

ANNUAL REPORT

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National Board of Accreditation
New Delhi

Annual Report

April 1st 2015 to March 31st 2016



National Board of Accreditation
New Delhi

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Vision

To be an accrediting agency of international repute by ensuring the highest degree of credibility in assurance of quality and relevance of professional education and come to the expectations of its stakeholders, viz., academicians, corporate, educational institutions, government, industry, regulators, students, and their parents."



Mission

To stimulate the quality of teaching, self-evaluation and accountability in higher education and facilitate the Institutions in realizing their academic objectives, adopt teaching practices that enable them to produce high quality professionals and to assist them in continuously contributing to the domain of knowledge through innovations & research.

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CHAPTER 1

1. Introduction

1.1 Preamble

Education is considered to be a quality education when it provides all learners with the capabilities that make them economically productive, contribute in building a peaceful and democratic society, maintain a sustainable livelihood and enhance individual and society wellbeing. The learning outcomes may vary according to the context but at the end of education cycle it must include the knowledge, life skills, innovation and entrepreneurship in each individual student. To have quality education system in place which is relevant to the needs of the society and economy and nurture qualities of creative thinking, innovation, learning by experimenting, etc. we need to have a robust accreditation system in the country.

Accreditation is a process that institutions of higher education undergo to confirm that they meet the required educational standards. Accreditation is earned through accrediting bodies that have been created specifically to assess higher education institutions and programs.

The purpose of accreditation is to create a set of standards for all institutions of higher education, and to encourage institutions to be the best. The accreditation aims to ensure accountability of institutions and programs in order to boost public trust and confidence. When an institution or program is properly accredited, students are able to gauge its overall quality without conducting a detailed analysis on their own.

National Board of Accreditation (NBA), accredits programs offered by the technical/professional institutions uses a multi-pronged approach to ensure quality standards are being met by a program seeking accreditation. First, an institution must apply for accreditation and submit a Self-Assessment Report (SAR) which is based on the standards and criteria set by the NBA. After that, a panel of experts visits the institution to verify and assess various parameters, standards and processes in accordance with the SAR. The panel of experts is required to submit a report to NBA based on their observations during the visit. Subsequently, the final decision on accreditation of a program is taken after going through a well-defined decision making process.

Benefits of Accreditation

Accreditation is a tool that stakeholders use to monitor, assess and evaluate the standards and quality of the education a student receives at a college, university or other institution of higher learning. Here are some of the main benefits enrolled students receive by attending an accredited institution/program. Accredited institution/program offers the highest quality education available.

- ❖ Accredited institution/program offers the highest quality education available.
- ❖ Employers value degrees of an accredited program the most.
- ❖ Accreditation pushes institutional programs to continually improve.

1.2 The Organization

The New Education Policy of 1986 recognized the need for a Statutory Body at the National level responsible for overseeing the growth and quality of Technical Education in the country. Accordingly, All India Council

for Technical Education (AICTE) was established by an Act of Parliament in 1987, with a view to the proper planning and coordinated development of the technical education system throughout the country, the promotion of qualitative improvement of such education in relation to planned quantitative growth and the regulation and proper maintenance of norms and standards in the technical education system for matters connected therewith. Technical education was defined as programs of education, research and training in engineering, technology, architecture, town planning, management, pharmacy and applied arts and crafts and such other programs or areas as the Central Government may, in consultation with the Council, by notification in the official Gazette, declare.

AICTE, as a part of its one of the activities, set up the National Board of Accreditation (NBA) in September 1994, in order to assess the qualitative competence of the programs offered by educational institution from diploma level to post-graduate level in engineering and technology, management, pharmacy, architecture and related disciplines, which are approved by AICTE.

The NBA, in its present form, has come into existence as an autonomous body with effect from 7th January 2010, under the aegis of AICTE, with the objective of assurance of quality and relevance of technical education, through the mechanism of accreditation of programs offered by the technical institutions. The NBA conducts evaluation of programs of technical institutes on the basis of laid down norms. This may include, but not limited to Institutional Missions and Objectives; Organization and Governance; Infrastructure Facilities; Quality of Teaching and Learning; Curriculum Design and Review. Support Services (Library, Laboratory, Instrumentation, Computer Facilities, etc.) and any other aspect as decided by the General Council and/or Executive Committee, which will help the graduates produced by the institutions as per industry requirements.

1.3 Authorities of NBA

At present, the NBA has the following authorities.

- i. The General Council,
- ii. The Executive Committee, and
- iii. Such other authorities as may be constituted and/or declared by the General Council

General Council

The General Council is the principal authority of the NBA, and responsible for its over all activities and affairs. It gives policy directions/guidelines to the Executive Committee, which takes steps for managing the activities and affairs of the NBA accordingly.

