

**ALL INDIA COUNCIL FOR TECHNICAL EDUCATION  
NORTH EAST QUALITY IMPROVEMENT PROGRAMME  
(AICTE-NEQIP)**

**SCHEME DOCUMENT**  
**[2013 – 2016]**



**All India Council for Technical Education**  
**(A Statutory Body of the Government of India)**  
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## ABBREVIATIONS AND ACRONYMS

|                |  |
|----------------|--|
| <b>AD</b>      | Appraisal Document   |
| <b>AICTE</b>   | All India Council for Technical Education                              |
| <b>BoG</b>     | Board of Governors   |
| <b>CD</b>      | Compact Disk   |
| <b>CE</b>      | Continuing Education   |
| <b>CFP</b>     | Centrally Funded Project   |
| <b>GATE</b>    | Graduate Aptitude Test in Engineering                                  |
| <b>HoD</b>     | Head of the Department   |
| <b>IDP</b>     | Institutional Development Proposal                                     |
| <b>I-I-I</b>   | Industry Institute Interaction   |
| <b>IIC</b>     | Industry Institute Interaction Cell                                    |
| <b>INDEST</b>  | Indian National Digital Library in Engineering Sciences and Technology |
| <b>IRG</b>     | Internal Revenue Generation  |
| <b>KPI</b>     | Key Performance Indicator  |
| <b>LCD</b>     | Liquid Crystal Display   |
| <b>LRs</b>     | Learning Resources   |
| <b>MoU</b>     | Memorandum of Understanding  |
| <b>NBA</b>     | National Board for Accreditation of the AICTE                          |
| <b>NPE</b>     | National Policy on Education of GoI                                    |
| <b>OBC</b>     | Other Backward Class   |
| <b>PEC</b>     | Project Evaluation Committee   |
| <b>PMC</b>     | Project Monitoring Committee   |
| <b>PG</b>      | Post graduate  |
| <b>PIU</b>     | Project Implementation Unit  |
| <b>QPR</b>     | Quarterly Progress Reports   |
| <b>R&amp;D</b> | Research and Development   |
| <b>SC</b>      | Scheduled Castes   |
| <b>SD</b>      | Scheme Document  |
| <b>ST</b>      | Scheduled Tribes   |
| <b>SWOT</b>    | Strengths, Weaknesses, Opportunities and Threats                       |
| <b>UG</b>      | Undergraduate  |

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**ALL INDIA COUNCIL FOR TECHNICAL EDUCATION  
NORTH EAST QUALITY IMPROVEMENT PROGRAMME  
(AICTE-NEQIP)**

