

COREN ACCREDITATION: PROCESS, ASSESSMENT AND EVALUATION



A WORKSHOP FOR PROGRAMME EVALUATORS OF OUTCOME-BASED
ENGINEERING ACCREDITATION

BY

ENGINEERING ACCREDITATION COMMITTEE
COUNCIL FOR THE REGULATION OF ENGINEERING IN NIGERIA (COREN)

ON 26th NOVEMBER, 2024



Outcomes of the Workshop

At the end of this workshop, participants are expected to:

1. know different types of COREN Accreditation Visits.
2. explain in detail the Procedure for COREN OBE Accreditation
3. understand the steps for assessment and evaluation of Programme

Outline of the Workshop

1. Types of COREN Accreditation Visits
2. Procedure for COREN OBE Accreditation
3. Steps for Assessment and Evaluation of Programmes

SECTION A
COREN ACCREDITATION VISITS

TYPES OF ACCREDITATION VISITS

Resource Verification Visit

1. The Institution apply for Resource Verification at least **9 months** before the first intake of students.
2. A grace period of six (6) months shall be given, If engineering facilities and equipment are found to be inadequate and Resource Inspection visitation conducted again.

TYPES OF ACCREDITATION VISITS ...

Pre-Accreditation Visit

1. 1 years after the Resource verification approval, COREN shall conduct Pre-Accreditation Exercise.
2. An institution that scores more than 50% shall be granted “Passed Pre-Accreditation” by E &T C.
3. New programme shall be given interim accreditation status until there are feedbacks on the performance of graduates meeting ***societal needs*** (such as Employers, Alumni, PEOs, Community Services, etc.).

TYPES OF ACCREDITATION VISITS ...

Accreditation Visit

1. Programme seeking accreditation for the first time applies for Accreditation visit towards the end of the sixth semester (Third year of study).
2. The programmes seeking re-accreditation apply within the last year, but not exceeding six months before the expiration from the accreditation period granted.
3. All cases of non-compliance shall attract a penalty of 20% administration cost of the total cost of the accrediting the programme.

TYPES OF ACCREDITATION VISITS ...

Post Accreditation Visit

1. COREN shall conduct unannounced Post Accreditation visits to the institutions in order to maintain the standard of the programme.
2. The visit is to be conducted by selected Evaluators whose report goes directly to the Registrar.

Section B-
PROCEDURE FOR COREN ACCREDITATION
VISITS

PROCEDURE FOR ACCREDITATION VISIT

- ❖ COREN conducts accreditation of engineering programmes based on the following steps:

Identify and publish programmes that are in the last year of their accreditation statuses.

COREN notifies concerned institutions on accreditation expiration (at least 12 months).

6 months before the expiration of the existing accreditation status, the institution informs COREN of their readiness for the accreditation exercise by sending in a completed SAR

PROCEDURE FOR ACCREDITATION VISIT ...

If the SAR submitted is found satisfactory, the COREN schedules an accreditation visit. Otherwise, the institution is asked to provide further information before an accreditation visit is scheduled.

If the required information is not provided within 3 months [non-compliance], the accreditation process shall attract a penalty of 20% of the total cost of accrediting the programme.

At the expiration of the second warning, the programme shall be deemed to have failed accreditation and graduates of the programmes shall not be eligible for COREN registration

Selection/Notification of Evaluators by EAC (Section 2.11).

PROCEDURE FOR ACCREDITATION VISIT ...

COREN sends the list of the Evaluators to the institution (30 days before Accreditation Visit) in order to resolve any conflict of interest.

Submission of SSR to COREN by the institution at least 1 month before the scheduled visit.

COREN sends the SSR and other necessary documents to the Evaluators at least 2 weeks before the scheduled visit.

The visitation team conducts accreditation process and prepares a report on their findings using the accreditation manual and BMAS

PROCEDURE FOR ACCREDITATION VISIT ...

Presentation of the accreditation visitation report to the COREN.

Deliberation on the accreditation reports and decision-making by EAC of COREN.

EAC of COREN decision on accreditation status is forwarded to COREN Council for notification.

The Registrar communicates EAC's decision on the status of accreditation to the concerned institutions.

EAC of COREN updates the institution's accreditation status on the COREN website.