Sl. No.	Name and address	Nominated as
1	Dr. Surendra Prasad, [Former Director, IIT Delhi] Department of Electrical Engineering, IIT Delhi, Hauz Khas, New Delhi-16.	Chairperson
2.	Secretary, Deptt. of Higher Education, Ministry of HRD, Shastri Bhavan, New Delhi – 10003	Member (ex-officio)
3.	Chairman, All India Council for Technical Education 7th Floor, Chanderlok Building, Janpath, New Delhi-11000	Member (ex-officio)
4.	Chairman, University Grants Commission Bahadur Shah Zafar Marg, New Delhi Pin:110 002	Member (ex-officio)
5	President, Association of Indian Universities, 16, Kotla Marg, Bahadur Shah Zafar Marg, New Delhi-110 002	Member (ex-officio)
6.	Prof. Dilip K. Bandyopadhyay, 607, Gaur Heights, Sec- 4, Vaishali, Ghaziabad, UP - 201010	Member (Nominated)
7.	Prof. Rajeev Sangal Director, Indian Institute of Technology (BHU), Varanasi - 221 005	Member (Nominated)
8.	Prof. S. C. Sahasrabudhe, [Former Deputy Director IIT Mumbai], Director, DAIICT Near Indroda Circle, Gandhinagar - 382 007, Gujarat	Member (Nominated)

9.	Mr. T. V. Mohan Das Pai, Director, Manipal Universal Learning 5th Floor, Manipal Towers 14, Old Airport Road Bangalore 560025	Member (Nominated)
10.	Dr. R. K. Shevgaonkar Director, IIT Delhi, Hauz Khas, New Delhi - 110016	Member (Nominated)
11.	Prof. Ramakrishana Ramaswamy Vice - Chancellor, University of Hyderabad, Prof. C.R Rao Road, Gachibowli, Hyderabad, Andhra Pradesh 500 046	Member (Nominated)
12.	Prof. Piyush Trivedi, Vice Chancellor Rajiv Gandhi Proudyogiki Vishwavidyalaya [Technical Univ.,] SH-18, Airport Bypass Road, Bhopal 462 036, Madhya Pradesh	Member (Nominated)
13.	Prof. A. K. Agarwal Vice Chancellor, Gujarat Technological University, Admission Committee for Professional Courses Building, L.D College of Engineering Campus, Navarangpura, Ahmedabad -380 015, Gujarat	Member (Nominated)
14.	Prof. B.S. Sahay Director, Indian Institute of Management Studies, Raipur, Government Engineering College Campus, Old Dhamtari Road, Sejbahar, Raipur – 492015	Member (Nominated)
15.	Prof. Ajay Khare Director, School of Planning & Architecture, Bhopal, Director, SPA Bhopal, 1st Floor, Sports Complex MANIT, Bhopal – 462 051	Member (Nominated)
16.	Lt. Gen. S. P. Kochhar [Lt Gen (Retd)] 9 BR Mehta Lane, KG Marg, New Delhi - 110 001	Member (Nominated)
17.	Dr. Sunil Rai Director, Goa Institute of Management, Poriem, Sattari, Goa 403505	Member (Nominated)

18.	Sh. Ramesh Kumar Safaya Principal, Bastu Kala Academy of Architecture, New Delhi 9/1, Institutional Area (opp. JNU East Gate), Aruna Asaf Ali Marg, Qutab Institutional Area, New Delhi, DL 110016	Member (Nominated)
19.	Sh. S. K. Kak, Vice Chancellor, Mahamaya Technical University, Noida C – 22, Sector – 62, Noida, Gautam Buddh Nagar – 201 301 Uttar Pradesh	Member (Nominated)
20.	Dr. Preeti Bajaj, Director, G. H. Rasoni College of Engineering, CRPF Gate NO.3, Hingana Road, Digdoh Hills Nagpur - 440 016, Maharashtra	Member (Nominated)
21.	Dr. Anil K. Nassa, Member Secretary, National Board of Accreditation, 4th Floor, East Tower, NBCC Place, Lodhi Road, New Delhi - 110 003	Member Secretary (ex-officio)

Executive Committee

The affairs of the NBA are managed, administered, directed and controlled as per Rules and Bylaws approved by the Executive Committee (EC) and ratified by the General Council (GC).

Sl. No.	Name and address	Nominated as
1	Dr. Surendra Prasad [Former Director, IIT Delhi] Department of Electrical Engineering, IIT Delhi, HauzKhas, New Delhi - 110 016	Chairperson
2.	Chairman All India Council for Technical Education, 7th Floor, Chanderlok Building, Janpath, New Delhi-110 001	Member (ex-officio)
3.	Additional Secretary (T) Department of Higher Education, MHRD, Government of India, Shastri Bhawan, New Delhi-110 001.	Member (ex-officio)

4.	Prof. Ved Prakash Chairman, University Grants Commission Bahadur Shah Zafar Marg, New Delhi Pin:110 002	Member (ex-officio)
5	Dr. Sanjay Chahande Principal Secretary, Higher & Technical Education, Government of Maharashtra, Mantralaya annex, Nariman Point, Mumbai – 400032	Member (ex-officio)
6.	Sh. H. Mohan Secretary, Department of Technical Education & Training, Government of West Bengal, 6th Floor, Bikash Bhavan, Salt Lake City, Kolkata - 700 091	Member (ex-officio)
7.	Sh. Bharat Lal Meena Principal Secretary, Department of Higher & Technical Education, Government of Karnataka, K. G. S., 6th Floor, M.S.Building, R. No. 645, Dr. B. R. Ambedkar Veedhi, Bangalore - 560 001	Member (ex-officio)
8.	Sh. R. K. Verma Secretary, Department of Technical Education, Government of Punjab, Chandigarh - 160 017	Member (ex-officio)
9.	Prof. Dilip K. Bandyopadhyay, 607, Gaur Hights, Sector - 4, Vaishali Ghaziabad - 201 010	Member (Nominated)
10.	Prof. B. B. Ahuja, Deputy Director, Government College of Engineering Pune 411 005, Maharashtra	Member (Nominated)
11.	Prof. Manoj Datta, Department of Civil Engineering, IIT Hauz Khas, New Delhi – 110 016	Member (Nominated)
12.	Dr. Tarun Jha Professor Department of Pharmaceutical Technology, Jadavpur University, Raja S.C. Mullick Road, Kolkata-700032	Member (Nominated)
13.	Ms. Rekha Sethi, Director General, All India Management Association, Management House, 14, Institutional Area, Lodhi Road, New Delhi – 110003	Member (Nominated)

