

“Orientation Workshop on Outcome Based Accreditation”



May 14th, 2016

ABOUT NBA

- Established in the year 1994 under Section 10 (u) of AICTE Act.
- NBA became Autonomous in January 2010 and in April 2013 the Memorandum of Association and Rules of NBA were amended to make it completely independent of AICTE, administratively as well as financially.
- NBA now independent in its functioning: decision making as well as financially.
- Does not receive any grant either from the government or from any regulatory body of technical and higher education.

NBA

NBA is committed to provide:

1. Credible System of Accreditation
2. Transparent & Accountable System

Credible System of Accreditation

- Strength and credibility of accreditation process largely lies in the integrity, honesty, expertise and professionalism.
- Evaluators – face of NBA.
- **Transparency-**
 - Report discussed in the meetings of EAC in presence of all team chair
 - Recommendations of EAC are considered in Sub-committee of AAC chaired by Chairman, NBA
 - Copy of the report is sent to the Institution
 - Change in decision communicated to the institution with reasons
 - 360 degree feedback

Composition of Evaluation Team

❑ **Composition of Evaluation Team:**

The Evaluation Team consists of at least 3 members.

❑ **Chairperson**

- Chairperson is selected with significant experience in program evaluation and is not below the rank of Professor.
- Preference is given to the Directors/ Head of Institutions of national repute and having significant experience in Accreditation.

❑ **Program Evaluators (two per program)**

- Associate Professor and above; industry professionals, Professional society members, R&D Organizations

Industry: PG qualification with min 15 years experience

Scientist: Scientist 'D' and above

□ VISIT

- **During the two and a half day visit, the team has discussions with**
 1. the Head of the institute/Dean/Heads of Department /Program and course coordinators
 2. a member of the management (to discuss how the program fits into the overall strategic direction and focus of the institution and management support for continued funding and development of the program)
 3. faculty members
 4. alumni
 5. Students
 6. Employers

Accreditation

- Accreditation is a process of quality assurance and improvement, whereby a program in an approved Institution is critically appraised to verify that the program continues to meet and/or exceed the Norms and Standards prescribed by regulator from time to time.
- It is a kind of recognition which indicates that a program fulfills desired standards.

ACCREDITATION SERVES TO NOTIFY

1. Parents and prospective students that a program has **met minimum standards**.
2. Faculty, deans and administrators of a program's **strengths and weaknesses** and of ways to improve the programme.
3. Employers that graduates are **prepared** to begin professional practice.
4. The public that graduates are aware of societal consideration.

WHAT IS NOT THE PURPOSE OF ACCREDITATION

- ❑ **Not to** find faults with the institution but to assess the status-ante of the performance.
- ❑ **Not to** denigrate the working style of the institution and its programs but to provide a feed back on their strengths and weaknesses.
- ❑ **Not to** demarcate the boundaries of quality but to offer a sensitizing process for continuous improvement in quality provisions.
- ❑ **Not to** select only institutions of national excellence but to provide benchmarks of excellence and identification of good practices.

General Policy on Accreditation

The following general policies are the guiding principles for the accreditation of programs:

1. Programs, and not Educational Institutions, are considered for accreditation.
2. Programs from which at least two batches of students have graduated are considered for accreditation.

TRADITIONAL APPROACH FOR QUALITY ASSURANCE OF ENGINEERING PROGRAMMES

- Focused on the input & process quality
- The criteria for accreditation may typically include the following list:
 - Organization and governance
 - Financial resources
 - Physical resources and facilities
 - Faculty and staff
 - Student intake quality
 - Teaching – learning process
 - Co-curricular and extra-curricular activities
 - Student services & counseling
 - Research & Development
 - Industrial interaction

What is Outcome based Education?

1. what the students need to learn?
2. What the students should demonstrate to the professional world?
3. Accordingly designing both curricula and delivery mechanisms(teaching strategies) to build the required skills and competence.

