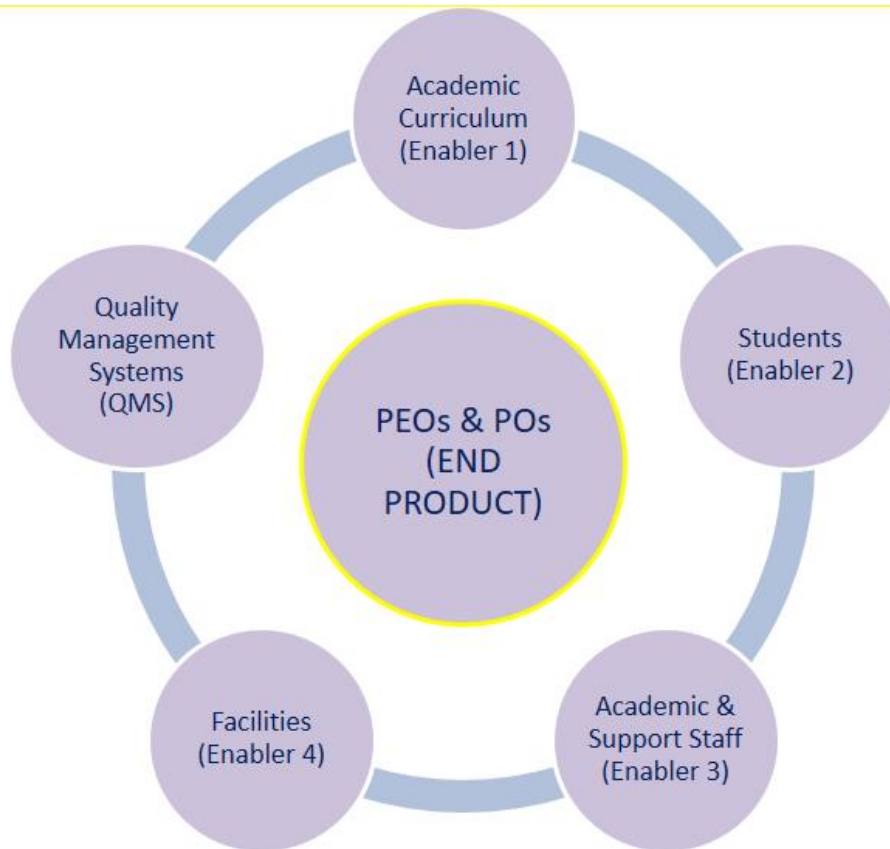
The objective of accreditation is to ensure that graduates of the accredited engineering programmes satisfy the **minimum academic requirements** for registration as a graduate engineer with the Board of Engineers Malaysia (BEM) and for admission to graduate membership of IEM.

In addition, the objective of accreditation is to ensure that Continual Quality Improvement (CQI) is being practiced by IHL, and accreditation may also serve as a tool to benchmark engineering programmes offered by IHL in Malaysia.