14.	Mr. Rajesh Uppal Executive Director (IT) & CIO Maruti Udyog Limited Palam Gurgaon Road, Gurgaon- 122 015	Member (Nominated)
15.	Mr. Vibhas Joshi Corporate Head Moser Baer India Ltd. 43 B Okhla Industrial Estate, New Delhi – 110 020	Member (Nominated)
16.	Mr. T. V. Mohan Das Pai, Director, Manipal Universal Learning 5th Floor, Manipal Towers, 14, Old Airport Road, Bangalore 560025	Member (Nominated)
17.	Sh. M. Gopalkrishna, IAS (Retd.), 'Bhramare' # 12-2-823 A/23, Santhoshnagar, Mehdiapatnem, Hyderabad - 500 028, Andhra Pradesh	Member (Nominated)
18.	Prof. Rajeev Sangal, Director, Indian Institute of Technology (BHU), Varanasi - 221 005	Member (Nominated)
19.	Prof. S. C. Sahasrabudhe, Director DAIICT Near Indroda Circle, Gandhinagar - 382 007, Gujarat	Member (Nominated)
20.	Dr. Anil K. Nassa, Member Secretary, National Board of Accreditation, 4th Floor, East Tower, NBCC Place, Lodhi Road, New Delhi - 110 003	Member Secretary (ex-officio)

Other Authorities constituted by the General Council

a) Finance Committee:

The Finance Committee of the NBA is constituted as per clause 40 of the Memorandum of Association and Rules. The Finance Committee considers the revised estimates and the budget estimates for the following financial year in August and December of the calendar year respectively.

Sl. No.	Name and address	Nominated as
1.	Dr. Surendra Prasad [Former Director, IIT Delhi] Department of Electrical Engineering, IIT Delhi, Hauz Khas, New Delhi - 110 016	Chairperson

2.	Shri Yogendra Tripathi, Finance Adviser, Department of Higher Education, Ministry of Human Resource Development, Government of India, Shastri Bhawan, New Delhi-110001.	Member (ex-officio)
3.	Prof. B. S. Sahay, Director, Indian Institute of Management-Raipur, Government Engineering College Campus, Old Dhamtari Road, Sejbahar, Raipur-2015.	Member (ex-officio)
4.	Sh. M. Gopalkrishna, IAS (Retd.), 'Bhramare' # 12-2-823 A/23, Santhoshnagar, Mehdipatnem, Hyderabad - 500 028, Andhra Pradesh	Member (Nominated)
5.	Dr. Anil K. Nassa, Member Secretary, National Board of Accreditation, 4th Floor, East Tower, NBCC Place, Lodhi Road, New Delhi -110 003	Member Secretary (ex-officio)
6.	Sh. R. K. Ganju, SAO (Admn.) National Board of Accreditation	Convener

b) Academic Advisory Committee:

The Academic Advisory Committee of the NBA is constituted as per clause 41 of the Memorandum of Association and Rules. It monitors and promotes the activities of NBA with reference to its various activities like assessment, accreditation, publications, selection and shaping of instruments for assessment and accreditation, modalities of operations in-charge, the rules, regulations and guidelines.

Sl. No.	Name and address	Nominated as
1.	Dr. Surendra Prasad [Former Director, IIT Delhi] Department of Electrical Engineering, IIT Delhi, Hauz Khas, New Delhi - 110 016	Chairperson
2.	Prof. S.C. Sahasrabudhe, Director, DAIICT, Near Indroda Circle, Gandhinagar - 382 007, Gujarat	Member (Nominated)

3.	Prof. Manoj Datta , Department of Civil Engineering, IIT, Hauz Khas, New Delhi – 110 016	Member (Nominated)
4.	Prof Dilip K. Bandyopadhyay Vice Chancellor, Guru Gobind Singh Indraprastha University, 607, Gaur Hights, Sector - 4, Vaishali, Ghaziabad Delhi	Member (Nominated)
5.	Prof. A. H. Kalro, [Former Director, IIMK], Vice Chancellor, AES Bungalow #2, Opposite HL College of Commerce, Commerce Six Roads, Navrangpura, Ahmedabad – 380 009, Gujarat	Member (Nominated)
6.	Dr. Tarun Jha Professor, Department of Pharmaceutical Technology, Jadavpur University, Raja S.C. Mullick Road, Kolkata-700032	Member (Nominated)
7.	Sh. Suresh Mahatre, Vice President, Tata Consultancy Services, 10th Floor, Air India Building, Nariman Point, Church Gate Mumbai - 400 021	Member (Nominated)
8.	Mr. P. Dwarakanath (Advisor - Group Human Capital Max India Limited, Max House; 1, Dr. Jha Marg, Okhla Phase III, New Delhi 110020.	Member (Nominated)
9.	Mr. Yogi Sri Ram Senior VP, Corporate HR, L& T, Mumbai, North Block – II, First Floor, Gate No. 1, Powai Campus, Saki Vihar Road, Mumbai – 400 072	Member (Nominated)
10.	Ms. Shalini S. Sharma, Head – Higher Education, Confederation of Indian Industry (CII), Head – Higher Education, Lodhi Road, New Delhi	Member (Nominated)