OUTCOME-BASED PROGRAM ACCREDITATION

- Knowledge and competencies profiles
- Graduate attributes which form the student learning outcomes:
 - Engineering knowledge
 - Problem analysis
 - Design/development of solutions
 - Investigation
 - Modern tool usage
 - The engineer and society
 - Environment and sustainability
 - Ethics
 - Individual and team work
 - Communications
 - Project management and finance
 - Life-long learning

NBA OUTCOME BASED ACCREDITATION

Two Tier System

- Introduction of Two-Tier System based on Types of Institutions.
- The Tier-I documents: applicable to the engineering/technology programs offered by academically autonomous institutions and by university departments and constituent colleges of the universities.
- Tier-II documents: for non-autonomous institutions, i.e., those colleges and technical institutions which are affiliated to a university.
- For both: Same set of criteria have been prescribed for accreditation.

NBA's Criteria of Accreditation

- Institutional Mission, Vision and Programme Educational Objectives
- Programme Outcome
- Programme Curriculum
- Students' Performance
- Faculty Contributions
- Facilities and Technical Support
- Academic Support Units and Teaching-Learning Process
- Governance, Institutional Support and Financial Resources
- Continuous Improvement in Attainment of Outcomes

Accreditation Criteria

| S.No | Criteria | UNDERGRADUATE | |
|------|-----------------------------------------------------------|---------------|---------------|
| | | TIER-I MARKS | TIER-II MARKS |
| 1 | Vision, Mission and Programme Educational Objectives | 100 | 75 |
| 2 | Programme Outcomes | 225 | 150 |
| 3 | Programme Curriculum | 125 | 125 |
| 4 | Students' Performance | 75 | 100 |
| 5 | Faculty Contributions | 175 | 175 |
| 6 | Facilities and Technical Support | 75 | 125 |
| 7 | Academic Support Units and Teaching-Learning Process | 75 | 75 |
| 8 | Governance, Institutional Support and Financial Resources | 75 | 75 |
| 9 | Continuous Improvement | 75 | 100 |
| | TOTAL | 1000 | 1000 |

New SAR TIER-II

| Criteria No. | Criteria | Mark/Weightage |
|---------------------|------------------------------------------------------------------|-----------------------|
| | Program Level Criteria | |
| 1. | Vision, Mission and Program Educational Objectives | 60 |
| 2. | Program Curriculum and Teaching – Learning Processes | 120 |
| 3. | Course Outcomes and Program Outcomes | 120 |
| 4. | Students' Performance | 150 |
| 5. | Faculty Information and Contributions | 200 |
| 6. | Facilities and Technical Support | 80 |
| 7. | Continuous Improvement | 50 |
| | Institute Level Criteria | |
| 8. | First Year Academics | 50 |
| 9. | Student Support Systems | 50 |
| 10. | Governance, Institutional Support and Financial Resources | 120 |
| | Total | 1000 |

Marks Comparison of revised SAR of UG Engineering Tier-I & Tier II

| S.No. | Criteria | UG Engineering | |
|--------------|-----------------------------------------------------------|----------------|---------|
| | | Tier-I | Tier-II |
| 1. | Vision, Mission and Program Educational Objectives | 50 | 60 |
| 2. | Program Curriculum and Teaching – Learning Processes | 100 | 120 |
| 3. | Course Outcomes and Program Outcomes | 175 | 120 |
| 4. | Students' Performance | 100 | 150 |
| 5. | Faculty Information and Contributions | 200 | 200 |
| 6. | Facilities and Technical Support | 80 | 80 |
| 7. | Continuous Improvement | 75 | 50 |
| 8. | First Year Academics | 50 | 50 |
| 9. | Student Support Systems | 50 | 50 |
| 10. | Governance, Institutional Support and Financial Resources | 120 | 120 |
| TOTAL | | 1000 | 1000 |

Tier – I Grades

- **=75% & Above** 'Y'
- **=60% and <75%** 'C'
- **=40% and <60%** 'W'
- **<40%** 'D'

Award of Accreditation-Tier-I (UG)

1. Full Accreditation of the program for five years

If there is no deficiency or weakness in any of the criteria laid down by NBA and concerns in not more than three criteria. At least 30 % of the required Faculty shall be Ph.D and also the enrolment of students shall be 75 % and above. Then Sub – Committee of AAC on the recommendations of EEAC may accord Full Accreditation for five years to the program concerned.