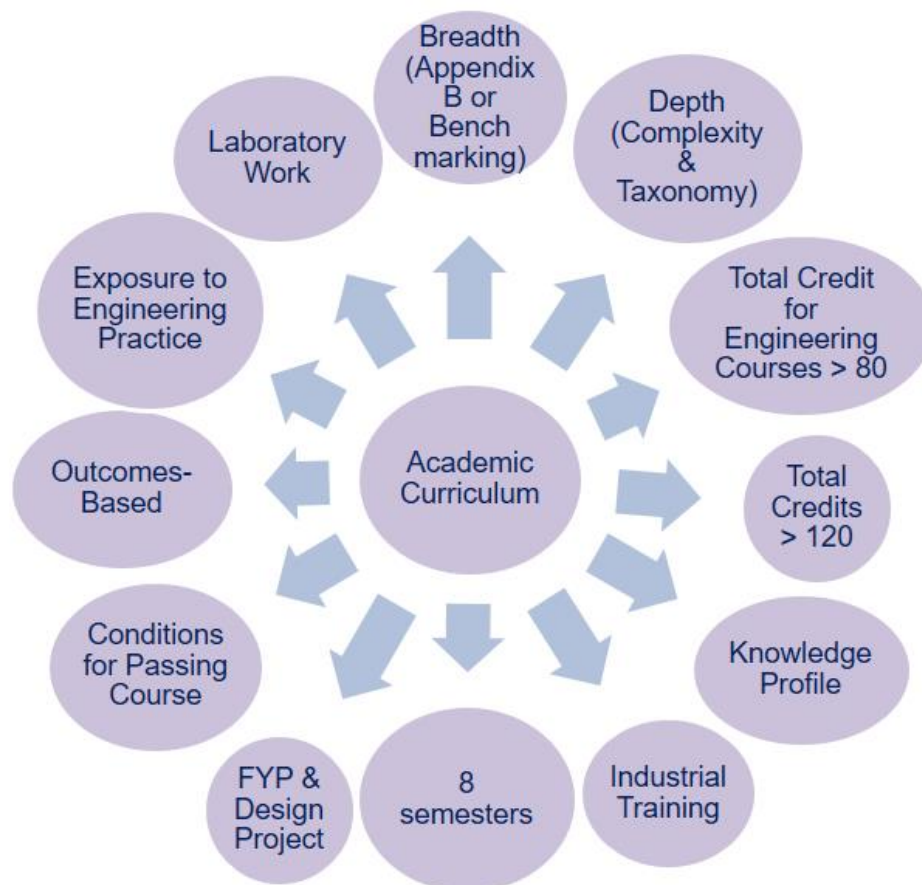




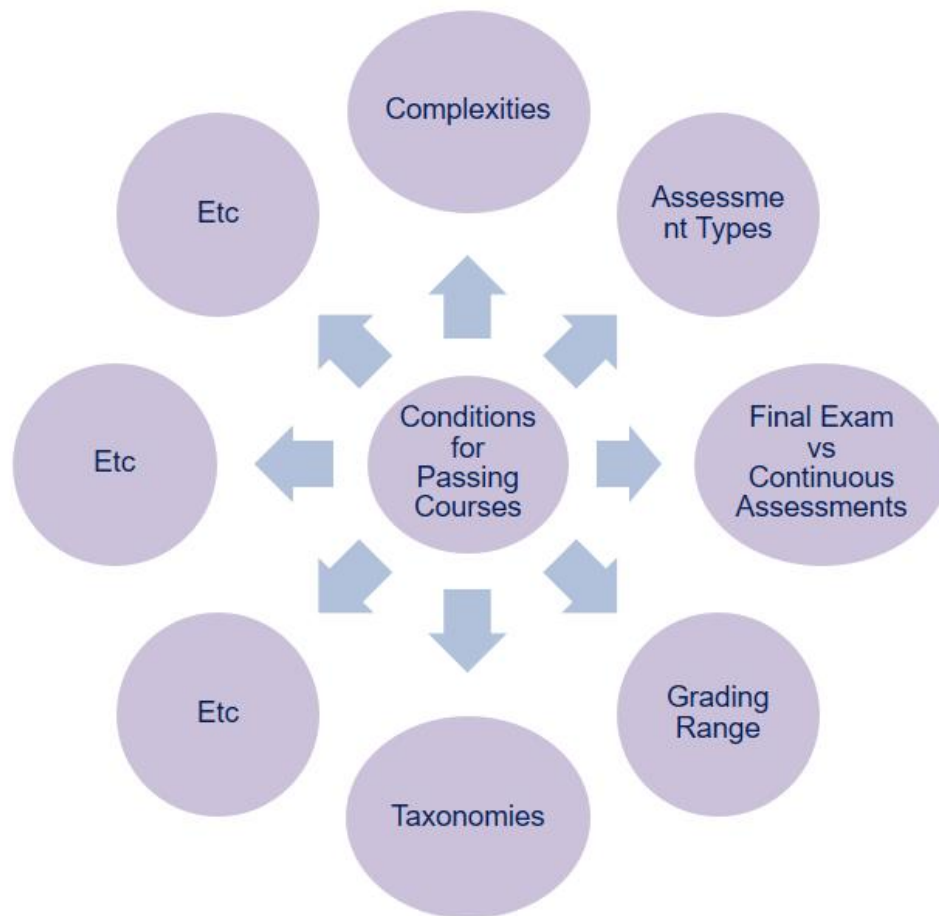
# The Big Picture (Level 1)



