NBA Accreditation-An overview

Dr Abdul Gafur M Principal Ilahia College of Engineering and Technology, Mulavoor "Learning gives creativity, Creativity Leads to thinking, Thinking provides knowledge, Knowledge makes you Great"

A P J Abdul Kalam

About NBA

- The National Board of Accreditation (NBA) was setup in September 1994 by the AICTE to assess the qualitative competence of the programs offered by technical educational institutions from diploma level to post-graduate level in engineering and technology, management, pharmacy, architecture and related disciplines.
- In April 2013 it became completely independent of AICTE, administratively as well as financially

Evaluation Criteria

- vision, mission and objectives,
- organization and governance,
- infrastructure facilities,
- quality of teaching and learning,
- curriculum design and review,
- support services (library, laboratory, instrumentation, computer facilities, etc.)
 - To help the graduates produced by the institutions as per industry requirements

National Employability Report Engineers, 2019

- Only 3.84% of engineers are employable in software-related jobs at start-ups.
- Around 3% engineers possess new-age skills in areas such as AI, Machine Learning, Data engineering and Mobile technologies.
- ▶ On an aggregate level, employability in these areas is around 1.5–1.7%.
- US has a much higher proportion of engineers, almost four times, who have good programming skills as compared to India.

National Employability Report Engineers, 2019 (Contd..)

- A much higher percentage of Indian engineers (37.7%) cannot write an error-free code, as compared to China (10.35%).
- Only 40% of engineering graduates end up doing an internship and 36% do any projects beyond coursework.

Reference:

https://www.aspiringminds.com/researchreports).

Outcome based Education (OBE)

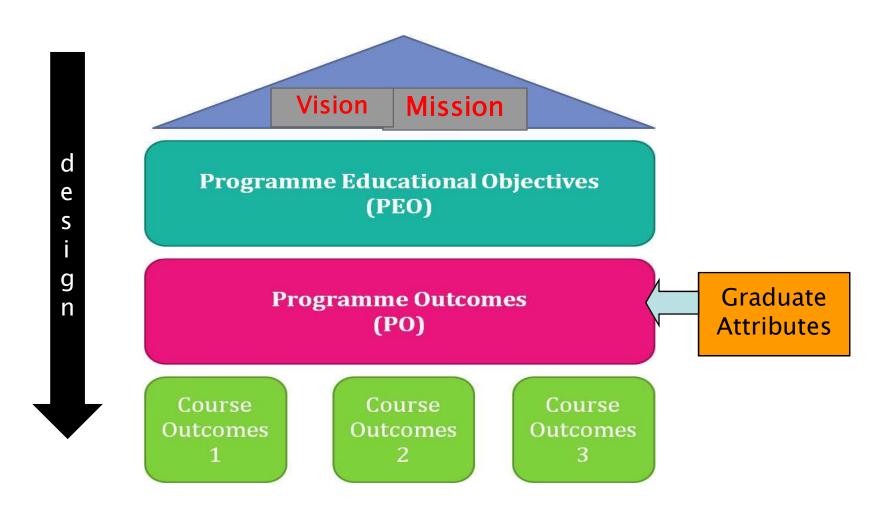
- Outcome-based education is targeted at achieving desirable outcomes (in terms of knowledge, skills, attitudes and behaviour) at the end of a program.
- Teaching with this awareness and making the associated effort constitutes outcome-based education.
- Outcomes are dependent not only on inputs but also on the processes followed by an institution

POs-Diploma Engineering

OBE - 5 D's

- Define Outcomes (What to achieve)
- Design Curriculum (What is provided)
- ✓ Deliver Instruction (Learning methods)
- Document Results (Get result)
- Determine Advancement (Introspect)

OBE Design



When to Assess

Program Educational Objectives(PEOs)

Few years after Graduation – 4 to

Graduation – 4 to 5 years



Program Outcomes (POs)



Course Outcomes (COs)

Upon graduation



OBE Teaching & Learning

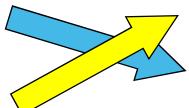
- There is no single specified style of teaching or assessment in OBE; instead, classes, opportunities, and assessments should all help students achieve the specified outcomes
- The role of the faculty adapts into instructor, trainer, facilitator, and/or mentor based on the outcomes targeted
- Not Sage on the Stage, But Guide on the Side

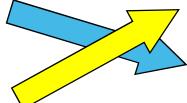
Revised Bloom's Taxonomy

Original Terms

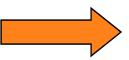
New Terms

- Evaluation
- -Synthesis
- Ahalysis
- Application
- Comprehension
- Knowledge















- Evaluating
- Analysing
- Applying
- Understanding
- Remembering

Dr Abdul Gafur M, Principal. ILAHIA College of Engineering & Technology.

Benefits of Accreditation

- Helps the institution to know its strengths, weaknesses and opportunities;
- Initiates institutions into innovative and modern methods of paedagogy;
- Gives institutions a new sense of direction and identity;
- Provides society with reliable information on quality of education offered;
- Students studying in NBA accredited programs can be assured that they will receive education which is of high academic quality and professional relevance

Benefits of Accreditation (Contd..)

- Accreditation assures prospective employers that students come from a program where the content and quality have been evaluated, satisfying established standards
- Accreditation helps in gaining confidence of stakeholders and in giving a strong message that as a country, our technical manpower is of international standards and can be very useful in enhancing the global mobility of our technical manpower.

The Impact of Accreditation

- Encourages quality improvement initiatives by institutions;
- improves student enrolment both in terms of quality and quantity;
- Helps the institution in securing necessary funds;
- Enhances employability of graduates;
- Facilitates transnational recognition of degrees and mobility of graduates and professionals;
- Contributes to social and economic development of the country by producing high quality technical manpower.