11.	Ms. Rekha Sethi Director General, All India Management Association, Management House, 14, Institutional Area, Lodhi Road, New Delhi – 110003	Member (Nominated)
12.	Dr. U. Chandrasekhar, Director The Engineering Staff College of India (ESCI) Institution of Engineers Gachi Bowli, Hyderabad	Member (Nominated)
13.	Mr. Ranjit Shahani, Vice Chairman & Managing Director, Novartis India Ltd., Sandoz House, Dr. Anne Besant Road, Worli, Mumbai – 400 018	Member (Nominated)
14.	Prof. B. Suresh, Vice Chancellor, JSS University, Mysore JSS Medical Institution Campus, Sri Shivarathreeshwara Nagara, Mysore – 570 015, Karnataka.	Member (Nominated)
15.	Dr. Anil K. Nassa, Member Secretary, National Board of Accreditation, 4th Floor, East Tower, NBCC Place, Lodhi Road, New Delhi - 110 003	Member Secretary (ex-officio)

c) Sub Committees

The Sub Committees of Academic Advisory Committee of the NBA are constituted as per clause 42 of the Memorandum of Association and Rules. NBA has Sub Committees on each discipline, such as Engineering, Management, Pharmacy, etc., which functions separately to evolve standards for assessment and accreditation in their respective fields, forms assessors panel to lay down guidelines for assessor and to evaluate and approve the recommendations of the evaluation and accreditation committee. These sub committees meet frequently as required.

d) Appellate Committee

This Committee is headed by a senior academician/professional. The appeals filed by the institutions against the decision of the Sub Committee of Academic Advisory Committee regarding the accreditation of the programme are considered Appellate Committee and further disposed of by the Academic Advisory Committee.

e) Evaluation and Accreditation Committee

The NBA has Evaluation and Accreditation Committee for each discipline. These Committees are headed by an academician of eminence having wider experience in her/his profession and accreditation process. These committees consider the report of the visiting teams of expert volunteers with respect to the evaluation of programs for the purpose of accreditation and make a recommendation to the Sub Committee of the Academic Advisory Committee.

Officers of NBA

At present, the following are the officers of the NBA:

- I. Chairperson
- ii. Member Secretary
- iii. Such other officers as may be declared by the Executive Committee.

As per the provision of revised MoA and Rules of the NBA, the Central Government appoints the Chairperson of NBA based on the recommendation of the General Council of NBA and Member Secretary of NBA shall be appointed by the General Council on the recommendation of the Executive Committee.

CHAPTER 2

2. Highlights of the Year and New Initiatives

2.1. Important Decisions and Initiatives

i. Introduction of Pre-Qualifiers for UG Engineering Programs

It has been observed that many institutions apply for accreditation of their programs even if they lack the basic inputs like a minimum level of student admissions, faculty strength etc., therefore, it is clearly impossible for such institutions to proceed on the path of outcome based education and accreditation,.

Therefore, National Board of Accreditation (NBA) introduces Pre-Qualifier for institutions for processing of Accreditation applications of Higher Education Institutions under the Tier-I/Tier-II format.

Under this new process, the institution will first be required to pay only 10 % of the fee and fill in the pre-qualifier format. These details filled by the institution in the pre-qualifier format will be evaluated by NBA. In cases, NBA finds that the information provided in the pre-qualifier is in compliance with the requirements; the institution will be allowed to proceed further regarding submission of 90% Fee and SAR only for those programs which will be in compliance with the essential qualifiers.

In all other cases, NBA will intimate the institution about the shortcomings found. The institute may apply for such programs after overcoming the shortcomings.

ii. Introduction of Outcome based accreditation documents

- ☞ Self-Assessment Reports of UG Engineering (Tier I and Tier II), Diploma Engineering and UG Pharmacy.
- ☞ Evaluation Guidelines for UG Engineering (Tier I and Tier II), Diploma Engineering.
- ☞ Evaluation Documents for UG Engineering (Tier II).
- ☞ Compliance Report for UG Engineering Tier I and II: The institutions are required to submit compliance report in respect of the programs which have been accredited provisionally for two years. These Compliance Reports are to be submitted after one year.

iii. Reconsideration of Accreditation Fee for Diploma Programs

NBA has received requests from various state governments for exemption/reduction of fee for diploma programs and it is also observed that NBA receives very less proposals for accreditation of Diploma Programs because of high fee structure as NBA has a uniform fee structure for all the programs, i.e., 5 lacs for one program and 2 lacs for subsequent programs.

Considering above, NBA has reduced the Accreditation Fee of Diploma Programs, i.e. Rs.2.00 lakhs for one program and 1.50 lakhs for subsequent program. The same was informed to all the state Secretaries and Directorate of Technical Education. The reduced Fee structure is also available at NBA website.

iv. 3rd World Summit on Accreditation (WOSA 2016)

NBA has organized 3rd World Summit on Accreditation (WOSA 2016) during 18th to 20th March, 2016 at The Leela Ambience, Gurgaon. The theme of the summit was “Quality Assurance through Outcome Based Accreditation” and the sub themes are as below:

- ☞ Accreditation: Global Best Practices
- ☞ Improving Quality through attainment of Learning Outcomes
- ☞ Technical Education – An Indian Perspective
- ☞ Industry Expectations from Academia
- ☞ Effective Use of ICT for Education and learning

During the summit, 11 International and 20 National Keynote Speakers were deliberated their views on various themes and sub themes of WOSA 2016 which was comprised of 7 Sessions, 2 Plenary Sessions and 5 Technical Sessions. These sessions were attended by more than 780 delegates and invitees including 15 international delegates from various Educational Institutions, Professional Bodies and Central and State Government Departments.