EAC of COREN receives and acts on appeal for consideration, if any

SECTION C:

**DIFFERENCES BETWEEN THE PRESENT COREN
ACCREDITATION PROCEDURE AND THE PROPOSED
OBE ACCREDITATION.**

1: Programme Outcomes and Educational Objectives

- Different Accreditation Criteria: PEOs, POs and CLOs
 - ✓ Development of PEOs and CLOs with involvement of all Stakeholders
 - ✓ Adoption of POs.
 - ✓ Assessment, Evaluation and Review of Programme Outcomes and Educational Objectives periodically.
 - ✓ Considering the societal needs (soft skills such as creativity, problem solving, team work, management and Entrepreneurial skills, decision making.
 - ✓ Evidence of involvement of all Stakeholders in the development, Assessment, Evaluation and Review of Outcomes and Objectives.

EMPLOYABILITY AND QUALITY OF EDUCATION

- Detoun Ogwo (2010) reported a survey on youth employability based on completed questionnaires by 91 Human Resources Managers and Personnel from selected network of companies and the results are as follow:
 - ✓ 48 % of employers rated young graduates “poor” in conceptual and creative thinking
 - ✓ 44 % of employers rated young graduates “poor” in self-awareness
 - ✓ 39.6 % of employers rated young graduates “poor” in time management
 - ✓ 36 % of employers rated young graduates “poor” in global and commercial awareness
 - ✓ 34.1 % of employers rated young graduates “poor” in sense of career direction

EMPLOYABILITY AND QUALITY OF EDUCATION...

- ✓ 34.1 % of employers of employers rated young graduates “poor” in emotional intelligence
- ✓ 39.1 % of employers of employers rated young graduates “poor” in managing school to work transition

➤ In conclusion, the data above confirmed that:

- ✓ There is a gap between teachings in tertiary institutions and meeting the skills set demands of industries.
- ✓ Students should be empowered with life-skills required to navigate through life.
- ✓ There is the urgent need to restructure existing curricula to support employers demands and promote conceptual and creative thinking, self-awareness, sense of career direction and emotional intelligence.

2. Mapping and Attainment of CLOs, POs and PEOs

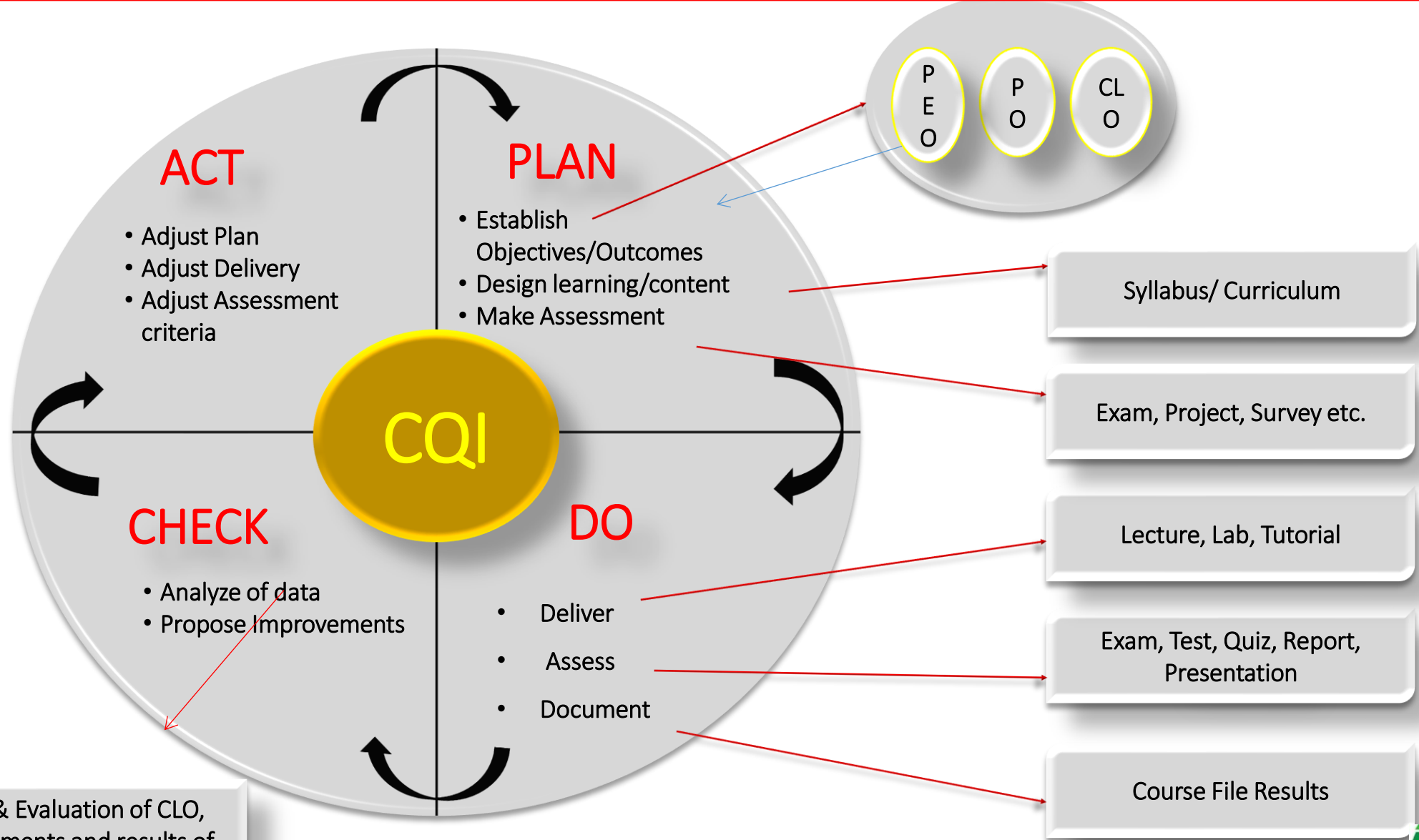
- Linking Topics to Programme Educational Objectives (PEOs)
 - ✓ Topics lead to learning objectives
 - ✓ Group/individual learning objectives lead to course outcome
 - ✓ Course outcomes must relate to programme outcomes
 - ✓ Programme outcomes must address the Programme Educational Objectives
(What kind of “engineers” to produce?)
- Determination of CLOs, POs and PEOs attainment levels

