

**Evaluation Report
for NBA Accreditation of Undergraduate
Engineering Programmes**



**National Board of Accreditation
New Delhi, India**

June 2009

FOREWORD

National Board of Accreditation (NBA), was established in September 1994. The NBA is entrusted with the task of evolving a procedure for quality assessment in the technical education sector, and specifically to

- Articulate the criteria for assessment of quality;
- Identify parameters to quantitatively assess these criteria and assign appropriate programme-specific weights;
- Validate the procedure by well - designed test runs;
- Establish appropriate benchmarks.

The unprecedented expansion of the technical education sector in India in recent years has brought in its wake questions about the quality of education imparted, the competence of the graduates and their relevance to the current technical manpower needs of our country. The concurrent ISO standardization movement in the industrial scene has highlighted the need for accrediting programmes, especially in terms of their role as the main suppliers of technically qualified human resource.

It is heartening to note in this context that the NBA is now bringing out second edition of Manual for Accreditation of for Engineering (UG) programmes in India. It consists of four Sections, viz.,

- Accreditation Policy and Procedure
- Evaluation guidelines
- Evaluation Report
- Self Assessment Report

It is hoped that this manual will provide the students, parents, employers and the society at large, comprehensive information on all aspects of the Quality Assurance provided by the NBA to assist them in making a judicious choice among competing educational programmes.

This manual is the culmination of sustained efforts and mutually supporting interaction amongst several individuals, organizations and agencies. This manual addresses the equivalence of evaluation and accreditation processes for engineering education programs to international standards so as to ensure opportunities for global mobility of engineering graduates.

We would be failing in our duty if we do not place on record our gratitude and appreciation for the help we have received from the following people.

- The Members of the Board of the NBA and the NBA Engineering Committee for their ready and

willing cooperation and the officials of NBA for their dedicated efforts.

- Committee comprising Prof. S.C. Sahasrabudhe Director, DAACT, Gandhinagar, Prof. M.U. Deshpande Former Professor, IIT – Bombay, Prof. Gopal Ranjan Former VC, IIT, Roorkee, Prof. Gautam Biswas IIT, Kanpur, Prof S Sen Gupta IIT Kharagpur, Prof. V.P. Kodali, Ex Director of E&I, DRDO, Shri Ravi Kumar, presently Principal Secretary (Technical Education), Govt of Rajasthan for their valuable contribution in drafting the initial accreditation manual.
- Prof. Ashok Saxena University of Arknas, USA and Prof K. Vedula University of Manchester, USA for their valuable guidance
- Committee comprising Prof S K Khanna Former Chairman AICTE, Prof K L Chopra, Former Director – IIT – Kharagpur, Prof S Sen Gupta, IIT – Kharagpur, Prof J P Gupta, VC – Jaypee University, Noida, Prof Rajeev Kumar, IIT Kharagpur for their contribution in refining, revising and presenting the final version of the accreditation manual.

We welcome suggestions from all the stakeholders in Engineering Education in order to bring further improvement in the effort of NBA to provide a transparent and credible System of accreditation of engineering programs in India.

Prof. P.N. Srivastava
Chairman, NBA

Evaluators' Report on Accreditation Visit

Name of the Programme :

Name and address of the Institute :

Name of the Affiliating University :

Dates of the Accreditation Visit :

Name, Designation and Affiliation of Program Evaluator 1 :

Name, Designation and Affiliation of Program Evaluator 2 :

Name, Designation and Affiliation of Team Chairperson :

Signatures:

(Program Evaluator1)

(Program Evaluator 2)

(Team Chairperson)

Criterion - I: Organization and Governance, Resources, Institutional Support, Development and Planning

Item No.	Item Description	Max. Points	Points Awarded	Remarks
I-I.1	Campus infrastructure and facility	30		
I-I.2	Organization, governance and transparency	20		
I-I.3	Budget allocation and utilization	10		
I-I.4	Library	25		
I-I.5	Academic support units and common facilities	20		
I-I.6	Internet	5		
I-I.7	Co-curricular and extra curricular activities	10		
I-I.8	Career guidance, Training, placement and Entrepreneurship cell	15		
I-I.9	Safety norms and checks	5		
I-I.10	Emergency medical care and first-aid	10		
	Total	150		