2. Full Accreditation of the program may be considered after three months

In case, there is no weaknesses in not more than three criteria in a program that may be overcome within a short period of three months, the institution may be given three months time to rectify the same. If there is any deficiency in any of the criteria, then this not will be applicable for the program. The institution is required to submit a compliance report to NBA describing action taken in response to the weakness (es) and concerns identified. The institution compliance report will be placed before EEAC to take a view. If EEAC is satisfied, it can make its recommendation to the Sub Committee of AAC for final recommendation regarding accreditation of the program concerned to the Executive Committee.

*Y should be ≥ 7 , W should be ≤ 3 , C should be and/or ≤ 2 and D should be Zero

3. Provisional Accreditation of the program for two years

In case the program under consideration has deficiencies in no more than two criteria, and has full compliance in not less than four criteria laid down by NBA and at least two Professors or one Professor and one Associate Professor available in the respective Program/ Department, EEAC may recommend to the Engineering Sub Committee of AAC to consider the program for Provisional Accreditation for two years. However, a deficiency in Criterion - V (Faculty Information & Contributions) may not be recommended for accreditation. In all such cases, the institute may submit a compliance report after one year which will be processed as per procedure laid down.

4. No Accreditation of the program

If the program has less than four fully compliant criteria or deficiencies in more than two criteria or deficiency in Criterion - V (Faculty Information & Contributions) may not be recommended for accreditation.

Award of Accreditation-Tier-II (UG)

1. Full Accreditation of the program for five years

Program seeking accreditation under TIER-II scoring a minimum of 750 points in aggregate out of 1000 points with minimum score of 60% in mandatory fields (criteria 4 to 6) and also at least 30 % of the required Faculty shall be Ph.D. Then Sub – Committee of AAC on the recommendations of EEAC may accord Full Accreditation for five years to the program concerned

2. Provisional Accreditation of the program for two years

Program with a score of greater than or equal to 600 points with minimum 40% marks in Faculty Information and Contributions (Criterion V) and also availability of at least one (1) Professor or one (1) Associate Professor (As per AICTE Qualification) shall be eligible for provisional accreditation for two years under Tier-II system.

3. No Accreditation of the program

Program scoring less than 600 points or less than 40% marks in Faculty Information and Contributions (Criterion V) or non-availability of at least one (1) Professor or one (1) Associate Professor (As per AICTE Qualification) are not eligible for accreditation.

Compliance status to Pre-Qualifiers (TIER-II)

| S.N. | Pre Visit Qualifiers (Average of Assessment years) | Existence | Compliance Status Complied/Not Complied |
|--------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------|
| | Essential qualifiers | | |
| 1 | Vision, Mission & PEOs i. Are the Vision & Mission of the Department stated in the Prospectus / Website? ii. Are the PEOs of the Program listed in the Prospectus / Website? | | |
| 2 | Whether approval of AICTE for the programs under consideration has been obtained for all the years including current year | | |
| 3 | Whether the Institute has received Zero deficiency report from the regulatory authority i.e AICTE, UGC etc. for the current academic session. | | |
| 4 | Whether admissions in the undergraduate programs at the Institute level has been more than 50% * (average of the last three assessment years) | | |
| 5 | Whether admissions in the undergraduate programs under consideration has been more than 50% ** (average of the last three assessment years) | Program 1<name>: % Admission | |
| Program 2<name>: % Admission | | | |
| Program n<name>: % Admission | | | |

| | | | |
|----|------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--|
| 6 | Whether student faculty ratio in the programs under consideration is better than or equal to 1:20 (average of the last three assessment years) | Program 1<name>: SFR | |
| | | Program 2<name>: SFR | |
| | | Program n<name>: SFR | |
| 7 | Whether at least one Professor or one Associate Professor available in the respective Program/ Department | | |
| 8 | Whether number of available Ph.Ds in the department exceeds 10% of the required number of faculty | | |
| 9 | Whether the placement ratio (Placement + higher studies) is greater than 40% (average of the last three assessment years) | | |
| 10 | Whether two batches have passed out in the programs under consideration | | |

| | Desirable parameters | | |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| 1 | Whether department has program assessment and quality improvement committee. If so, its constitution and mandate. | | |
| 2 | Whether the departments under consideration receives separately earmarked funds for i. Maintenance of Laboratory/computational facilities(recurring funds) ii. Up-gradation of laboratory/computation facilities(non-recurring funds) | | |
| 3 | Whether HODs possess Ph.D degrees for the programs under consideration | | |
| 4 | Whether number of available Ph.Ds in the department exceeds 15% of the required number of faculty | | |
| 5 | Whether admissions in the undergraduate programs under consideration has been more than 60% (average of the last three assessment years) | | |

*Total number of students admitted in first year minus number of students migrated to other institutions, plus the number of students migrated to this institution divided by the sanctioned intake.