# The Big Picture (Level 2)



# The Big Picture (Level 3)



## ANALOGY



- A car is to transport passengers from point A to B.
- Compulsory components:
  - Body/chassis
  - Engine
  - 4 tyres
  - Fuel,
  - Driving wheel etc. etc. etc.
- Important items (but not compulsory):
  - Seats
  - Spare tyre, etc. etc. etc.
- Desirable items:
  - GPS Navigator
  - Other accessories, etc. etc. etc

# TRIANGULATION AND COLLAPSING OBSERVATIONS



After listing the issues/shortcomings:

- Group them under common grouping or category or sub-criteria.
- Triangulate them to see if they are linked to each other.
- Place them under the most appropriate main accreditation criteria.
- Use the form provided in Appendix A to help classify the observed shortcomings into either a weakness, minor concern, major concern or OFI.



## DEFINING TERMS





# STRENGTHS

- Strengths can be defined as anything with a '**wow factor**' of '**very outstanding nature**' far beyond just satisfying the minimum requirements.



# WEAKNESSES

- ANY of the eight (8) Qualifying Requirements not fulfilled.
- Transgressed any Accreditation Criteria to the point of **TOTAL COLLAPSE**.
- Below the 'minimum' expectation of criteria.
- Programme has no breadth and depth of an engineering education.
- OBE is not implemented.
- Repeated Major Concerns can be upgraded to Weaknesses.

# CONCERNS



- Any shortfalls/ shortcomings or transgression of but **not amounting to 'total collapse'** of any of the accreditation criteria.

## CONCERNS



### MAJOR or MINOR?

- **ALWAYS** Have the big picture perspective in mind.
- Avoid trivialities/bean counting.
- Repeated Minor Concerns can be upgraded to Major Concerns.
- Repeated OFIs can be upgraded to Minor Concerns.

# OPPORTUNITIES FOR IMPROVEMENT



• Opportunities for Improvement (OFI) refer to 'good to have' or 'desirables' recommendations made by the Evaluation Panels for programme Continual Quality Improvement (CQI). OFI do not affect accreditation decision in the first round of accreditation when these OFI are listed. However, if programme failed to act upon these OFI in the next round of accreditation, it will be taken as going against the spirit of Continual Quality Improvement (CQI), and may be turned from OFI into concerns.

## ACCREDITATION DECISION RUBRICS NEW PROGRAMME + NEW CYCLE



	5 years	5 years + interim report within 3 years	3 years			2 years				1 year				Deferred
Major concerns	x	x	x	1	2	x	1	2	3	1	2	3	4	> 4 major concerns or any weakness.
Minor concerns	x	≤ 2	3-4	1-2	x	5-6	3-4	1-2	x	5-6	3-4	1-2	x	

# ACCREDITATION DECISION RUBRICS CONTINUING ACCREDITATION



Balance of years	Balance of years -1 year	Balance of years - 2 years
All concerns CLOSED	$\leq 2$ concerns not CLOSED	$> 2$ concerns not CLOSED



## GUIDELINES FOR PANEL

## GUIDELINES FOR PANEL



**A. Issues reported are in view of the overall impact onto the 'big-picture' perspective of any criteria, and not reported in isolated silos.**

### **Example 1: Safety issue in the laboratory.**

- The overall picture of safety, and the impact of such an issue must be evaluated.
- Is it wide-spread or endemic or amounting to 'safety culture problem'?
- If only one or 'two' of the many 'enablers' of safety is/are compromised, and it is not widespread, the issue would just be highlighted as OFI.

## GUIDELINES FOR PANEL



**Example 2: Issues with final examination questions: straight-forward and non-challenging or not-complex enough and of lower cognitive (Bloom etc.) taxonomies.**

- What is your expectation – all questions must be complex and of high taxonomy levels (evaluation and synthesis)?
- Is it wide spread? How many exam papers you observed?
- Have you checked continuous assessment as well including quizzes, tutorials, mid-sem exams, projects, etc.