During the summit, 46 papers including 2 international papers were presented. The papers were shortlisted through a double blind review process. To motivate authors, best authors in select themes were given an opportunity to present papers in select technical sessions.

v. National Institutional Ranking Framework (NIRF), 2016

The ministry of HRD had set up a core committee under the chairmanship of secretary, Higher education, MHRD for evolving National Institutional Ranking Framework for academic institutions in India. MHRD directed that NIRF would be managed by the NBA.

The National Board of Accreditation was assigned the responsibility for inviting applications for ranking of institutions for all the disciplines using NIRF Framework and for anchoring the effort for “India Rankings 2016”. NBA also served the Implementation Core Committee (ICC) constituted by the MHRD as well as all other committees' set-up to examine the data for all five sets of parameters under each of the disciplines.

CHAPTER 3

3. Accreditation

The NBA accreditation is the equivalence of a quality assurance scheme for the higher technical education. It is open to all institutions in India which provide technical education to students in Engineering and Technology, Management, Architecture, Pharmacy and other related fields. It accredits the AICTE approved programs of the technical institutions.

3.1. Outcome Based Accreditation

NBA has adopted internationally prevailing outcome-based assessment and accreditation, in which excellence in technical education is evaluated based on the results of the assessment of educational outcomes, rather than on prescriptive input standards. NBA believes that educational quality must be measured by outcomes rather than inputs, because inputs do not necessarily correlate with quality outcomes, since the quality of outcomes is dependent not only on inputs, but also on the processes used by the Institution and its programs to convert inputs into the defined outcomes. The only accurate way to measure excellence in technical education, therefore, is through the assessment of educational outcomes.

Because of the essential role that educational processes play in determining educational outcomes, NBA has developed accreditation principles based on best practices in education. These principles promote excellence through a benchmarking process, which is helpful in determining why an Institution is able to or not able to achieve its mission, broad based goals, and interpret the results of the outcomes assessment process.

3.2. Graduate Attributes

Graduates Attributes (GAs) form a set of individualized assessable outcomes that are the components indicative of the graduate's potential to acquire competence to practice at the appropriate level. The GAs are exemplars of the attributes expected of a graduate from an accredited program. NBA has defined the Graduate Attributes for each discipline. NBA's graduate attributes for undergraduate engineering program are as follows:

- ☞ **Engineering Knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- ☞ **Problem Analysis:** Identify, formulate, research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- ☞ **Design/Development of Solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- ☞ **Conduct investigations of complex problems:** The problem that cannot be solved by straightforward application of knowledge, theories and techniques applicable to the engineering discipline.

- ☞ **Modern Tool Usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling of complex engineering activities with an understanding of the limitations.
- ☞ **The Engineer and Society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- ☞ **Environment and Sustainability:** Understand the impact of the professional engineering solutions to societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- ☞ **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- ☞ **Individual and Team Work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- ☞ **Communication:** 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.
- ☞ **Project Management and Finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- ☞ **Lifelong Learning:** Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.

The NBA has a two-tier system of accreditation for Technical Programs including undergraduate engineering programs. The Tier-I document is applicable to the engineering programs offered by academic autonomous institutions, university departments and constituent colleges of the universities authorized to change the curricula as per the requirement of NBA and also have financial autonomy. The Tier-II documents is for the non-autonomous institutions, i.e. those colleges and technical institutions which are affiliated to a university (depends on university for any change in the curriculum as well as for its implementation).

In both Tier-I and Tier-II documents, the same set of criteria have been prescribed for accreditation. In the Tier-I document, the criteria which are based on outcome parameters, namely, program outcomes and program educational objectives have been given more focus, whereas in the Tier-II document, the focus is on the output-based criteria namely, student performance, facilities and technical support and continuous improvement. Also the criteria for Tier-I format is more stringent.



Image: Accreditation visit in progress



Image: Accreditation visit in progress



Image: Accreditation visit in progress



Image: Accreditation visit in progress



Image: Accreditation visit in progress



Image: Accreditation visit in progress

The accreditation status that may be granted by NBA under Tier –II as per the defined process:

- ☞ Full Accreditation of the program for five years
- ☞ Provisional Accreditation of the program for two years
- ☞ No Accreditation of the program.

3.3. Standing Committee Meetings and Status of Accreditation

- ☞ During the period under report NBA has conducted following meetings:
- ☞ Fifteen Moderation Committee meetings,
- ☞ Nineteen Evaluation and Accreditation Committee meeting
- ☞ Twelve Sub-committee of Academic Advisory Committee meeting
- ☞ Two Appellate Committee meeting
- ☞ One Sub Committee of GC meeting

During this period, 394 programs of various disciplines were considered for accreditation from Engineering/Pharmacy/Management institutions across the country out of which 341 programs got accredited and 53 programs were not accredited. 313 programs of Engineering, 22 programs of Management, 1 program of MCA and 5 Programs of Pharmacy got the accredited. The detailed information is provided in tabulated form in Appendix I.

