Board of Engineers Malaysia
www.bem.org.my

Engineering Accreditation Council
www.eac.org.my

New Program Evaluator Training – Outcome Based Accreditation

9th Oct 2019, New Council Hall, 1st Floor, IEB HQ, Ramna, Dhaka, Bangladesh

09.30 – 10.45 (1 hr 15mn)
11.00 – 13.00 (2hr)
14.00 – 15.30 (1hr 30mn)
15.45 – 17.00 (1 hr 15mn)

BEM Malaysia
EAC Chair

Megat Johari Megat Mohd Noor

BEM Board Member & P.Eng.

MySET President & Fellow

MJIIT Professor (Retired)

Malaysian Society For Engineering & Technology
Nurturing 21st Century Professionals

UTM UNIVERSITI TEKNOLOGI MALAYSIA

MJIIT MALAYSIA-JAPAN INTERNATIONAL INSTITUTE OF TECHNOLOGY

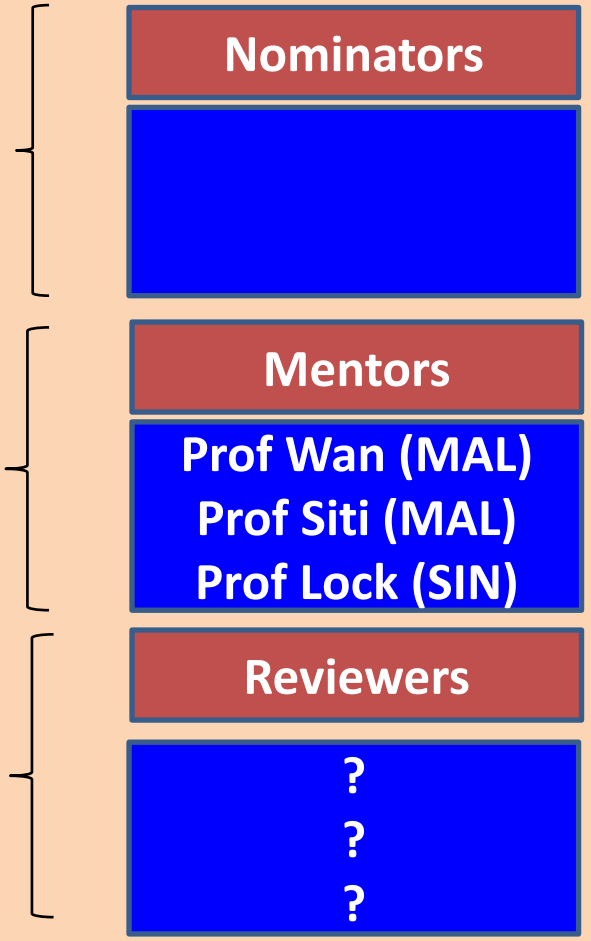
Megat Johari MEGAT MOHD NOOR

Board Member, BEM
Chair, Engineering Accreditation Council (EAC), BEM
Council Member, Engineering Technology Accreditation Council (ETAC), BEM
Professional Engineer with Practicing Certificate, BEM
Founding Director, Engineering Accreditation Department, BEM
Associate Director (International), Engineering Accreditation Department (EAD), BEM
President & Fellow, Malaysian Society for Engineering & Technology (MySET)
Vice President, Federation of Engineering Institutions of Islamic Countries (FEIIC)
Former Vice-President & Fellow, Institution of Engineers Malaysia (IEM)
Former Director, Centre for Quality & Risk Management (QRiM), UTM
Former Professor & Founding Dean, Malaysia Japan International Institute of Technology (MJIIT), UTM
Former Head, Department of Civil Engineering, UPM
Former Head, Quality Unit, Faculty of Engineering, UPM
Member, Malaysia Research University Committee, MoHE

9 October 2019

Bangladesh Washington Accord Route (till 2020?)

- **Nominator**
  First visit: …..
  Provisional Status: …..
- **Previous Mentor**
- **Current Mentor**
- **1a Reviewer (……..)**
  Visit: 2019 ?
- **1b Reviewer (ADM)**
  Visit: 2019 ?



Full Signatory in Jun 2020
at IEAM Cape Town, South Africa ?

Outlines

- Introduction
- OBE
- Evaluation
- Decorum
- Decision & Reporting

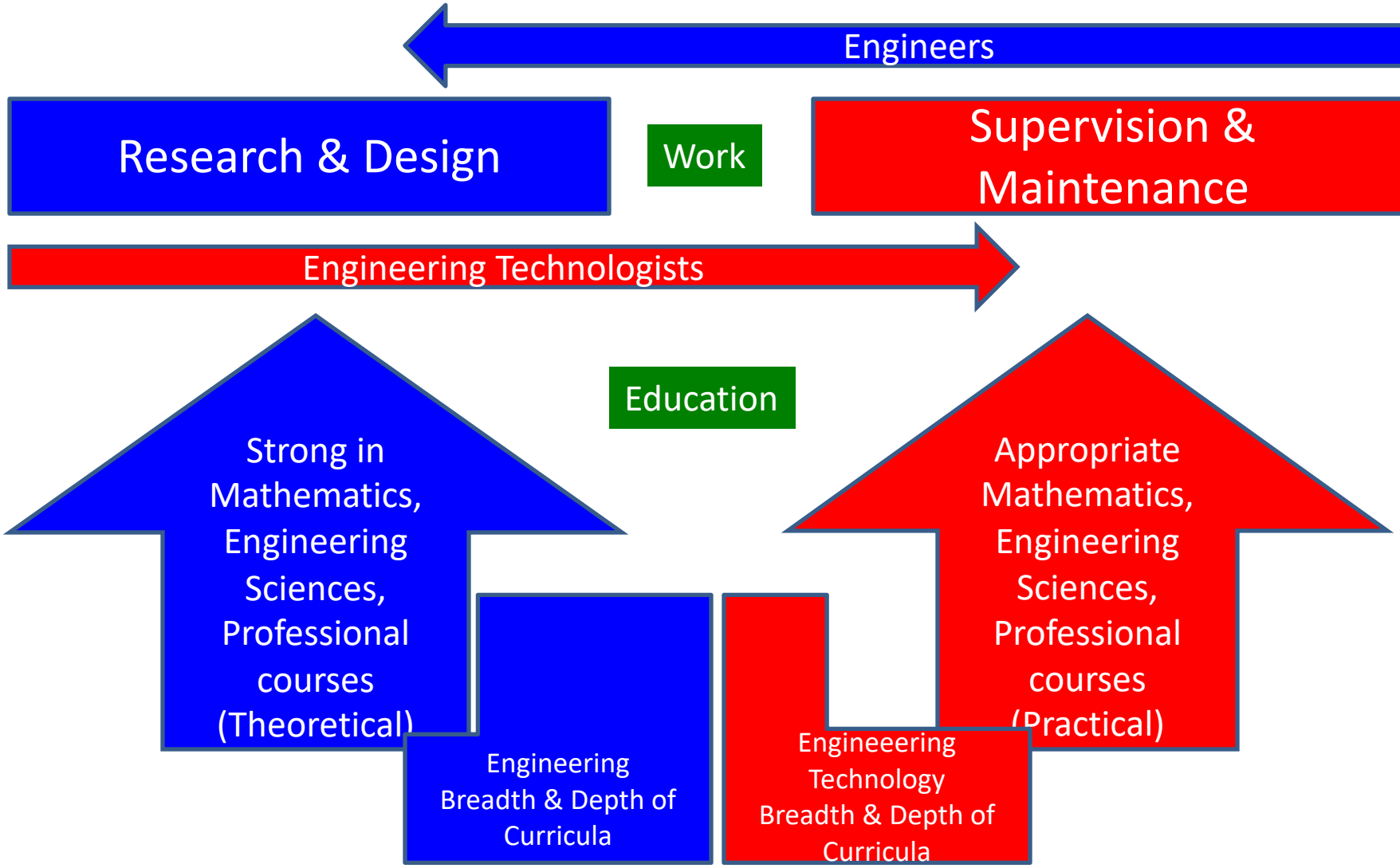
Challenges

- **Paradigm Shift – Outcome & Quality**
- **Maintain Fundamentals while Encourage Inclusion of Latest Technology Advancement in the Curriculum**
- **Allow Academic Innovation and Creativity**
- **Avoid Side-tracked**
- **Variety of Modes**