# GUIDELINES FOR PANEL



## THE BIG PICTURE

–The Condition for Passing Courses stipulates:  
‘Unless the continuous assessment approach adopted can demonstrate the attainment of the depth of knowledge, IHLs are strongly reminded to ensure that no student shall pass a course if they fail in their final examination of the semester’.

# GUIDELINES FOR PANEL



**Example 3: Exposure to industrial practice to students: Lack of industry visits by students.**

▪Did you care to look for the five (5) important enablers/components:

- ✓ Lectures/talks by guest lecturers from industry
- ✓ Academic staff with industrial experience
- ✓ Courses on professional ethics and conduct
- ✓ **Industry visits**
- ✓ An industry-based final year project
- ✓ Regular use of a logbook in which industrial experiences are recorded.

## GUIDELINES FOR PANEL



### **B.Avoid over-exaggerated or magnified or blown-out of proportion statements.**

- Some panels have the tendency to exaggerate or magnify a small issue, thus making the issue looked more serious than it is.
- Panel must judge/evaluate the impact any observed shortcomings had onto any (or combined) of the 5 main Accreditation Criteria, and use proper wordings to reflect real situation. This is where, panel should avoid the 'trivial many' but more focussed on the 'significant few'.
- The bigger-perspective must always be up-hold to avoid the 'trivial many' and to focus on the 'significant few'.

## GUIDELINES FOR PANEL



- Are the concerns widespread? If not, it shouldn't be highlighted as a big issue. Classify them under OFI/desirables/good to have.
- Are the panel being too detailed oriented?
- Are the issues raised only good to have/desirables items?
- Does the panel have the tendency to impose their own practice to others?
- Do the issues raised arise from stipulated clauses in the EAC Manual 2012?
- Are the issues raised just an opinion or suggestion/specific solution? If yes, put it under OFI. We're not consultants.

## GUIDELINES FOR PANEL



- Has the panel triangulated their findings or recommendations with other sources such as comparing them with earlier EAC panel's report and accreditation recommendations and decisions, External Examiner's and benchmarking reports, checking for precedence (same or similar earlier cases at the same or other IHL for example), confirming facts through documentations and interview with management, staff, students, alumni, employers, IAP, Adjunct Professors, etc.
- If an issue is claimed to be widespread, has it been substantiated with quantities: number, statistics, percentages, etc. based on facts and figures (evidences).

## GUIDELINES FOR PANEL



- What will be the impact of such observed problem on the main criteria of accreditation (2 + 5 criteria).
  - High Impact: **MAJOR CONCERN**
  - Low Impact: **MINOR CONCERN**.
  - Totally Collapsing Main Criteria: **WEAKNESS**.

Panel needs to refer to **Determining Accreditation Decision paper** prepared by the EAD for guidelines.

Example:

Incomplete course files for example do not really any impact on Academic Curriculum.

## GUIDELINES FOR PANEL



### C. Place issues correctly under relevant criteria.

- Take the above earlier example, where some course files have missing items in them, either purposely left out or unintentional. Also, the files may have used the course code different from the one listed in the SAR.
- In such a situation, the panel needs to evaluate/judge as to what is the root cause of this shortcoming. There is an indication of the root cause is due to the lack of documentation control and checking by the programme, particularly when it had already implemented an SOP or ISO system that involves the course files preparation. This may have resulted from a poor QMS system.

## GUIDELINES FOR PANEL



### C. Contd...

- After further probing, the panel should have been able to place the shortcoming under the relevant criteria, and evaluate the impact of such shortcoming.



## GUIDELINES FOR PANEL



**D. Don't use ambiguous or vague words, or without evidence to back up. Evidences are not limited to hard or soft copy documents, but also on-site observations, interviews, etc.**

- Many words being used by the panel do not have 'quantities' associated to them, such as majority, nominal, seemed to be, etc. These words may have differing interpretations. Such ambiguous/vague words must be avoided and replaced with words that are more specific and must be substantiated with quantities, figures, percentages, etc.