**Total number of students admitted in first year in the respective program minus number of students migrated to other programs/ institutions plus the number of students migrated to this program divided by the sanctioned intake in the respective program.

Decision: If compliance status in all the cases is yes, then the institute shall be treated as eligible for furnishing the e-SAR of the programs which may be considered for accreditation as per procedure.

Compliance status to Pre-Qualifiers (TIER-I)

| S.N. | Pre Visit Qualifiers (Average of Assessment years) | Existence | Compliance Status Complied/N ot Complied |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------------------------------------------------|
| | Essential qualifiers | | |
| 1 | Vision, Mission & PEOs i. Are the Vision & Mission of the Department stated in the Prospectus / Website? ii. Are the PEOs of the Program listed in the Prospectus / Website? | | |
| 2 | Whether approval of the competent authority (Approval of AICTE/ UGC/ BoG of Universities/ Deemed Universities etc.) for the programs under consideration has been obtained for all the years including current year | | |
| 3 | Whether admissions in the undergraduate programs at the Institute level has been more than 60% * (average of the last three assessment years) | | |
| 4 | Whether admissions in the undergraduate programs under consideration has been more than 60% ** (average of the last three assessment years) | % Admission | |
| 5 | Whether student faculty ratio in the programs under consideration is better than or equal to 1:20 (average of the last three assessment years) | SFR | |

| | | | |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------|--|--|
| 6 | Whether at least two Professors or one Professor and one Associate Professor available in the respective Program/ Department | | |
| 7 | Whether number of available Ph.Ds in the department exceeds 20% of the required number of faculty | | |
| 8 | Whether the placement ratio(Placement + higher studies) is greater than 40% (average of the last three assessment years) | | |
| 9 | Whether two batches have passed out in the programs under consideration | | |
| 11 | Whether HODs possess Ph.D degrees for the programs under consideration | | |

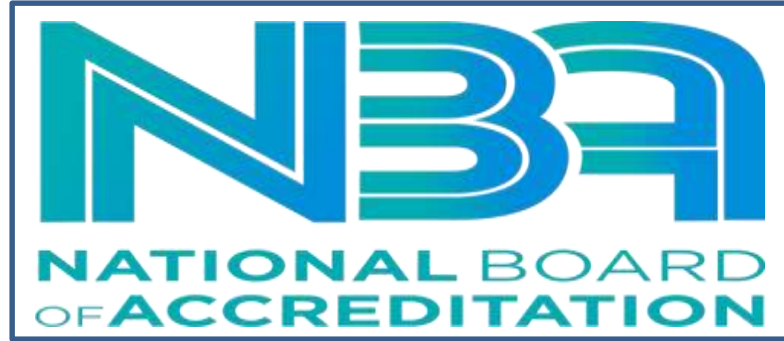
| | Desirable parameters | | |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| 1 | Whether department has program assessment and quality improvement committee. If so, its constitution and mandate. | | |
| 2 | Whether the departments under consideration receives separately earmarked funds for Maintenance of Laboratory/computational facilities(recurring funds) Up-gradation of laboratory/computation facilities(non-recurring funds) | | |

*Total number of students admitted in first year minus number of students migrated to other institutions, plus the number of students migrated to this institution divided by the sanctioned intake.

**Total number of students admitted in first year in the respective program minus number of students migrated to other programs/ institutions plus the number of students migrated to this program divided by the sanctioned intake in the respective program.

Decision: If compliance status in all the cases is yes, then the institute shall be treated as eligible for furnishing the e-SAR of the programs which may be considered for accreditation as per procedure.

As far as desirable parameters are concerned, the Institutions are expected to meet these parameters also. Although institutions which are non-compliant on these parameters may be invited to prepare their SAR, it is expected that they would have taken necessary steps in this direction.



Thank you