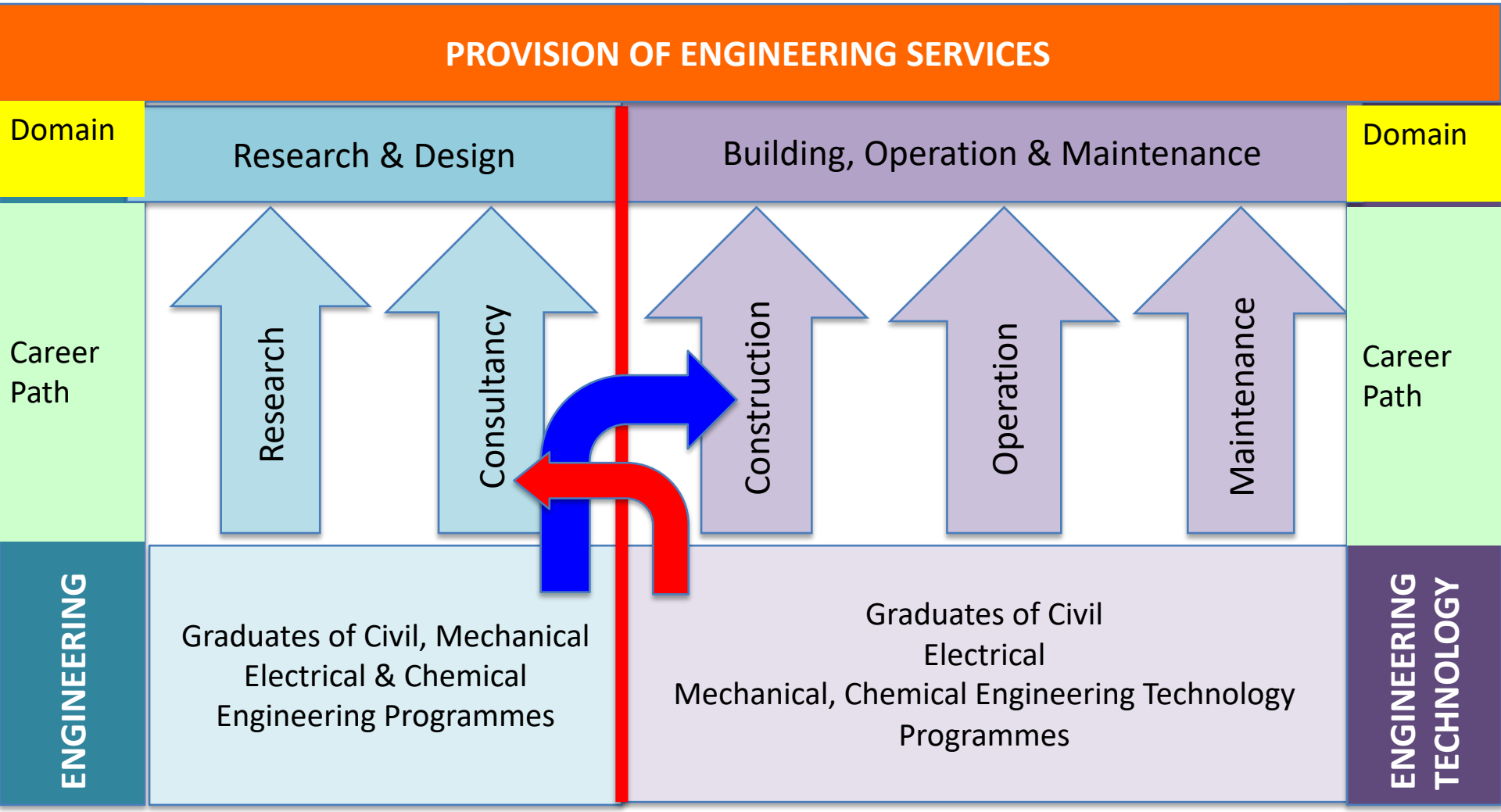
Issues

- Attainment
- Culminating
- Selective
- Comprehensive
- Complex problem
- Wide spread
- Limited
- Constructive alignment
- Adding up/Binary/Average/Minimum/Maximum
- Low Taxonomy
- Systems approach
- Software support