3: Setting up of Industrial Advisory Board/Committee for the Programme

- ✓ Development of **Industrial project** to Improve student competence in communication, teamwork, and project management.
- ✓ Formulation of **Design course** to address industrial needs.
- ✓ Encourage students to participate in industrial discussions and fora, professional practice exposure, and collaborative projects / research for the solutions to engineering problems.
- ✓ Participate in students' activities and involvement in student organizations to provide experience in management and governance, representation in education and related matters and social activities.
- ✓ Participate in the development/ review of PEOs, evaluation of the level of achievement of the PEOs and POs.
- ✓ Provision of additional support to sustain and enhance the quality of the programme.

4: Involvement of more stakeholders in the development, assessment, evaluation and reviewing of Programme Outcomes and educational Objectives to meet the needs of the society at a given attainment levels.

5: Continuous Quality Improvement (CQI): A new criterion



6. Definition of Key Performance Indicators (KPI) for each Accreditation criterion.

- KPI is a measurable value that demonstrates how effectively a Programme is achieving Key Outcomes and Objectives.
- Organization uses KPIs to evaluate their success at reaching targets (Outcomes and Objectives)

Outcome to measured : Good Teamwork

Students are able to demonstrate:

1. Positive contribution to the team project (minutes of meeting)
2. Well prepared and participate in discussion(observation)
3. Volunteer to take responsibility
4. Prompt and sufficient attendance
5. Aplomb (Composure) and decorum (Modesty)

7. Training of Accreditation evaluators in line with international best practices.
8. Qualifying Requirements for COREN Accreditation visit: Development and submission of Self-Assessment Report (SAR) to COREN at least 6 months before the expiration of the present Accreditation status. This shows the readiness of the programme for Accreditation visit.
9. Development of OBE scoring software for mapping and Assessment of Programme Outcomes and Educational Objectives.

10. Measurements of OBE Accreditation visit will be in terms of

- ✓ **Concern**
- ✓ **Weakness**
- ✓ **Deficiency**
- ✓ **Compliance and**
- ✓ **Opportunity for improvement.**

11. Opportunity to appeal the outcomes of COREN Accreditation visit.

12. Development of COREN OBE Accreditation Manual, 2019

13. Institutional Linkage and Community Service as a criterion and core requirement for Accreditation

- Industrial collaboration and linkages programme
- Promotes Industrial and Universities relationship
- Feedback from the industry and employers is crucial and an essential part of curriculum review process used to evaluate attainment of the PEOs.
- Opportunity for Staff to contribute to the development of their immediate community and the nation through community service, projects within and outside the Universities.

SECTION C
ASSESSMENT

ASSESSMENT GUIDELINES

Evaluation of programmes shall be evidence based in strict adherence to the criteria set in the COREN BMAS and the OBE Accreditation Manual. This includes auditing and confirmation of **documents submitted by the educational Institution.**

In awarding marks and grades, Evaluators shall strictly adhere to the grading guidelines provided in:

- a) The OBE Accreditation Manual,
- b) Programme Evaluators' Manual and
- c) COREN BMAS.