**Table-1**

**Summary of Scheme Guidelines**

| <b><u>Eligibility Criteria and Project Funding</u></b>   |  |   |
|--|--|---|
| <b>Eligibility of Institute</b>  |  | AICTE approved government/ government aided Polytechnics and Degree engineering institutes & AICTE approved university departments of North Eastern Region.   |
| <b>Requirements</b>  |  | <ul style="list-style-type: none"> <li>One batch should have passed out</li> <li>Minimum four courses currently being conducted.</li> <li>Minimum 50% faculty positions filled out of which 30% on full-time regular basis as percentage of the total faculty positions sanctioned in accordance with the AICTE prescribed student-to-faculty ratio</li> <li>Board of Governors in place with an eminent educationist or Industrialist as the Chairperson.</li> </ul> |
| <b>Method of Assessment</b>  |  | Evaluation of proposals through Project Evaluation Committee  |
| <b>Duration of Project</b>   |  | 3 years   |
| <b>Limit of Funding</b>  | <b>Polytechnics</b>                            | 5.0 Crore   |
|  | <b>Degree Institutions</b>                     | 7.0 Crore   |
| <b>Disbursement of funds based on projected budget</b>   | <b>On Sanction of Proposal</b>                 | Advance up to 25% of the sanctioned amount  |
|  | <b>Year 2</b>                                  | Advance up to 30% of the sanctioned amount  |
|  | <b>Year 3</b>                                  | Advance up to 35% of the sanctioned amount  |
|  | <b>After Completion of the Project</b>         | Reimbursement of actual expenditure up to sanctioned amount (based on UC & Completion Report)   |
| <b>Terms and Conditions (Documents to be submitted for each disbursement)</b>  |  | <ul style="list-style-type: none"> <li>Duly Audited Utilization Certificate</li> <li>Progress Report in the prescribe format</li> <li>Receipt &amp; Payment A/c</li> </ul>  |
| <b><u>Project outcomes and deliverables</u></b>  |  |   |
| <b>Expected outcomes and Key performance indicator at the closure of the project</b>   | <b>Polytechnics</b>                            | <b>Degree Institutes</b>  |
| Accreditations of Eligible Courses (obtained or applied)   | 60%  | 60%   |
| Increase in regular full time faculty with minimum master's degree against total engineering faculty in place measured above base line       | 20%  | 30%   |
| Increase in regular full time faculty with doctoral degree in engineering of total engineering faculty in place measured above base line     | 5%   | 10%   |
| Faculty position filled  | 90% (with at least 65% on regular appointment) | 90% (with at least 65% on regular appointment)  |
| Increase in the number of publications in the field of Engineering in refereed journals during the project duration measured above base line | 30%  | 50%   |
| Increase in the transition rate for students from the First year to the Second year of Courses measured above base line                      | Minimum 30%                                    | Minimum 30%.  |
| Enrolment of faculty for qualification up gradation  | Minimum 30%                                    | Minimum 30%.  |

# THE AICTE-NEQIP PROJECT

## 1. Project Objectives:

The Project will focus on the following objectives:

- Strengthening institutions in terms of infrastructure.
- Strengthening institutions in terms of faculty competence and quality of teaching, research and consultancy.
- Strengthening institutions in terms of academics to improve learning outcomes and employability of students.

## 2. Project Scope:

Project will be open for participation by: (a) the All India Council for Technical Education (AICTE) approved Government and Government aided Polytechnics and (b) Government and Government aided Engineering institutions (c) AICTE approved university departments from North Eastern Region. Institutions can submit duly forwarded Applications in the prescribed format as given in *Annexure I* with required supporting documents. An estimated 30 engineering institutions will be competitively selected to improve the infrastructure, quality and competence of faculty and academics to improve learning outcomes and employability of students.

## 3. Project Strategy:

The Project will be implemented by AICTE in pursuance of the National Policy on Education (NPE-1986 revised in 1992) and Special attention given to the economic development of the North eastern region from the Eighth Plan period onwards. In October 1996, the Central Government's announcement of 'New Initiatives for the North Eastern Region' included a number of measures for the development of the NER which covered policy changes, special area development and development projects in key sectors. In order to mobilize financial resources, a policy decision was taken to earmark at least 10% of the Plan Budget(s) of the Central ministries/departments for development of the North Eastern states. The Project will be implemented as a **Centrally Funded Project (CFP)** and 100% of the project cost will be borne by the AICTE. The duration of the project is for three years (2013 to 2016).

A set of Eligibility Criteria for Engineering and Polytechnic Institutions to participate in this project is enforced to achieve a high and sustained impact of the Project. The criteria seek to give the project institutions adequate autonomy and decision making powers that will enable and encourage them to deliver quality education and undertake research in an efficient manner. A primary focus is to increase empowerment of institutions for self governance and incentivizing improvements in Engineering Education in the north eastern region.

The institutions will be required to submit a comprehensive and coherent Project Proposal containing a set of reforms, improvements in faculty competence and quality of teaching, research and consultancy, and improvement in the associated infrastructure. The project institutions will be required to implement academic and non-academic reforms within their self-conceived development programmes that focus on quality and relevance, excellence, resource mobilization, greater autonomy with accountability, faster decision making, research and consultancy.