Engineering & Engineering Technology Domains



Career Paths



PEO

WHAT YOU WANT YOUR GRADUATES TO BE IN 3 - 5 YEARS

EXTRA-CURRICULAR

WA 1
ENGINEERING
KNOWLEDGE

WA 2
PROBLEM
ANALYSIS

WA3
DESIGN

WA5
MODERN TOOLS

WA6 ENGR & SOC
WA7 ENV & SUST
WA8 ETHICS

WA4
INVESTIGATION

WA9
IND & TEAM

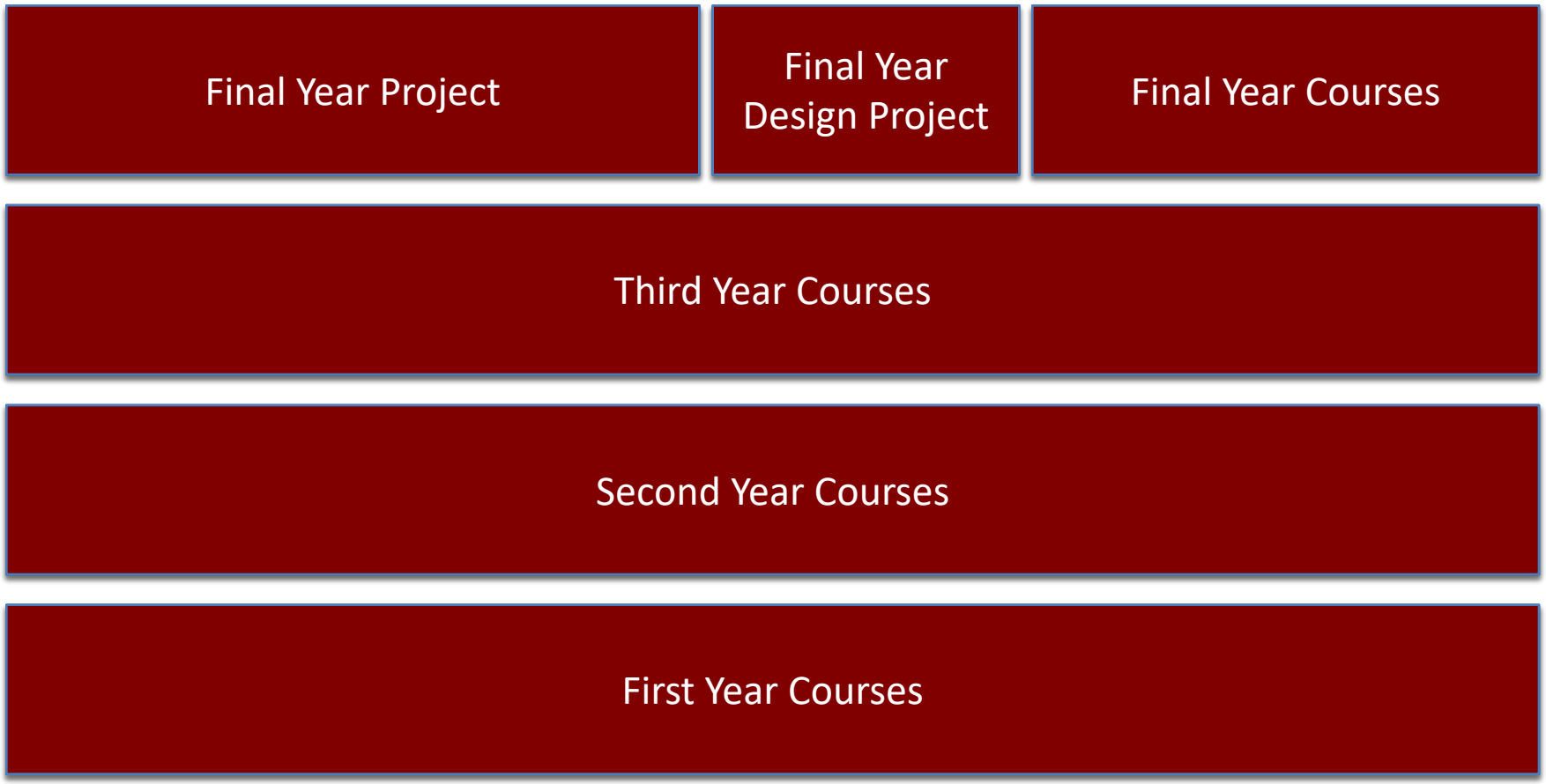
WA10
COMMUNICAT-
ION

WA11
PROJ MGMT &
FINANCE

WA12
LIFE LONG

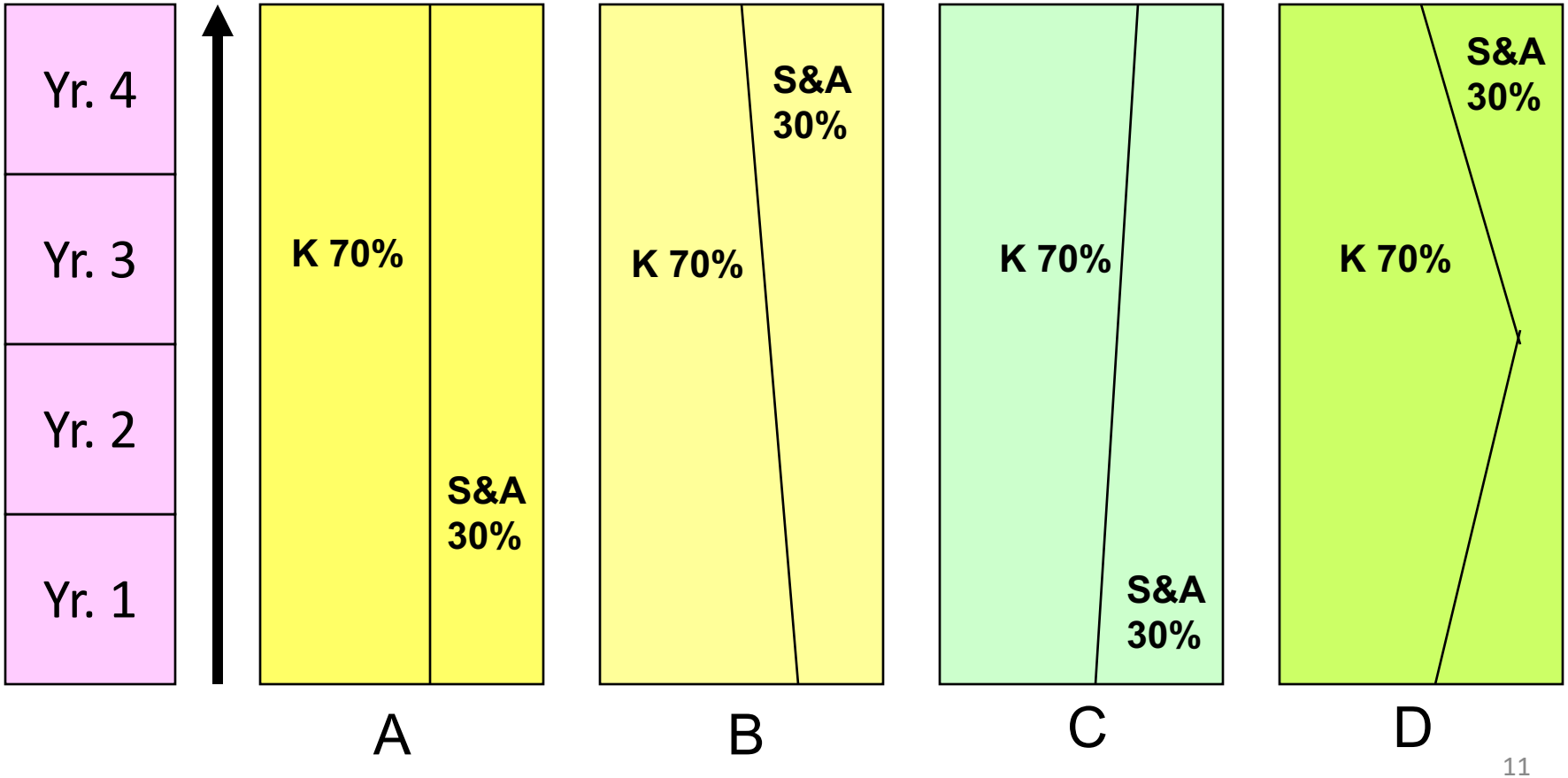
UNIVERSITY EXPERIENCE

PO Attainment



Curricula Models

Distribution of Knowledge, Skills & Attitude elements throughout the 4 years

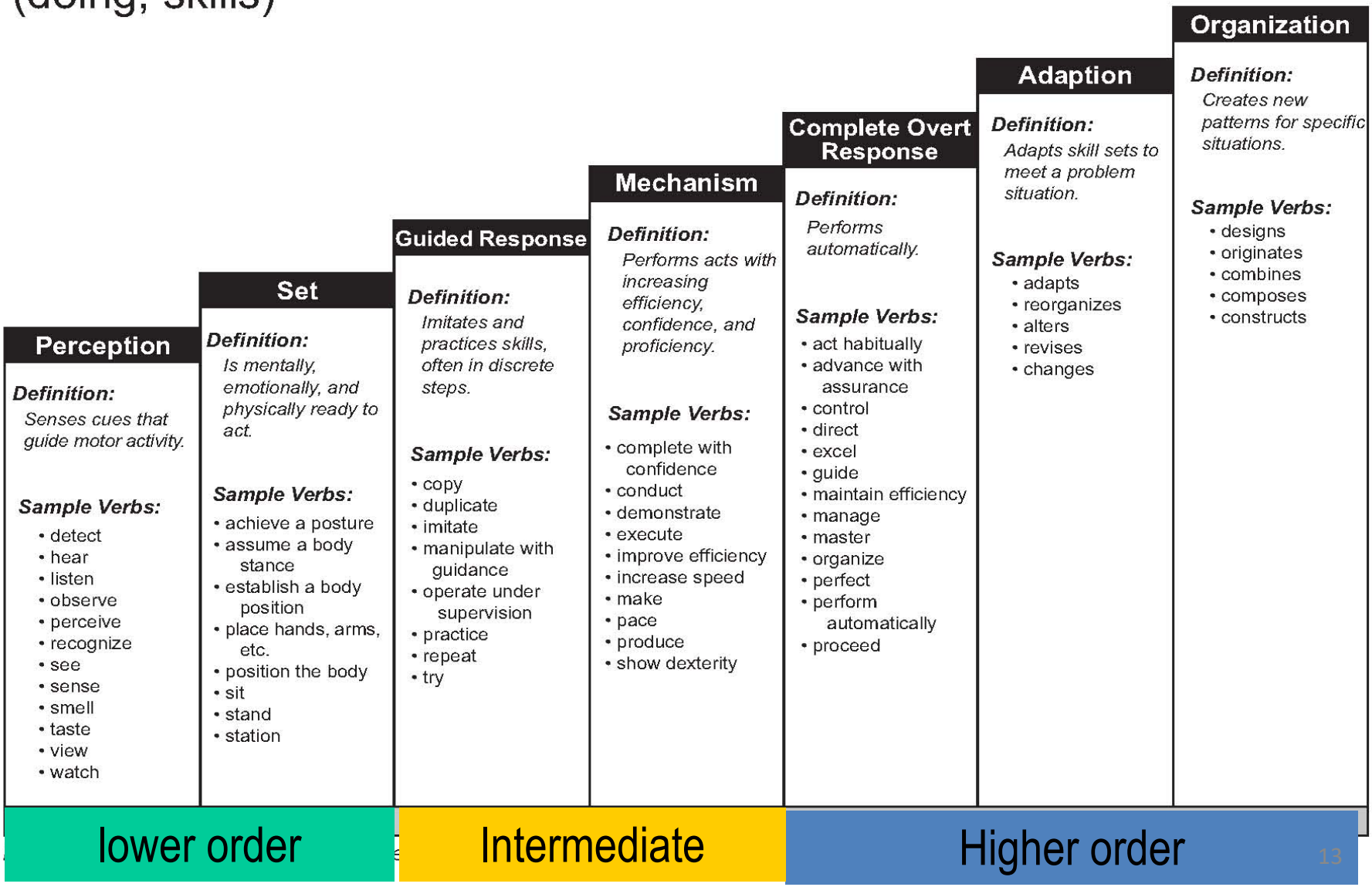


New Bloom's Taxonomy

Remembering: can the student recall or remember the information?	define, duplicate, list, memorize, recall, repeat, reproduce state
Understanding: can the student explain ideas or concepts?	classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase
Applying: can the student use the information in a new way?	choose, demonstrate, dramatize, employ, illustrate, interpret, operate, schedule, sketch, solve, use, write.
Analyzing: can the student distinguish between the different parts?	appraise, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test.
Evaluating: can the student justify a stand or decision?	appraise, argue, defend, judge, select, support, value, evaluate
Creating: can the student create new product or point of view?	assemble, construct, create, design, develop, formulate, write.

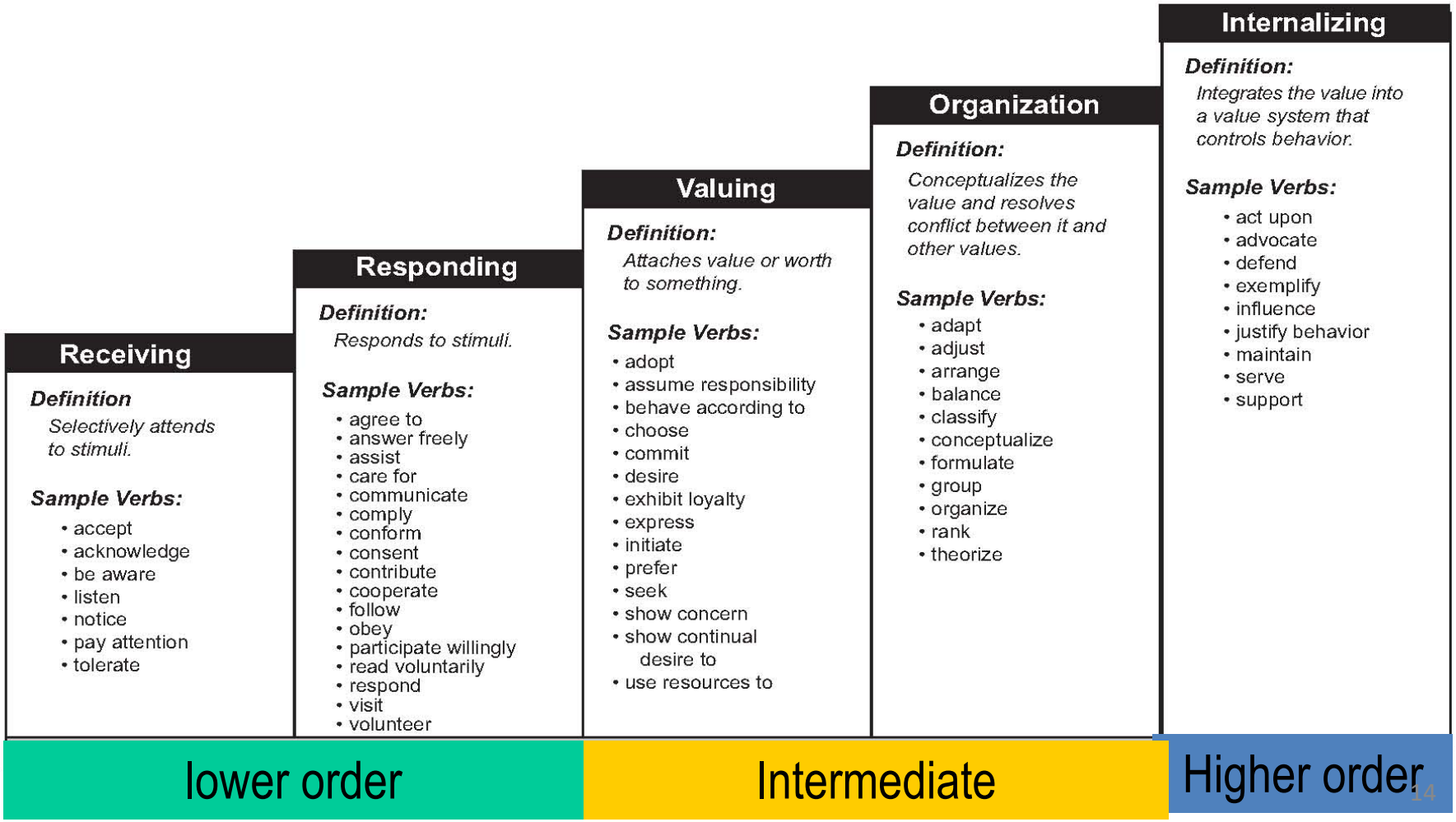
Psychomotor Domain

(doing, skills)