## GUIDELINES FOR PANEL



**E. Comments should not be based on prejudice, perception, impression or assumptions.**

- To recommend accreditation decision based on something that has yet to happen is unprofessional especially if they are based on prejudice, perception, impression or assumptions. However, in certain cases, if based on the judgement of the panel (after triangulations), an 'adverse' condition can really be anticipated; panel may state their perception or strong opinion on the issue.



## GUIDELINES FOR PANEL



### **F. Report should not be too detailed oriented or bean-counting the 'branches and leaves'.**

- Some panels tend to become consultants. They go into every detail of the criteria to the level of giving specific solutions to solve an identified issue. It is sufficient just to point out the issues at the 'forest/woods' level.

## GUIDELINES FOR PANEL



### **G. No statements are of the 'read in-between the lines' and inconclusive type of statements, and not left to EAC for further interpretation.**

- Some panels tend not to reveal the whole truth regarding any programme shortfalls they observed. Some below standard conditions observed are 'watered down' by 'read in-between the lines' statements.

# GUIDELINES FOR PANEL



## G. Contd....

- For example, a statement that reads 'The programme needs to enhance the quality of the final year projects (FYP) and so on.....', but has never made any mention of the current status of the quality of the FYP conclusively. The word 'enhance' could mean that the quality of the FYP is already satisfactory to the EAC2012 Manual's expectation, and the panel is just stating the recommendation as an OFI, or it could also mean that the quality is below expectation, and must or shall be improved and stated as a CONCERN (minor or major dependent on the big-picture situation).

# GUIDELINES FOR PANEL



## G.Contd....

- It would have been better to re-write the above observations by including the current state of the quality of the thesis in reference to the clauses on FYP stipulated in the manual prior to the mention of the need to improve its quality.
- In fact, some panels do not well conclude observations, where statement that reads 'The programme has adequately addressed the concern, however .....'. It should have been concluded as follows 'The concern has adequately addressed and closed'.

# GUIDELINES FOR PANEL



**H. Statement does not contradict each other, and no concerns and recommendations made are based on the clauses and spirit of the EAC Manual 2012.**

- Panel some time note that students are highly motivated at one place, but at another place, they are said to be too overloaded with workload. This has sent conflicting and contradicting message to the EAC.

# GUIDELINES FOR PANEL



**H. Contd.....**

- Some recommendations may also have been made based on own opinion and self-practice, and not based on the clauses and spirit of the EAC Manual 2012. Some panel members are known to have high inclination to go into too many details in scrutinising and dissecting the Academic Curriculum. They may have encroached into the territory beyond the scope and jurisdiction of the EAC.
- It would be good for panel to cross check and triangulate their observations with earlier EAC panel findings, programme benchmarking and external examiners' reports.



# ACCREDITATION CONDUCT GUIDELINES

## *Roles as Evaluator Panel Members*



Auditing  
Programme  
Standard  
against EAC  
Manual

Drive/catalyst  
of cultural  
change  
towards  
CQI/OBE in  
IHL

Role Model



## *Basic Requirements for Evaluators*



Understand the EAC Manual especially the OBE approach

Have the right conduct/send the right message

Ask the right questions

Do your homework

Act professionally

Avoid conflict of interest and possibilities of compromise to the independence and integrity of panel judgment

## *Basic Requirements for Evaluators*



Focus more on outcomes approach when interacting with academic staff and students: delivery of programme objectives and specified graduate outcomes through systematic educational design and continuous quality improvement

Look for the supporting evidence on generic attributes

Assess rigorously compliance against the full range of accreditation criteria



## *Basic Requirements for Evaluators*



Qualitatively discuss and give reflective comments on the processes of setting, review and attainment monitoring of programme objectives and graduate outcomes, the educational design processes, the quality assurance systems

Formalise the pre-visit meeting, document initial findings and any requests for further information

Communicate these to the IHL to help prepare for the visit

## *Basic Requirements for Evaluators*



Mention the need for developing a comprehensive specification of graduate outcomes for each specific programme, and for using this to drive the processes of educational design, and also as a reference for assessment tracking and continuous quality improvement

## *Basic Requirements for Evaluators*



Mention about the need for the teaching team to drive a quality assurance cycle at the individual programme and academic course levels, to track assessment processes and the delivery of learning outcomes