CHAPTER 4

4.0 Training & Development

4.1 Training programs

With NBA following Outcome Based Accreditation, the need for orientation and awareness in the Faculty members of various institutions was elevated. Given the due consideration, to the large size of technical education in the country, it was decided to conduct the trainings through selected institutions in a partnership/collaboration mode. NBA then identified some good institutions that would act as Nodal Centers for creating awareness and coordinating NBAs training and orientation programmes. Nodal Centers are further responsible for identifying the institutions in their locality as Training Centers and also for coordinating the training programs in Training Centers.

These orientation programmes are aimed at equipping the faculty with the evolving concepts, practices, perspectives and approaches. They also strive to enable participating faculty to develop a sound knowledge base, collaborative analysis and ability to appreciate varied views of a vibrant peer group. The training pedagogies in these programs are aptly aligned to their specific needs and foster a more effective comprehension through participative learning.

On completion of a training program a faculty member is expected have gained knowledge about the following:

- ☞ NBA Accreditation – Introduction, Awareness Methodology, Guidelines, benefits, Washington benefits and its advantages.
- ☞ Outcome Based Accreditation System – Developing internal methods for assessment of Outcomes and continuous quality improvement systems and processes.
- ☞ How to prepare the SAR and effect improvement during the process.

NBA conducted 9 workshops, creating awareness and training evaluators on outcome based education & accreditation which saw a participation of 2853 people.

Training Programmes

- i. Awareness Workshops on Outcome Based Education & Accreditation for the Institutions organized during 2015-16:

S. No.	Place	Coverage	Date	No. of Participants
1.	Pune in collaboration with Directorate of Technical Education, Govt. of Maharashtra	Institutions in Pune, Nasik and Aurangabad Region	11/06/15	433
2.	Bhubaneshwar in collaboration with Biju Patnaik University of Technology, Odisha	Institutions in Odisha	17/07/15	334

3.	Bengaluru in collaboration with Visvesvaraya Technological University, Belgaum	Institutions in and around Bengaluru	21/07/15	448
4.	Bhopal in collaboration with Directorate of Technical Education, Govt. of M.P.	Institutions in Madhya Pradesh	07/09/15	284
5.	Hyderabad in collaboration with JNTU, Hyderabad	Institutions in Telangana	14/09/15	595
6.	Chennai in collaboration with Anna University, Chennai	Institutions affiliated to Anna University	03/10/15	320
7.	Lucknow in collaboration with Directorate of Technical Education, Govt. of U.P.	Polytechnics in U.P.	20/01/16	260

ii. **Orientation/Interactive Workshops on Outcome Based Accreditation for Team Chairs/Program Evaluators (PEVs):**

S. No.	Place	Participants	Date	No. of Participants
1.	Delhi	Program Evaluators from Northern Region	16/11/15	122
2.	Delhi	Team Chairs & Evaluators	21/03/16	57



Dr. Anil Kumar Nassa, Member Secretary, NBA addressing the delegates during the Orientation Workshop on Outcome Based Accreditation held at IHC, New Delhi on 16 November, 2015.



Interactive Workshop on Evidence- Based On-Site Assessment during Accreditation Visit" held at IHC, New Delhi on 21st March, 2016. Dignitaries on dais:
(L to R) Dr. Anil Kumar Nassa, Member Secretary, NBA, Ms. Katy Turff (UK), Prof. R. Natarajan (India), Dr. Kai Sang Lock (Singapore), and Prof. Robin King (Australia).

CHAPTER 5

5.0 World Summit on Accreditation (WOSA) 2016

National Board of Accreditation organized 3rd World Summit on Accreditation (WOSA 2016) during 18th to 20th at Hotel Leela, Gurgaon. It had been organized with main theme of "Quality Assurance through Outcome Based Accreditation" and five sub themes, Accreditation Global Best Practices, Improving quality through attainment of learning outcomes, Technical Education - An Indian perspective, Industry expectations from academia and Effective use of ICT for education and learning. The discussion and global participation in WOSA- 2016 brought about new ideas and helped in establishing new trends of identifying opportunities and challenges in professional and technical education world-wide. The summit was inaugurated by Hon'ble Minister, Ministry of Human Resource Development, Govt. of India, Hon'ble Mrs. Smriti Zubin Irani, HRD Minister, GOI.

In the Summit total 7 sessions were organized, 2 plenary & 5 technical; participation included 706 delegates including 15 international delegates from China, USA, UK, Korea and Canada; 63 invitees, 31 speakers, 20 National & 11 International and 46 papers including 02 international papers out of 112 papers were presented. The papers were shortlisted through a double blind review process. To motivate authors, best authors in select themes were given an opportunity to present papers in select technical sessions.



Mrs. Smriti Zubin Irani, Hon'ble Minister HRD, GoI, releasing the Proceedings of WOSA 2016 during the Inaugural Function held at the Leela Ambiance Hotel, Gurgaon, on 19th March, 2016.

Dignitaries on dais (L to R): Shri, R. Subramanyam, Secretary (HE), Prof. Surendra Prasad, Chairman, NBA, Mrs. Smriti Zubin Irani, Hon'ble Minister of HRD, GoI, Prof. Anil D. Sahasrabudhe, Chairman, AICTE and Dr. Anil Kumar Nassa, Member Secretary, NBA



View of delegates of WOSA 2016



View of Technical Session in progress during the 3rd WOSA 2016 held at the Leela Ambience Hotel, Gurgaon



View of delegates during the WOSA 2016

CHAPTER 6

6.0 National Institutional Ranking Framework (NIRF)

6.1. Background

The process of framing National Institutional Ranking Framework (NIRF) began on October 9, 2015 with constitution of a 16-member core committee under the chairmanship of Secretary (HE), Ministry of Human Resource Development. The terms of reference of the Committee were to suggest a reliable, transparent and authentic National Framework for performance measurement and ranking of institutions for higher education and to recommend institutional mechanisms, processes and timelines for implementation of the National Institutional Ranking Framework. The framework was given a final shape subsequent to intense discussions and deliberations during a series of meetings of the Committee and exchanges with peers and stakeholders through many online discussions.