Affective Domain

(feeling, attitudes)



Course Outcome (CO) contributing to Programme Outcome (PO)

Ability to function in a multidisciplinary team

- Assign **multidisciplinary design** projects in engineering courses.
- Implement design projects with **multidisciplinary teams**

Exercise:
Identify a course and discuss how it can be implemented

Course Outcome (CO) contributing to Programme Outcome (PO)

Broad education necessary to understand the impact of engineering solutions in a global, environment and societal context + knowledge of contemporary issues

- Include structured **controversies** in engineering course
- Conduct class exercise or homework **problems that involve global/societal issues**

Exercise:
Identify a course and discuss how it can be implemented

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Course Outcome (CO) contributing to Programme Outcome (PO)

Life Long Learning

- Teach students about **learning styles** and help them identify the strength and weakness of their styles and give them strategies to improve
- Use **active learning** methods to accustom them to relying on themselves
- Give assignments that requires **library and www searches**
- Anything done to fulfil criteria on: (a) understanding ethical and professional responsibility and (b) understanding societal and global context of engineering solutions, will **automatically satisfy this criteria**

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Learning outcomes by adding a condition and standard

Poor

- **Students should be able to design research.**

Better

- **Students should be able to independently design and carry out experimental and correlational research.**

Best

- **Students should be able to independently design and carry out experimental and correlational research that yields valid results.**

Source: Bergen, R. 2000. A Program Guideline for Outcomes Assessment at Geneva College

Knowledge Profile

WK1
natural sciences

WK2
mathematics, numerical analysis, statistics, computer and information science

WK3
engineering fundamentals

WK4
engineering specialist knowledge

4 YEARS

WK5
engineering design

WK6
engineering practice

WK7
engineering in society

WK8
research literature

PROGRAMME LEARNING OUTCOME

Engineering Knowledge
(WA1) Apply knowledge of mathematics, natural science, engineering fundamentals and an engineering specialisation to the solution of **complex** engineering problems; **(WK1 to WK4)**

WA = Programme Learning Outcome
WK = Knowledge Profile = Curriculum

PROGRAMME LEARNING OUTCOME

Problem Analysis - Complexity of analysis
(WA2) Identify, formulate, research literature and analyse **complex** engineering problems reaching substantiated conclusions using **first principles** of mathematics, natural sciences and engineering sciences **(WK1 – WK4)**

PROGRAMME LEARNING OUTCOME

Design/Development of Solutions – Breadth and uniqueness of engineering problems i.e. the extent to which problems are original and to which solutions have previously been identified or codified

(WA3) Design solutions for **complex** engineering problems and design systems, components or processes that **meet specified needs** with appropriate consideration for **public health and safety, cultural, societal, and environmental considerations (WK5)**

PROGRAMME LEARNING OUTCOME

Investigation - Breadth & Depth of Investigation & Experimentation
(WA4) Conduct investigation of **complex** problems using **research based knowledge (WK8)** and **research methods** including **design of experiments, analysis and interpretation of data, and synthesis of information** to provide valid conclusions

PROGRAMME LEARNING OUTCOME

Modern Tool Usage - Level of understanding of the appropriateness of the tool
(WA5) Create, select and apply **appropriate techniques, resources, and modern engineering and IT tools**, including **prediction** and **modelling**, to **complex** engineering problems, with an understanding of the limitations. **(WK6)**

PROGRAMME LEARNING OUTCOME

The Engineer and Society - Level of knowledge and responsibility
(WA6) Apply reasoning informed by contextual knowledge to assess **societal, health, safety, legal and cultural issues** and the consequent responsibilities relevant to professional engineering practice and solutions to **complex** engineering problems. **(WK7)**

PROGRAMME LEARNING OUTCOME

Environment and Sustainability - Type of solutions
(WA7) Understand and evaluate the sustainabilty and **impact of** professional engineering work in the **solutions** of **complex** engineering problems in **societal and environmental** contexts (demonstrate knowledge of and need for sustainable development) **(WK7)**

PROGRAMME LEARNING OUTCOME

Ethics - Understanding and level of practice
(WA8) Apply ethical principles and **commit** to professional ethics and responsibilities and norms of engineering practice. **(WK7)**

PROGRAMME LEARNING OUTCOME

Individual and Team Work – Role in and diversity of team
(WA9) Function effectively as an individual, and as a member or leader **in diverse teams and in multi-disciplinary settings**

PROGRAMME LEARNING OUTCOME

Communication – Level of communication according to type of activities performed
(WA10) Communicate effectively on **complex** engineering activities with the engineering community and with society at large, such as being able to **comprehend and write** effective reports and design documentation, make **effective presentations**, and give and receive **clear instructions**

PROGRAMME LEARNING OUTCOME

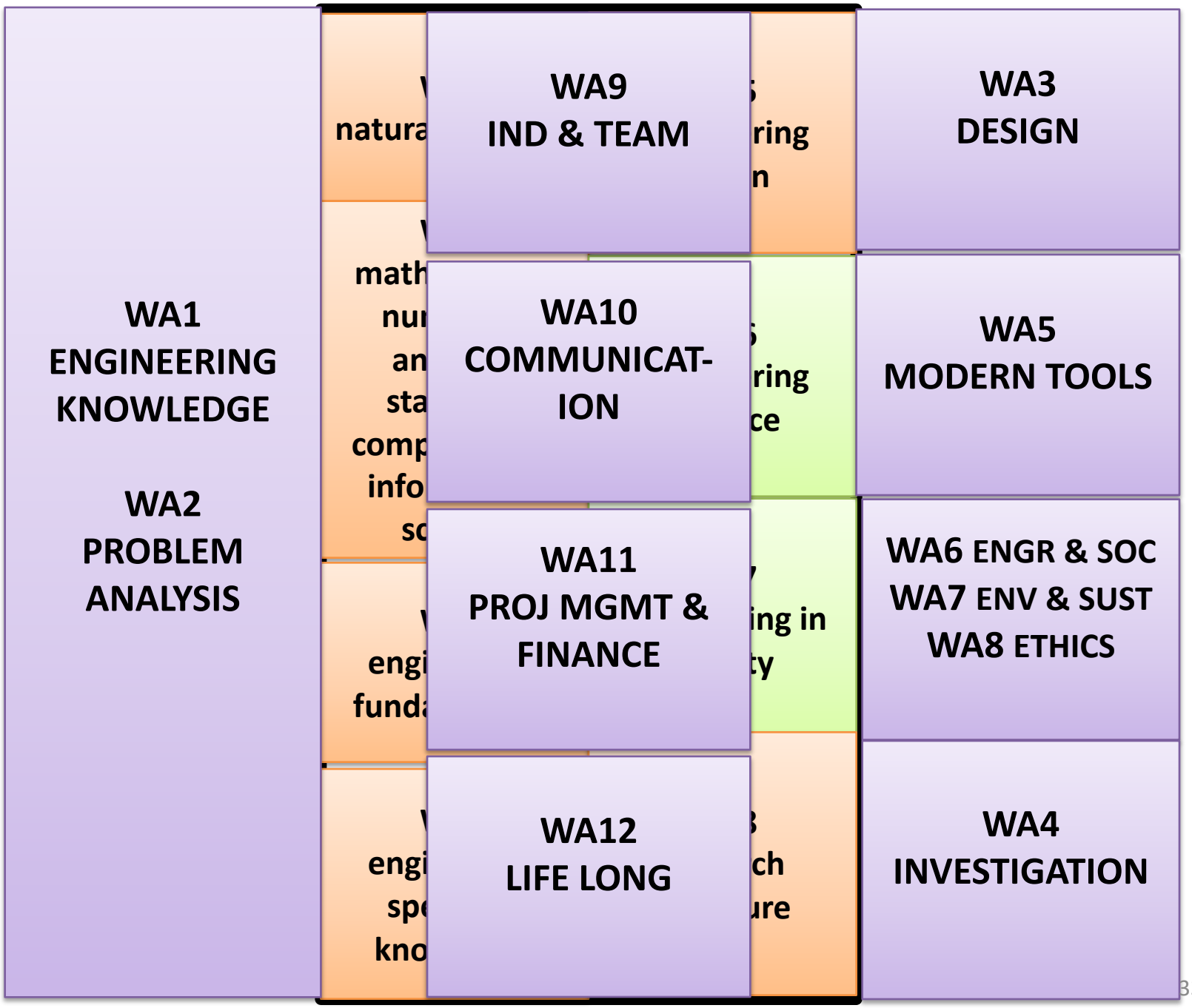
Project Management and Finance – Level of management required for differing types of activity
(WA11) Demonstrate knowledge and understanding of engineering and management principles and economic decision-making and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments

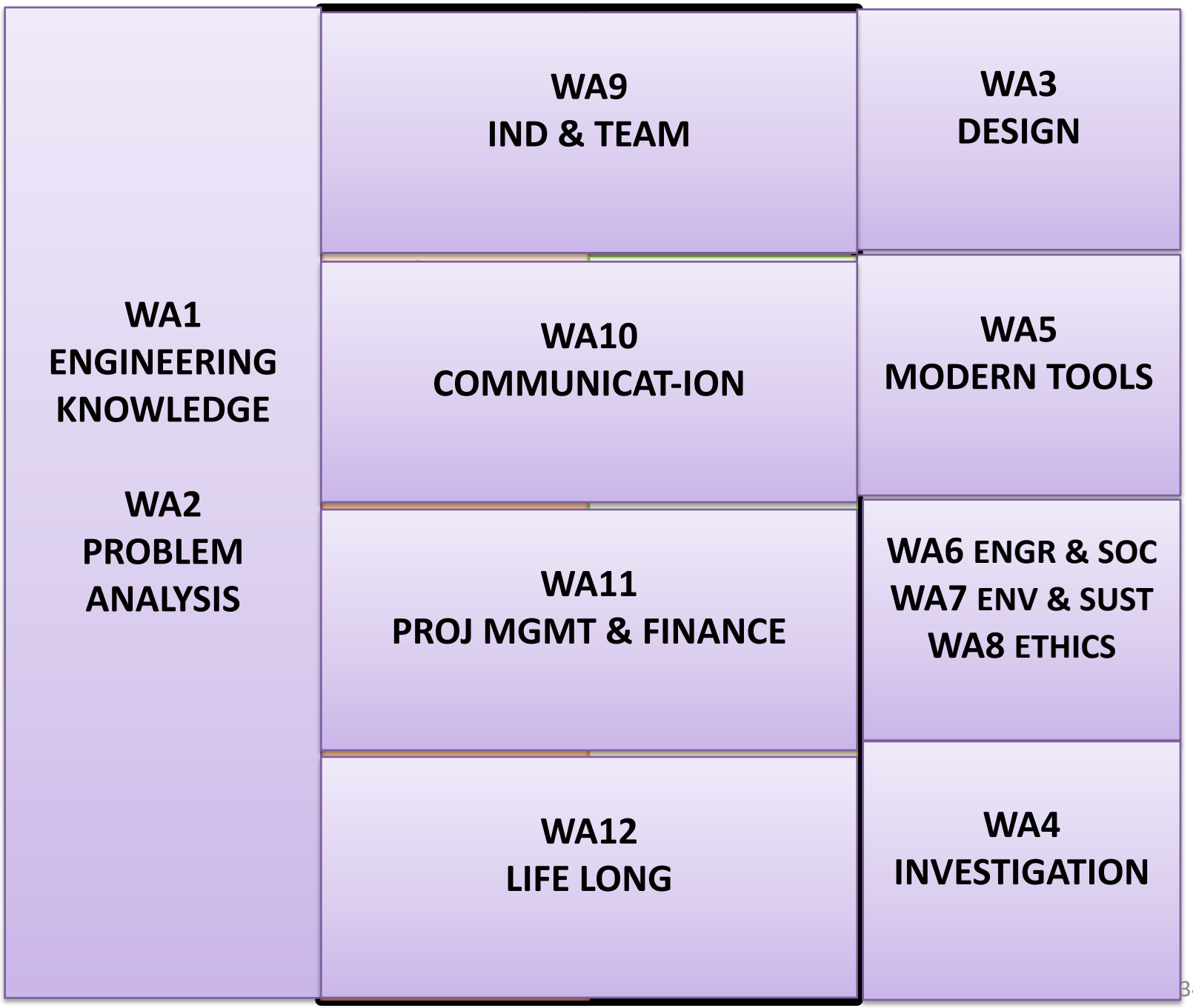
PROGRAMME LEARNING OUTCOME

Life-long Learning – Preparation for and depth of continuing learning
(WA12) Recognise the need for, and have the preparation and ability to **engage in independent** and **life-long learning** in the **broadest context of technological change**

Washington Accord Graduate Attributes
PROGRAMME OUTCOMES

WA1	Engineering Knowledge	Breadth & depth of knowledge
WA2	Problem Analysis	Complexity of analysis
WA3	Design/Development of Solutions	Breadth & uniqueness of engineering problems i.e. the extent to which problems are original and to which solutions have previously been identified and coded
WA4	Investigation	Breadth & depth of investigation and experimentation
WA5	Modern Tool Usage	Level of understanding of the appropriateness of the tool
WA6	The Engineer and Society	Level of knowledge and responsibility
WA7	Environment and Sustainability	Type of solutions
WA8	Ethics	Understanding and level of practice
WA9	Individual and Team Work	Role in and diversity of team
WA10	Communication	Level of communication according to type of activities performed
WA11	Project Management and Finance	Level of management required for differing types of activity
WA12	Life-long Learning	Preparation for and depth of continuing learning


WA1
ENGINEERING
KNOWLEDGE
WA2
PROBLEM
ANALYSIS
WA9
IND & TEAM
WA3
DESIGN
WA10
COMMUNICAT-
ION
WA5
MODERN TOOLS
WA11
PROJ MGMT &
FINANCE
WA6 ENGR & SOC
WA7 ENV & SUST
WA8 ETHICS
WA12
LIFE LONG
WA4
INVESTIGATION


WA1
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WA12
LIFE LONG
WA3
DESIGN
WA5
MODERN TOOLS
WA6 ENGR & SOC
WA7 ENV & SUST
WA8 ETHICS
WA4
INVESTIGATION

Complex Problem

Need to think broadly and systematically and **see the big picture**

Difficult Decision

Uncertain Strategy

Confusing Idea

Contentious Product

Intractable Change

Complex Problems *(Need High Taxonomy Level)*

Complex Engineering Problems have characteristic WP1 and some or all of WP2 to WP7, EP1 and EP2, that can be resolved with in-depth forefront knowledge

WP1	Depth of Knowledge required	Resolved with **forefront in-depth** engineering knowledge (WK3, WK4, WK5, WK6 or WK8) which allows a fundamentals-based, first principles analytical approach
WP2	Range of conflicting requirements	Involve **wide-ranging or conflicting** technical, engineering and other issues.
WP3	Depth of analysis required	Have **no obvious solution** and require abstract thinking, originality in analysis to formulate suitable models.
WP4	Familiarity of issues	Involve **infrequently encountered** issues
WP5	Extent of applicable codes	**Beyond codes** of practice
WP6	Extent of stakeholder involvement and level of conflicting requirements	Involve **diverse groups of stakeholders** with widely **varying needs**.
WP7	Interdependence	Are **high level problems** including **many component** parts or sub-problems.
EP1	Consequences	Have **significant consequences** in a range of contexts.
EP2	Judgement	Require judgement in **decision** making

Complex Engineering Activities *(Project based)*

Preamble	**Complex activities** means (engineering) activities or projects that have **some or all** of the following characteristics listed below
Range of resources	**Diverse resources** (people, money, equipment, materials, information and technologies).
Level of interaction	Require resolution of significant problems arising from interactions between **wide ranging** or **conflicting** technical, engineering or other issues.
Innovation	Involve creative use of engineering principles and **research-based** knowledge in **novel** ways
Consequences to society and the environment	Have **significant consequences** in a **range of contexts**, characterised by **difficulty** of prediction and mitigation.
Familiarity	Can extend **beyond previous** experiences by applying **principles-based** approaches.

WA – WK – WP Relationships

WA1 – Engineering Knowledge
(Science, Mathematics & Engineering)
(WK1, WK2, WK3, WK4)

to solve
Complex Engineering Problems

WP1 – Depth of Knowledge required:
Resolved with **forefront in-depth** engineering knowledge
(WK3, WK4, WK5, WK6 or WK8)
which allows a fundamentals-based, first principles analytical approach

WK1 - natural sciences **(WA1)** **(know what)**

WK2 - mathematics, numerical analysis, statistics, computer and information science **(WA1)**

WK3 - engineering fundamentals **(WA1)**

WK4 - engineering specialist knowledge **(WA1)**

WK5 - engineering design **(know how)**
WA3 - Design

WK6 - engineering practice **(know how)**
WA5 - Modern Tools

WK8 - research literature **(know why)**
WA4 - Investigation

to solve
Complex Engineering Problems

WK1 - natural sciences **(WA1)**

WK2 - mathematics, numerical analysis, statistics, computer and information science **(WA1)**

WP1 – Depth of Knowledge required:

Resolved with **forefront in-depth** engineering knowledge (WK3, WK4, WK5, WK6 or WK8) which allows a fundamentals-based, first principles analytical approach

WK3 - engineering fundamentals **(WA1)**

WK4 - engineering specialist knowledge **(WA1)**

WK5 - engineering design
WA3 - Design

WK6 - engineering practice
WA5 - Modern Tools

WK8 - research literature
WA4 - Investigation

WP2	**Range of conflicting requirements**
WP3	**Depth of analysis required**
WP4	**Familiarity of issues**
WP5	**Extent of applicable codes**
WP6	**Extent of stakeholder involvement and level of conflicting requirements**
WP7	**Interdependence**
EP1	**Consequences**
EP2	**Judgement**

Some or all
WP2 – WP7, EP1 & EP2

to solve
Complex Engineering Problems

WK1 - natural sciences **(WA1)**

WK2 - mathematics, numerical analysis, statistics, computer and information science **(WA1)**

WP1 – Depth of Knowledge required:

Resolved with **forefront in-depth** engineering knowledge (WK3, WK4, WK5, WK6 or WK8) which allows a fundamentals-based, first principles analytical approach