DOCUMENTS FOR ACCREDITATION

The documents required for accreditation specified in COREN publication include:

- a) Outcome Based Engineering Education: Benchmark Minimum Academic Standards,
- b) Accreditation Scoring Criteria for Undergraduate Engineering Programmes in Nigerian Universities, published in 2017
- c) OBE Accreditation Manual,
- d) Self-Study Report (SSR) in Hardcopy**
- e) Duly filled annexes provided in the OBE Accreditation Manual, in Hardcopy.**
- f) Supporting Material/Documents, either in Hardcopy or in Digital form.**

Items (d) and (e) are prepared by an engineering programme to be accredited.

It is submitted at least 6 and 1 month respectively, before commencement of accreditation visit.

PUBLICATION OF ACCREDITATION STATUS

- ❑ **COREN shall regularly update and publish the list of all accredited programmes clearly indicating their current status:**
 - ✓ Hard copies and circulate to CODET
 - ✓ Electronic on COREN website
 - ✓ Share with FME and NUC
 - ✓ Share with major Employers

REVALIDATION OF AN ACCREDITED PROGRAMME

- **The Institution proposing any change(s) to an accredited programme shall give detailed information to COREN under the following circumstances:**
 - ✓ An increase in the student enrollment.
 - ✓ A change in the scope of the programme objective /curriculum/nomenclature.
 - ✓ Addition of new stream/specialization in the programme's scheme of study.
 - ✓ Change of mode of delivery, etc.
- Failure to do so may cause COREN to withdraw the accreditation.
- COREN may then direct the Institution to apply for re-accreditation of the revised programme.
 - ✓ The application must be submitted at-least 6-months before the date of effective implementation of the proposed change.

ACCREDITATION PROCESS AND TIMELINE

□ Day 1

- i) Arrival and pre-accreditation meeting
- ii) Reviewing of SSR.

□ Day 2

- i) Opening meeting with Dean of Engineering and Head of Institution,
- ii) Inspection of common facilities (Library, Workshop, Drawing Studio, etc.)
- iii) Breaking of accreditation team into smaller groups for specific Engineering Programmes.

□ Day 3

- i) Use of information from SSR for assessment of programme
- ii) Visit of laboratories, workshops, etc
- iii) Review of student and staff files,

ACCREDITATION PROCESS AND TIMELINE...

- iv. Audit past question papers and marking guide, and students' laboratory reports
- v. Inspection of past final year student project reports and prototypes
- vi. Observe typical lectures/class session as handled by lecturers,
- vii. Interaction with students and staff (both teaching and non-teaching)
- viii. Review of Employers' rating of former students
- ix. Score the Engineering Programme being accredited and preparation of report
- x. Plenary meeting of accreditation team members.

□ Day 4

- i) Meeting with faculty members to discuss findings of the accreditation teams,
- ii) Exit meeting with head of Institution to discuss findings.

□ Day 5

- i) Return of Team members to their Stations.

REPORT AND RECOMMENDATIONS

- The report of accreditation is prepared by the Accreditation Team
- The report must be in accordance with Programme Evaluators' Guideline
- The report shall be submitted to E & T Committee, COREN

STRUCTURE OF ACCREDITATION FEES AND EXPENSES

1. The Institution shall bear all the costs incurred for carrying out activities related to the approval and accreditation of a programme.
2. The total cost is paid to COREN before the commencement of the accreditation process.
3. Additional cost shall be incurred for postponement of accreditation exercise.

NB: The chargeable fee for various types of accreditation visits and other issues (i.e. Resource Verification, Pre-Accreditation, Accreditation, Re-Accreditation,, Change of Scope, and Appeal cases) shall be as prescribed by COREN from time to time.

**SECTION D:
ACCREDITATION EVALUATION, CONFIDENTIALITY
AND CONFLICT OF INTEREST**

ACCREDITATION EVALUATION

The evaluation exercise shall be conducted by a Team of Evaluators appointed by COREN.

CONFIDENTIALITY

All Documents and information obtained during the process of accreditation exercise shall be treated as confidential.

CONFLICT OF INTEREST

1. Members of Council, E & T Committee and Department staff are expected to be constantly aware of any conflict of interest.
2. Members of Council and E & T Committee shall declare their interest or withdraw from any situation or activity that may constitute a conflict of interest.

Thank

you



The End

Q & A