The National Institutional Ranking Framework (NIRF) for engineering and management categories was unveiled by Smt. Smriti Irani, Honourable Minister for Human Resource Development on 29th September 2015. Soon after, the NIRF for ranking of the pharmacy and architecture institutions as well as for colleges & universities were released. The NIRF envisaged separate rankings for different categories of institutions in their own respective peer groups. Further, within each discipline, there was provision for separate ranking in two categories – institutions that are engaged in research and teaching (Category A), and those engaged mainly in teaching (Category B).

The final framework identified nearly 22 parameters in five major heads, several of them are similar to those employed globally such as excellence in teaching, learning and research. However, there are a few which are India-centric, reflecting aspirations of the rising numbers of young people of a vast nation. Country-specific parameters relevant to the Indian situation include regional and international diversity, outreach, gender equity and inclusion of disadvantaged sections of society.

6.2. Parameters for Ranking of Institutions

The NIRF provides for ranking of institutions under five broad generic parameters, namely:

1. Teaching, Learning and Resources

- a) Faculty Student Ratio - Permanent Faculty (FSR)
- b) Faculty Student Ratio - Visiting Faculty (FSR)
- c) Metric for Faculty with Ph.D. and Experience (FQE)
- d) Metric for Library, Studio & Laboratory Facilities (LL)
- e) Metric for Sports and Extra Curricular Facilities (SEC)
- f) Metric for Teaching and Innovation (TI)

2. Research, Consulting and Collaborative Performance Perception (PR)

- a) Combined Metric for Publications (PU)
- b) Combined Metric for Citations (CI)
- c) Intellectual Property Right and Patents (IPR)
- d) % of Collaborative Publications and Patents (CP)
- e) Footprint of Projects and Professional Practice (FPPP)

3. Graduation Outcome

- a) Performance in University Examinations (PUE)
- b) Performance in Public Examinations (PPE)
- c) Performance in Placement, Higher Studies and
- d) Entrepreneurship (PHE)
- e) Mean Salary for Employment (MS)

4. Outreach and Inclusivity

- a) Outreach Footprint (Continuing Education, Services)(CES)
- b) Percentage of Students from Other States / Countries (RD)
- c) Percentage of Women Students and Faculty (WS)
- d) Percentage of Economically and Socially Disadvantaged Students (ESDS)
- e) Facilities for Physically Challenged / Differently Abled Persons

5. Perception

- a) Process for Peer Rating in Category (PR)
- b) Applications to Seat Ratio (SR)

6.3 Participation

Discipline	Total	CFTIs & CFU	Government Institutions	Semi-Govt. Inst. (Deemed, State, 12 B Univ.)	Others (Pvt. & Deemed Pvt.)
Engineering	1438	53	168	13	1204
Management	609	14	27	11	557
Pharmacy	454	--	34	1	419
Architecture	28	1	4	4	19
College	803	--	--	744	59
University	233	46	--	141	46

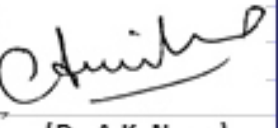
Region-wise Distribution of Institutions Registered for Ranking under NIRF

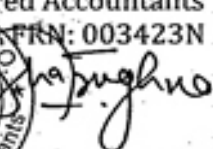

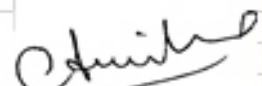
Discipline / Region	Engineering	Management	Pharmacy	University
North	252	150	84	86
South	737	257	194	58
East	126	35	28	23
West	301	162	145	50
North-east	22	5	3	16
Total	1438	609	454	233

CHAPTER 7

7.0 Finance

7.1 Annual Statement of Accounts

NATIONAL BOARD OF ACCREDITATION		
NBCC PLACE, EAST TOWER, 4th FLOOR,		
BHISHAM PITAMAH ROAD, PRAGATI VIHAR, NEW DELHI-110 003		
BALANCE SHEET AS ON 31st MARCH 2016		
PARTICULARS	31-03-2016	31-03-2015
<u>CORPUS CAPITAL FUND AND LIABILITIES</u>		
Corpus/ Capital Fund	6,00,00,000.00	6,00,00,000.00
Reserves & Surplus	1,05,64,22,497.30	86,49,41,503.59
Earmarked/ Endowment Fund	-	-
Secured Loans & Borrowings	-	-
Unsecured Loans & Borrowings	-	-
Deferred Credit Liabilities	-	-
Current Liabilities & Provisions	1,52,71,871.08	20,06,370.00
Total	1,13,16,94,368.38	92,69,47,873.59
<u>ASSETS</u>		
Fixed Assets	1,26,66,614.00	1,75,89,411.00
Investment - From Earmarked/ Endowment Funds		
Investments - Others	1,02,25,00,000.00	84,25,00,000.00
Current Assets, Loans & Advances	9,65,27,754.38	6,68,58,462.59
Miscellaneous Expenditure (to the extent not written off or adjusted)		
Total	1,13,16,94,368.38	92,69,47,873.59
Significant Accounting Policies		
Contingent Liabilities and Notes to Accounts		
<p>For DHAR TIRU & CO. Chartered Accountants FRN: 003423N</p>  <p>(Shahughan K. Shah) Partner Membership No.: 532394</p>	 (Atma Ram) Drawing & Disbursing Officer	 (Dr. A.K. Nassa) Member Secretary