WK3 - engineering fundamentals **(WA1)**

WK4 - engineering specialist knowledge **(WA1)**

WK5 - engineering design
WA3 - Design

WK6 - engineering practice
WA5 - Modern Tools

WK8 - research literature
WA4 - Investigation

WP2	**Range of conflicting requirements**
WP3	**Depth of analysis required**
WP4	**Familiarity of issues**
WP5	**Extent of applicable codes**
WP6	**Extent of stakeholder involvement and level of conflicting requirements**
WP7	**Interdependence**
EP1	**Consequences**
EP2	**Judgement**

WK7 - engineering in society
WA6 - engineer & society
WA7 - environment & sustainability
WA8 - ethics

Breadth

Design Course

WK1 - natural sciences **(WA1)**

WK2 - mathematics, numerical analysis, statistics, computer and information science **(WA1)**

WP1 – Depth of Knowledge required:

Resolved with **forefront in-depth** engineering knowledge (WK3, WK4, WK5, WK6 or WK8) which allows a fundamentals-based, first principles analytical approach

WK3 - engineering fundamentals **(WA1)**

WK4 - engineering specialist knowledge **(WA1)**

WK5 - engineering design
WA3 - Design

WK6 - engineering practice
WA5 - Modern Tools

WK8 - research literature
WA4 - Investigation

WP2	**Range of conflicting requirements**
WP3	**Depth of analysis required (WA2)**
WP4	**Familiarity of issues**
WP5	**Extent of applicable codes**
WP6	**Extent of stakeholder involvement and level of conflicting requirements WK7 (WA6, WA7, WA8)**
WP7	**Interdependence**
EP1	**Consequences**
EP2	**Judgement**

WK7 - engineering in society
WA6 - engineer & society
WA7 - environment & sustainability
WA8 - ethics

WA2 - Problem Analysis
WA9 - Individual and Team Work
WA10 - Communication
WA11 - Project Management and Finance
WA12 - Life-long Learning

Rubric

Adopted from G.Rogers

	4 – Exceeds Criteria	3 – Meets Criteria	2 - Progressing to Criteria	1 - Below Expectations
Content	Provides ample supporting detail to support solution/ argument	Provides adequate supporting detail to support solution/ argument.	Some details but may include extraneous or loosely related material.	Inconsistent or few details that may interfere with the meaning of the text.
Organization	Organizational pattern is logical & conveys completeness & wholeness.	Organizational pattern is logical & conveys completeness & wholeness with few lapses.	Little completeness & wholeness, though organization attempted.	Little evidence of organization or any sense of wholeness & completeness.
Style	Uses effective language; makes engaging, appropriate word choices for audience & purpose.	Uses effective language & appropriate word choices for intended audience & purpose.	Limited & predictable vocabulary, perhaps not appropriate for intended audience & purpose.	Limited or inappropriate vocabulary for the intended audience & purpose.
	Consistently follows the rules of standard English	Generally follows the rules for standard English.	Generally does not follow the rules of standard English.	Does not follow the rules of standard English.

Board of Accreditaion for Engineering & Technical Education (BAETE) Manual (2nd Edition 2019) Effective 1st Jan 2020

Accreditation Criteria

4.1 Organization and Governance
4.2 Financial and Physical Resources
4.3 Faculty
4.4 Students
4.5 Academic Facilities and Technical Support
4.6 Curriculum and Teaching-Learning Processes
4.7 Program Educational Objectives (PEO)
4.8 Program Outcomes and Assessment
4.9 Continuous Quality Improvement (CQI)
4.10 Interactions with the Industry……

Lessons Learnt

- Many models
- Extent of adherence
- Minimum mastery
- Ability to solve complex problem
- Back to the Manual
- Use right terminology
- Appropriate measurement

OBE

Directed & Coherent Curriculum
Graduate Relevant to Industry

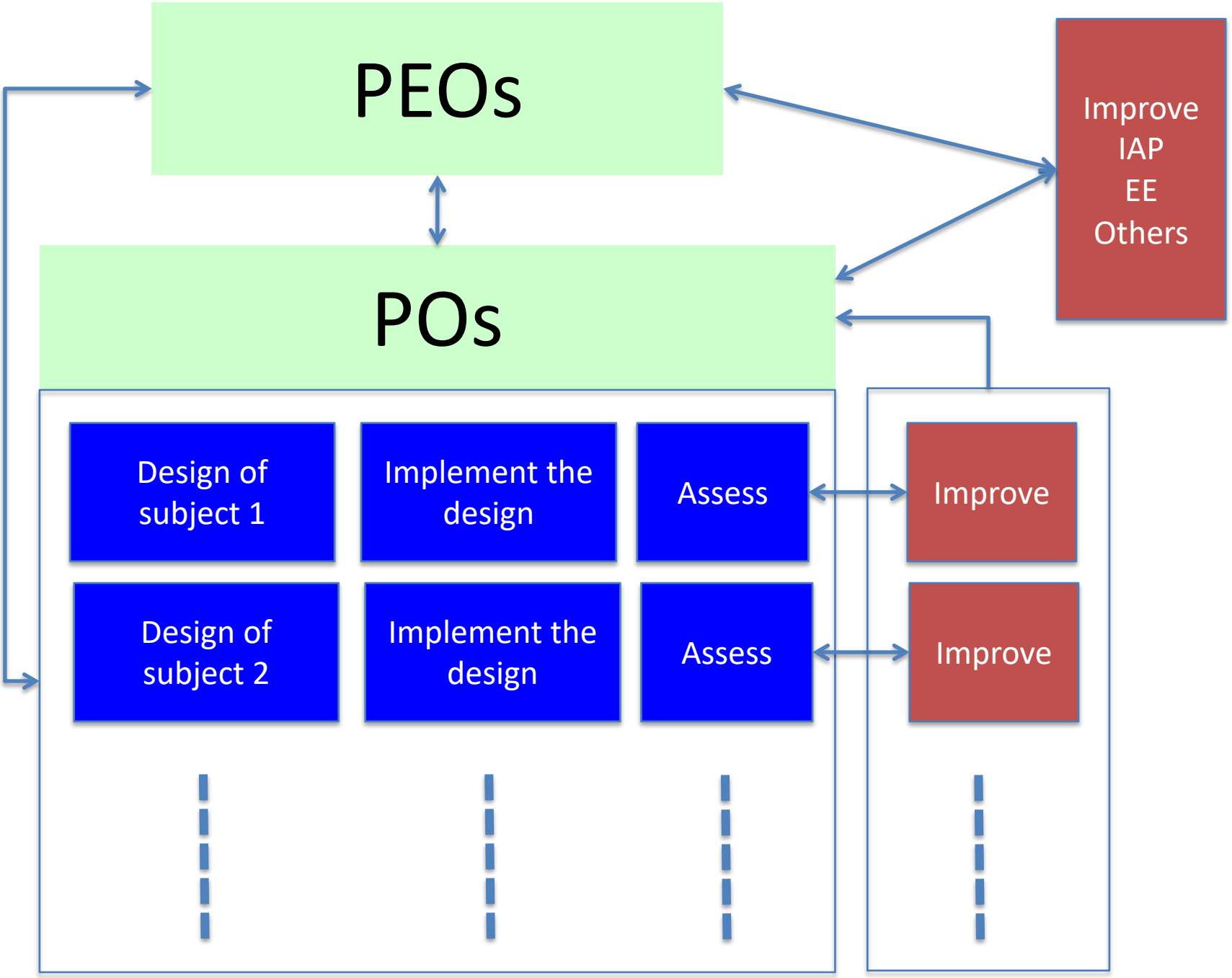
Programme Educational Objective
(after 3-5 Years)

Programme Learning Outcome
(at Exit)

Course/Unit/Learning Outcome
(Abilities & Intentional)

Accountable

Internally Driven CQI



Let's work it out

- Provide your comments on the statements in the slides allocated to the four groups. What are the probing required and your final judgment on the issue?
- How would you improve the situations?
- How would you write your judgment?

Group 1

- Uni Q decided to measure attainment of POs in the last two years of the program.
- Uni Y prefers in selecting a number of subjects within the program to show attainment of POs
- Uni Z chose to include only subjects own by the department conducting the program in showing attainment of POs
- Uni X has very few subjects allocated for non-technical POs

Group 2

- Uni A demonstrated strong attainment of technical POs but allowed students to fail only one of the non-technical POs
- Uni B approaches to demonstrate complex problem only at FYP
- Uni C defines complex problem as having breadth and depth at subject level
- Uni D specifies complex problem shall include all the knowledge profile

Group 3

- Two of 11 academics were not adhering to the designed OBE system. These two were teaching basic subjects; Statics and Mathematics
- Two thirds of the academics misaligned final examination questions from the CO-PO mapping
- Half of the academics set their assessment at higher taxonomy than the designed
- Rubrics were used as assessment tools in cognitive domain

Group 4

- The benchmarks for the attainment of POs were set at 50% for 50% of the students
- Three of the 30 subjects were allowing students who failed in one or two of the non-technical PO components of the subjects to move up the year without repeating the exact components
- Academics were having different understanding as to the interpretation of taxonomy level and strictly adhering to their interpretation.
- Rubrics were not used in assessing teamwork

BAETE's Expectations on Evaluators

- Commitment
- Not "Auditors"
- Reference Material: BAETE's Manual
- Pre-Visit Planning & Discussion
- Day -1 meeting (be seen doing it)
- Visit Day Aplomb & Decorum
- Reporting
- Response to factual inaccuracies

Pre-Accreditation Visit Meeting

- Meet at least **once** (in addition to the meeting on Day -1) **before** the **Accreditation Visit**, to study and discuss documents, and systematically identify shortcomings.
- Strategically plan and/or request supplementary input from the University to fill the gaps. (**Prepare interim report, checklist, schedule and assignment**)
- Further information required, communicate through PEC.