## *Basic Requirements for Evaluators*



Be more proactive in devising tailored visit schedules to optimise the time available for meetings with staff, students and other stakeholders

Spend less time on presentations and demonstrations by university staff and in viewing research facilities which add little value to the evaluation process

## *Basic Requirements for Evaluators*



Don't be  
diverted and  
sidetracked

Don't be drawn away  
from the key objectives  
of evaluating  
performance against the  
accreditation criteria, and  
evaluating the potential  
of the programme to  
deliver a balanced range  
and depth of graduate  
capabilities

## *Basic Requirements for Evaluators*



Devise key themes  
for questioning at  
the various  
sessions, and  
question  
systematically  
following the  
accreditation  
criteria or the  
guidelines  
provided in the  
Manual

Systematically  
identify deficiencies  
and shortcomings in  
the submitted IHL's  
documentation, and  
strategically plan  
questioning or  
request  
supplementary input  
from the Faculty to  
try and fill in the  
gaps



## *Basic Requirements for Evaluators*



Attempt to seek the input/role of external stakeholders mechanism such as representative employers or industry advisory body members to programme development & CQI

Investigate the development and attainment monitoring of programme objectives and graduate outcomes

## *Basic Requirements for Evaluators*



Be more proactive in devising tailored visit schedules to optimise the time available for meetings with staff, students and other stakeholders

Spend less time on presentations and demonstrations by university staff and in viewing research facilities which add little value to the evaluation process

## *Basic Requirements for Evaluators*



Consider seriously  
the reports of  
external examiners

Examine & evaluate  
for examples of  
student work,  
curriculum materials  
and quality  
assurance records

Look for evidence  
of consequential  
action on how the  
loop is closed on  
external examiner  
reports, and how  
the faculty takes  
specific action on  
recommendations  
and tracking  
outcomes of such  
action

## *Basic Requirements for Evaluators*



Adequately discuss  
about student  
exposure to  
professional  
engineering  
practice as an  
integrated element  
of learning

Adequately discuss  
responsibilities of  
the academic  
teaching team for  
the processes of  
educational design



## *Basic Requirements for Evaluators*



Adequately discuss about student feedback and input to the processes of continuous quality improvement

Validate delivery of the graduate outcomes such as mapping and tracking assessment elements across the individual courses or other direct measures

## *Basic Requirements for Evaluators*



Look for evidence on how the loop is closed on delivery of learning outcomes and assessment at the individual course level

Adequately discuss about details and track record of academic staff development



The panel should discuss all aspects of the academic programme to be evaluated with reference to the qualifying requirements and accreditation criteria.



This should include the discussion on:

- the programme objectives and specification of graduate outcomes
  - whether the development, review and attainment monitoring of graduate outcomes are informed by industry stakeholders.
  - whether the outcome specification drive a top-down educational design process.



- whether the academic curricula reflects a professional engineering programme, and whether it satisfies the criteria completely
  - whether the learning outcomes and assessment measures within courses systematically mapped to track delivery of the targeted graduate outcomes, whether the mathematics, chemistry and physics are at appropriate level.



- whether the content of each course appropriate
- whether the level of course material appropriate
- whether the courses build on previous course work
- whether the teaching-learning process include appropriate assessment
  - whether the internship and project work at a sufficient level, students standing in terms of their admission standards, their academic performance, their industrial internship, etc.



- whether the teaching-learning process include appropriate assessment
  - the academic and support staff in terms of their credentials and qualifications, their range of competencies, their advanced degrees, their industrial experience, their teaching loads, balance of faculty from one local institution, their involvement and accountability as a team for educational design, review and improvement, etc.



## Some Typical Questions

- How were the programme **objectives determined**?
- Are they **consistent** with the institution vision & mission?
- How does the institution **accomplish the objectives**?
- How is the **review and update** done?
- How does the institution knows that the **objectives are met**?
- Who are your **stakeholders**?
- **How** are the **stakeholders involved**?
- Does the outcome specification drives a **top-down** educational design process?

# Acknowledgement



- WA Mentor's Report
- WA Reviewer's Report
- Others who have contributed.

**THANK YOU**