NATIONAL BOARD OF ACCREDITATION		
NBCC PLACE, EAST TOWER, 4th FLOOR,		
BHISHAM PITAMAH ROAD, PRAGATI VIHAR, NEW DELHI-110 003		
INCOME & EXPENDITURE ACCOUNT FOR THE PERIOD ENDED ON 31st MARCH 2016		
PLAN & NON-PLAN FUND (CONSOLIDATED)		
PARTICULARS	31-03-2016	31-03-2015
A. INCOME		
Income from Sales & Services		-
Grants/ Subsidies		-
Fees/ Subscriptions	24,57,66,997.00	27,39,20,354.00
Income from Investments		-
Income from Royalty, Publications etc.		
Interest Earned	8,30,70,665.00	7,00,03,065.00
Other Income	1,35,650.27	42,437.60
Total (A)	32,89,73,312.27	34,39,65,856.60
B. EXPENDITURE		
Establishment Expenses	1,82,16,404.11	1,60,75,009.00
Other Administrative Expenses	1,61,45,915.45	97,39,930.23
Expenditure on Grants, Subsidies etc.	-	-
Travel Expenses	9,31,57,091.00	9,04,43,149.00
Other Expenses		
Depreciation	99,72,908.00	1,27,57,268.00
Income Tax for the Financial Year-2011-12	-	-
Income Tax for the Financial Year-2012-13		
Total (B)	13,74,92,318.56	12,90,15,356.23
Balance being excess of Income over Expenditure (A-B)	19,14,80,993.71	21,49,50,500.37
Transfer to Special Reserve		
Transfer to / from General Reserve		
Balance being surplus/ (Deficit) carried to Corpus/ Capital Fund	19,14,80,993.71	21,49,50,500.37
Significant Accounting Policies		
Contingent Liabilities and Notes to Accounts		
<div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="text-align: center;"> <p>For DHAR TIRU & CO. Chartered Accountants FRN: 003423N  (Shafrughan K. Shah) Partner Membership No.: 532394</p> </div> <div style="text-align: center;"> <p> (Atma Ram) Drawing & Disbursing Officer</p> </div> <div style="text-align: center;"> <p> (Dr. A.K. Nassa) Member Secretary</p> </div> </div>		

Appendix

I. Programs Considered for Accreditation in 2015-16

States	CA	ENGG				MGMT	PHAR	Grand Total
	PG	DIP	PG	UG	Total		UG	
ANDHRA PRADESH			5	45	50	1	1	52
ASSAM			5		5			5
BIHAR				5	5			5
CHANDIGARH				6	6			6
CHHATTISHGARH				5	5			5
DELHI	1			1	1			2
GUJARAT		2		4	6			6
HARYANA				2	2	1		3
JHARKHAND				5	5	3		8
KARNATAKA			2	46	48	2		50
KERALA				23	23	4		27
MADHYA PRADESH				9	9	2	1	12
MAHARASHTRA			25	26	51	5	1	57
NEW DELHI						1		1
ODISHA				6	6			6
PUNJAB				7	7			7
RAJASTHAN			8	5	13			13
TAMIL NADU			3	65	68	2	1	71
TELANGANA			15	23	38	2	1	41
UTTAR PRADESH			1	6	7	6		13
WEST BENGAL				4	4			4
Grand Total	1	2	64	293	359	29	5	394

II. No. of Program Accredited in 2015-16

States	CA	ENGG				MGMT	PHAR	Grand Total
		DIP	PG	UG	Total			
ANDHRA PRADESH			5	38	43	1	1	45
ASSAM			5		5			5
BIHAR				5	5			5
CHANDIGARH				5	5			5
CHHATTISHGARH				5	5			5
DELHI	1			1	1			2
GUJARAT				4	4			4
HARYANA				2	2	1		3
JHARKHAND				4	4	3		7
KARNATAKA			2	44	46	2		48
KERALA				17	17	2		19
MADHYA PRADESH				8	8	1	1	10
MAHARASHTRA			25	23	48	4	1	53
ODISHA				6	6			6
PUNJAB				6	6			6
RAJASTHAN			4	5	9			9
TAMIL NADU			3	49	52	1	1	54
TELANGANA			15	21	36	1	1	38
UTTAR PRADESH			1	6	7	6		13
WEST BENGAL				4	4			4
Grand Total	1		60	253	313	22	5	341

III. No. of Program Not Accredited in 2015-16

States	ENGG				MGMT	Grand Total
	DIP	PG	UG	Total		
ANDHRA PRADESH			7	7		7
CHANDIGARH			1	1		1
GUJARAT	2			2		2
JHARKHAND			1	1		1
KARNATAKA			2	2		2
KERALA			6	6	2	8
MADHYA PRADESH			1	1	1	2
MAHARASHTRA			3	3	1	4
NEW DELHI				1		1
PUNJAB			1	1		1
RAJASTHAN		4		4		4
TAMIL NADU			16	16	1	17
TELANGANA			2	2	1	3
Grand Total	2	4	40	46	7	53

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