Day -1 Meeting

- Findings (interim report)
- Strategy (schedule & assignment)
- Update checklist

EVALUATION DAY

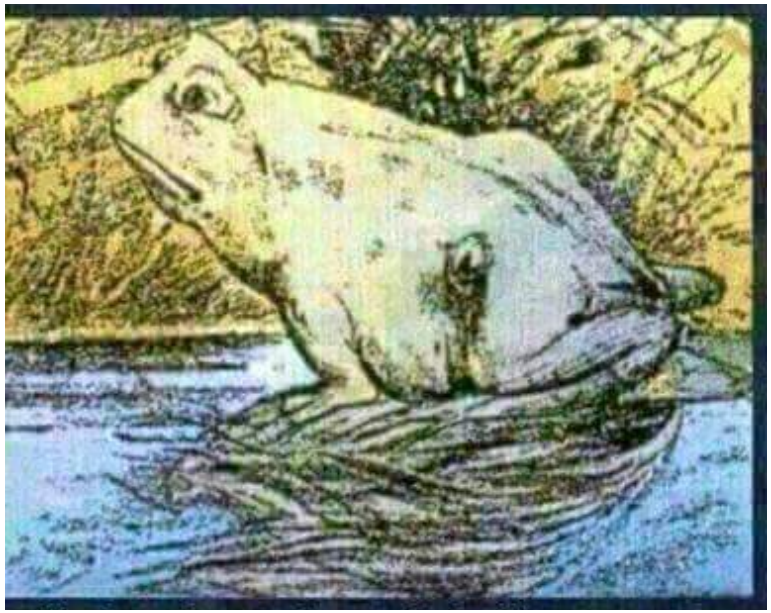
- **Opening meeting**
- Meeting with
  - staff members,
  - students,
  - external stakeholders such as alumni, employers, and industry advisor
- Visiting facilities.
- Checking relevant documents.
- **Exit meeting**

OPENING MEETING

- **Introduce** evaluation **team** members
- Mention the **objective** of the visit (programmes)
- Mention that it is **not fault finding** exercise but to identify the programme conformance to the Accreditation criteria
- Explain the **methods** of conducting the evaluation
- **Review** the plan and **schedule**
- **Confirm** the time of the **closing meeting**
- Invite the Programme owner to fill up **the latest** (within a specified timeframe) if any

TRIANGULATION … example

- Curriculum development (specification/input)
- Curriculum implementation (process)
- Demonstrated outcomes (output)



Its a horse?

Objective Evidence

Evidence is the facts or information used to prove or disprove a proposition. It should be collected through:

- Interviewing
- Observation of environment
- Observation of implementation
- Checking of records or document

Objective Evidence

- Evidence that exists
- Not influenced by emotion or prejudice
- Can be documented
- Is about quality
- Can be quantitative or qualitative
- Can be verified

Objective Evidence

The facts or information used to conclude whether a programme has or has not undertaken appropriate activities effectively to demonstrate attainment of the necessary outcomes.

EVALUATOR'S APPROACH

- Sensible questioning
- Check records
- Observing processes
- Analyse inputs and outputs
- Organised using tables, matrices, flowcharts and checklists

Questioning

6 friends – What, When, Why, Who, Where, How

Best friend – Show Me

Additional skills of LISTENING and OBSERVING

EFFECTIVE COMMUNICATION

Occurs when the right person, says the right things, to the right people, at the right place at the right time and in the right way to be heard and understood and to produce the right response.

Important

- Person is at ease in communicating with the Evaluator.
- Evaluator should do all he/she can to make person feel at ease.

EFFECTIVE COMMUNICATION (Cont..)

Tips

- Gain attention from the person before starting.
- Explain clearly the purpose of the session/visit.
- Include friendly remarks or express your interest in what he/she is doing.
- Politeness all the way never antagonise or belittle the person.
- Establish eye contact all the times.
- Communicate in the language he/she is comfortable.
- Use of body language to promote the dialogue. (Spoken message is 7%, verbal and vocal 38% and 55% facial).
- Listen, listen, listen, an Evaluator need to train himself to be an active listener.

POINTS TO CONSIDER IN DERIVING FINDINGS/CONCLUSION

- Establish requirement
- Probe process
- Whom do you speaks to?
- What to look for?
- Sampling
- How long to persist?
- Is there any shortcomings?
- Is it significant?
- Consult team members

Quiz

What are the six (6) typical starting words that Evaluators can begin with, when questioning?

Evaluators' Best friend ?

Quiz

What are the three (3) methods/techniques employed by Evaluators when conducting an accreditation exercise?

Opening Meeting - Evaluators

- Greetings
- Purpose
- Introduce team
- State standard & method
- Confidentiality
- Highlight some issues of interest
- Prepare questions for top management

Exit Meeting - Evaluators

- Greetings
- Thank IHL
- Relate strength
- Raise concerns
- Mention “detailed report & response to factual accuracies”
- Decision

Dos & Don'ts
Aplomb & Decorum

Dos	Don'ts
Formal attire	Track suit
Preparedness	Based on presentation
Time management	Not punctual
Well versed	Lack of knowledge
Probing	Surface
Big Picture	Compartmentalized
Triangulate	Single evidence
State the fact	Giving solutions
No surprises	Shocking decision
Collegial	Too formal
Serious	Too lighthearted

Don’ts

- Answering phone calls
- Silent
- Excused early
- Poor listener
- Opinionated
- Argumentative
- Please complete the list ….

COMPETENCY OF EVALUATORS

- Organizing skills
- Knowledge of the manual
- Questioning skills
- Comprehensiveness of the evaluation
- Listening to persons
- Overall appearances
- Reporting
- Overall judgment
- Overall rapport with persons
- Aplomb (self-confidence) and decorum (etiquette)

Random Observations

- Bullet points & Aggregation
- Ambiguous
- Poor time management
- Guidelines supersede Manual
- Keywords as sole determination
- Interrogative

Assessment for Decision

Malaysian Society For Engineering & Technology
Nurturing 21st Century Professionals

UTM UNIVERSITI TEKNOLOGI MALAYSIA

MJIIT MALAYSIA-JAPAN INTERNATIONAL INSTITUTE OF TECHNOLOGY

Senario A

Ten of the 40 subjects were indicating cognitive taxonomy level of 3 over a scale of 6. The rest, including the third and final years' subjects were indicating level 4. The final year's final examination questions mostly reached up to level 6.

An External Examiner's report indicated dissatisfaction over what he termed as poor curriculum design with regards to the taxonomy level.

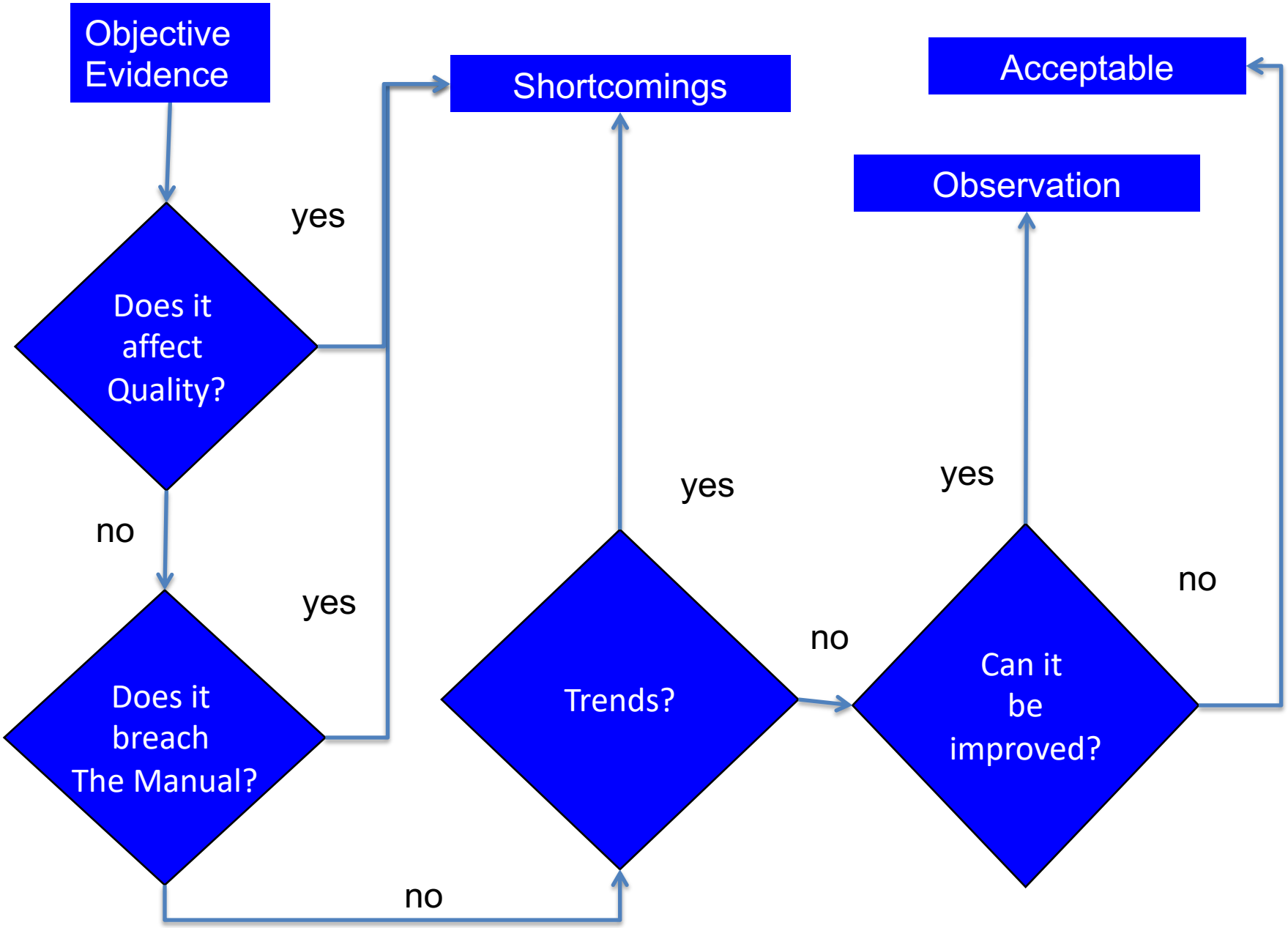
Laboratory works were mostly open ended. Final Year Projects (FYPs) were based on the research areas of the academic staff. Capstone design subject had industry involvement.