Criterion - II: Evaluation and Teaching-Learning

Item No.	Item Description	Max. Points	Points Awarded	Remarks
II-I.1	Evaluation system	40		
II-I.2	Tutorial classes/ remedial classes/ mentoring	20		
II-I.3	Teaching evaluation process : Feedback system	30		
II-I.4	Self Learning and Learning beyond syllabus	20		
II-I.5	Faculty Ratio and qualification for First Year Common Courses	25		
II-I.6	Academic performance in First Year Common Courses	40		
	Total	175		

Criterion - III: Students' Entry and Outputs

Item No.	Item Description	Max. Points	Points Awarded	Remarks
III-P.1	Students admission	10		
III-P.2	Success Rate	30		
III-P.3	Academic performance	30		
III-P.4	Placement and higher studies	40		
III-P.5	Professional activities	20		
III-P.6	Students' Projects Quality	20		
	Total	150		

Criterion IV: Faculty Contributions

Item No.	Item Description	Max. Points	Points Awarded	Remarks
IV-P.1	Faculty in position : Teacher- student ratio	20		
IV-P.2	Faculty in position : Cadre ratio	20		
IV-P.3	Faculty qualifications	40		
IV-P.4	Faculty retention	20		
IV-P.5	Research publications and IPR	20		
IV-P.6	Externally funded R & D projects and consultancy work	20		
IV-P.7	Interactions of faculty members with outside world	10		
	Total	150		

Criterion V: Facilities and Technical Support

Item No.	Item Description	Max. Points	Points Awarded	Remarks
V-P.1	Class rooms	15		
V-P.2	Faculty rooms	15		
V-P.3	Laboratories including computing facility	25		
V-P.4	Technical manpower support	20		
	Total	75		

Criterion VI: Continuous Improvements

Item No.	Item Description	Max. Points	Points Awarded	Remarks
VI-P.1	Improvement in Success Index of students	10		
VI-P.2	Improvement in academic performance of students	10		
VI-P.3	Enhancement of faculty qualifications	15		
VI-P.4	Improvement in Faculty activities in research publication, R & D work and consultancy	15		
VI-P.5	Continuing education	10		
VI-P.6	New facility created	10		
VI-P.7	Overall improvements since last accreditation, if any, otherwise, since establishment	5		
	Total	75		

Criterion VII: Curriculum

Item No.	Item Description	Max. Points	Points Awarded	Remarks
VII-P.1	Contents of basic sciences, HSS, professional core and electives, and breadth	40		
VII-P.2	Emphasis on laboratory and project work	30		
VII-P.3	Curriculum updates and PEO reviews	30		
VII-P.4	Additional contents to bridge curriculum gaps	25		
	Total	125		

Criterion VIII: Program Educational Objectives – Their Compliance and Outcomes

Item No.	Item Description	Max. Points	Points Awarded	Remarks
VIII-P.1	Course objective and mapping	20		
VIII-P.2	Assessment outcomes	20		
VIII-P.3	Mapping with faculty expertise	20		
VIII-P.4	Mapping with outcomes	20		
VIII-P.5	Significant achievements	20		
	Total	100		

Criterion IX: General Report about the strengths, weaknesses and deficiencies, if any

Strengths:

Weaknesses:

Deficiencies, if any

Additional Remarks, if any

Summary Assessment

No.	Criterion Descriptor	Max. Points	Qualifying Points	Points Awarded	Qualified?
I	Organization and Governance, Resources, Institutional Support, Development and Planning	150	100		Yes / No
II	Evaluation and Teaching-Learning	175	115		Yes / No
III	Students' Entry and Outputs	150	100		Yes / No
IV	Faculty Contributions	150	100		Yes / No
V	Facilities and Technical Support	75	---		---
VI	Continuous Improvements	75	----		----
VII	Curriculum	125	-----		-----
VIII	Program Educational Objectives – Their Compliance and Outcomes	100	-----		-----
	Total	1000			

(Program Evaluator1)

(Program Evaluator 2)

(Team Chairperson)

Chairperson's Report

Strengths:

Weaknesses:

Deficiencies, if any

Additional Remarks, if any

(Team Chairperson)

Accreditation Status

1. The **Program** gets the status '**Accredited**' for next **5 years** from the date of issue of the letter from NBA, if it gets a minimum score of 750 points and scores minimum qualifying marks in the criteria specified.
2. The **Program** gets the status '**Provisionally Accredited**' for next **2 years** from the date of issue of the letter from NBA, if it gets a minimum score of 600 points.

The Institution may apply after overcoming the weaknesses to upgrade their status to "Full Accreditation" of the Program.

3. The **Program** gets the status '**Not Accredited**' if it gets the score less than 600 points.

(NBA's Authorized Signatory)