Classification of Institutions

Presently, NBA operates on a two-Tier system for Undergraduate Engineering Programs only.

TIER-I

- ▶ IIT, IISc,IIIT, NIT
- Central Universities, State Universities,
- PrivateUniversities
- Deemewd-to-be -Universities
- Autonomous Instituitions

TIER-II

Non-autonomous technical institutions affiliated to a University which may include

- Government Colleges
- Government Aided Colleges
 - Private/Self Financing Colleges

General Policy on Accreditation

- NBA accredits programs of technical institutions
- Except Management programs, all other programs from which at least two batches of students have graduated are considered for accreditation.
- For Management programs, where at least three batches of students have graduated are considered for accreditation.

Evaluation Criteria (Diploma Engg.)

Criterion No.	Program level Criteria	Points	
1	Vision, Mission, Program Educational Objectives	50	
2	Program Curriculum and Teaching – Learning Processes	200	
3	Course Outcomes and Program Outcomes	100	
4	Students' Performance	200	
5	Faculty Information and Contributions	150	
6	Facilities and Technical Support	100	
7	Continuous Improvement	75	
Institute Level Criteria			
8	Student Support Systems	50	
9	Governance, Institutional Support and Financial Resources	75	
Total Points		1000	

Accreditation Workflow

SAR Preparation

Evaluation Guidelines

Accreditation Visit

Factors to be assessed

- Outcomes of the education provided;
- Quality assurance processes; including internal reviews;
- Assessment;
- Activities and work of the students;
- Entry standards and selection for admission of students;
- Motivation and enthusiasm of faculty;
- Qualifications and activities of faculty members;
- Infrastructure facilities;
- Laboratory facilities;
- Library facilities;
- Industry participation;
- Organization.

Meeting with

- The Head of the Institution/Dean/Heads of Department (HoD)/Program and Course Coordinators;
- A member of the management
- Faculty members;
- Alumni
- Students; and
- Parents

Availability of the Exhibits

- Profile of faculty involved in the program;
- Evidence that the results of assessment of course outcomes and program outcomes are being applied to
- List of publications, consultancy an sponsored/funded research projects by the program faculty;
- Sample materials for theory and laboratory courses
- Sample test/semester examination question papers
- Sample test/semester examination answer scripts, project, assignments (excellent, good, marginal one)
- Student records of three immediate batches of graduates
- Sample project and design reports (excellent, good, marginal)
- Sample student feedback form
- Sample for industry institute interaction
- Result of quality assurance review (auditing report)
 - Records of employment/higher studies of graduates
 - Records secademic support and other learning activities

Visit to

- Classrooms
- Laboratories pertaining to the program
- Central and department library
- Computer centre

Exit meeting

The Evaluation Team should conduct an Exit Meeting with the Management Representative, the Head of the Institution, the Head of Department and other key officials at the end of the on-site visit to present its findings (strengths, concerns, weaknesses, deficiencies). The instituting will be given a chance to withdraw one or

Reconsideration of the programs

If a program is 'not accredited' or withdrawn during the visit, a fresh application for accreditation of the same program could be considered after one year from the date of previous visit of the Visiting Team.

Composition of the Evaluation Team

- NBA's Evaluation Team comprises of one Chairperson (Team Chair) and two Program Evaluators for each program.
- In case, the visit is to evaluate a single program, the Team may consist of the Chairperson and one Evaluator. In such cases, while appointing the Chairperson, NBA shall ensure that the Chairperson belongs to the same or allied program discipline.
- The Program Evaluators may be from amongst the serving as well as retired professionals.

Evaluation Documents

Award of Accreditation

- Accreditation of the Program for Six years;
- (>=750 points, 60% in Criteria 4-6, satisfies all conditions of 3 years accreditation)
- Accreditation of the Program for Three years;
- > (>=600 points, admission 50% and 1:30 Faculty Student Ratio averaged for latest three years)
- No Accreditation of the program.

Appeal

- If the institution is not satisfied with the NBA's decision on the Status of Accreditation, then the institution can make an appeal against the decision within 30 days of date of receipt of communication from NBA.
- The appeal is placed before the Appellate Committee and its recommendations are considered by the Academic Advisory Committee (AAC) for taking decision on appeal.

NBA Policy on Misconduct shown or/and done by an Institution

National Board of Accreditation

appropriate penalty would be awarded to the institution after due verification of the facts by way of either inquiry and/or the institution given an hearing as detailed below:

Sr. No.	Misdemeanor	Penalty
1.	False/misleading advertisement not conforming to NBA norms in any public media.	Notice to withdraw false information within 7 days or else withdrawal of accreditation.
2.	Information on website conflicting with SAR.	Notice to correct information on website within 7 days or else withdrawal of accreditation.
3.	False information in pre-qualification form – clerical/typo errors.	Re-submission within 2 weeks.
4.	False information in pre-qualification form – wilful falsification of data.	Not Eligible for accreditation for 2 years.
5.	False information in SAR not affecting accreditation.	Re-submission of information within 4 weeks.
6.	False information in SAR affecting accreditation.	Not Eligible for accreditation for 3 years.
7.	Attempts to influence Visiting Teams or other NBA authorities.	Not Eligible for accreditation for 2 years.
8.	Non-cooperation with NBA teams on official or surprise visits.	Not Eligible for accreditation for 2 years.

Fee structure

Pre-Qualifier

Course-File Index

Sample Question-Paper

Sample Questions from Visiting Team

Thank you