Majority of the students scored A in FYP and Capstone subject. Assessment Rubrics were widely used. Students were not satisfied with the Capstone subject on the allocated time and lacked of meeting space.

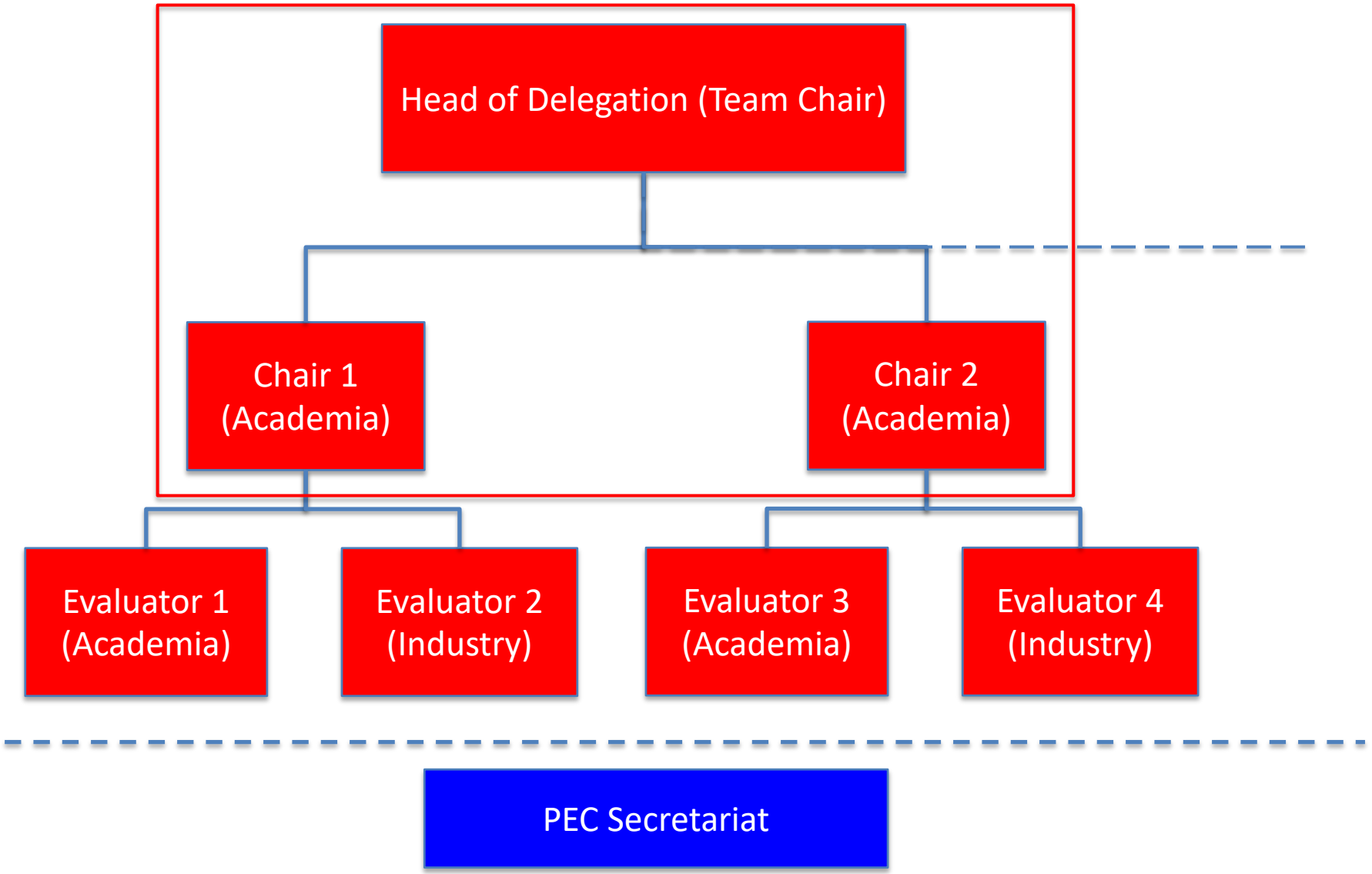
Question

How would you pursue to arrive at a decision, and state the justification. Classify the decision according to the clauses of the manual, indicating; strength, weakness, concern (major or minor) or OFI.

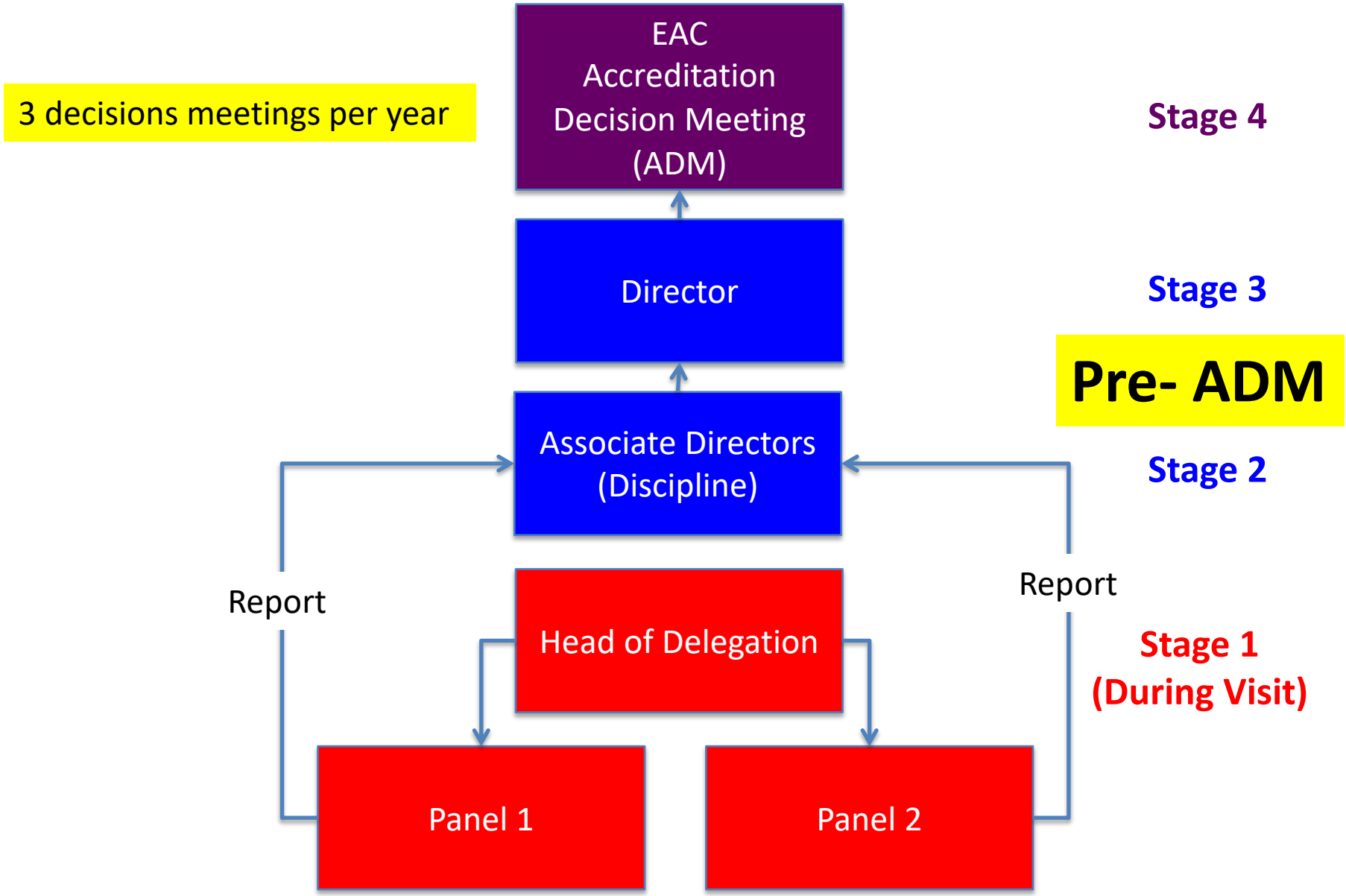
EVALUATION FLOW CHART



Accreditation Visiting Team



Consistency of Decision



Reporting

- Qualitative
- Strength
- Shortcomings (weaknesses)
- Concerns
- Opportunities for Improvement

Closing Remarks