The Project will lay major emphasis on monitoring and evaluation. The prime responsibility of monitoring will lie with the institutions themselves. The management structure at the Institutional level will monitor the progress of project on a regular basis and provide guidance for improving the performance of institutions in project implementation. The project institutions will submit the required information periodically and AICTE will regularly monitor and evaluate the progress of institutions. The monitoring will be based on action plans prepared by each project institution, implementation schedule and milestones agreed upon and achievements made on a set of Key Performance Indicators (KPIs). The monitoring will focus on implementation of reforms by

institutions, achievements in project activities, procurement of resources and services, utilization of financial allocations and achievements in faculty, staff and student development and management development activities.

#### 4. Project Components

**Table-2**

| <b>Suggested Activities that may be Undertaken Under The Project</b>  |  |
|---|--|
| <b><i>By Polytechnics and Degree Engineering institutions:</i></b>  |  |
| <ul style="list-style-type: none"> <li>• Improvement in teaching, training and learning facilities through: <ul style="list-style-type: none"> <li>○ Starting new UG and PG courses in Engineering discipline</li> <li>○ Modernization and strengthening of existing laboratories</li> <li>○ Establishment of new laboratories for existing and new UG and PG courses</li> <li>○ Modernization of classrooms</li> <li>○ Updating of learning resources</li> <li>○ Procurement of furniture</li> <li>○ Establishment / upgradation of Central and Departmental Computer Centres</li> <li>○ Modernization / improvements of supporting departments</li> <li>○ Modernization and strengthening of libraries and increasing access to knowledge resources</li> <li>○ Civil works</li> </ul> </li> <li>• Enhancement of R&amp;D and institutional consultancy activities</li> <li>• Faculty and Staff development for improved competency</li> <li>• Faculty Development for effective teaching.</li> <li>• Enhanced interaction with Industry</li> <li>• Institutional management capacity enhancement</li> <li>• Implementation of institutional reforms</li> <li>• Academic support for weak, SC&amp;ST Students</li> <li>• Finishing School training</li> <li>• Providing Teaching and Research Assistantships to General/SC/ST Students to increase enrolment in existing and new PG courses in Engineering discipline<br/>(only for Degree Engineering institutions offering PG programmes)</li> </ul> |  |

#### 5. Eligibility Criteria

Institutions meeting the following benchmarks will be considered for processing the proposal:

**Table-3**

**Eligibility Criteria and Benchmarks**

| <b>S. No.</b> | <b>Eligibility Parameters</b>   | <b>Benchmark Values</b> |
|---------------|---|-------------------------|
| 1             | <p>Agreement to implement all academic and non-academic reforms listed below:</p> <ul style="list-style-type: none"> <li>• Curricular Reforms through competent approval</li> <li>• Exercise of internal autonomies</li> <li>• Establishment of Corpus Fund, Faculty Development Fund, Equipment Replacement Fund and Maintenance Fund</li> <li>• Generation, retention and utilization of revenue generated through a variety of activities</li> <li>• Filling up all existing teaching and staff vacancies</li> <li>• Delegation of decision making powers to senior Institutional functionaries</li> <li>• Performance appraisal of faculty by students</li> <li>• Faculty incentives for Continuing Education (CE), consultancy and R&amp;D</li> <li>• Accreditation of at least 30% of its eligible Diploma, UG and PG courses accredited or applied for within two years of joining the project.</li> </ul> | Yes                     |

|   |   |                                |
|---|---|--------------------------------|
|   | <ul style="list-style-type: none"> <li>• Accreditation of at least 60% of its eligible Diploma, UG and PG courses accredited or applied for at the closure of the project.</li> </ul> |                                |
| 2 | Age of the Institution from the start of its first academic session (in years)<br>(i) For Polytechnics Institutions<br>(ii) For Degree Institutions                                   | More than 3yr<br>More than 4yr |
| 3 | Minimum number of Diploma / UG and PG courses currently conducted   | 4                              |
| 4 | Faculty positions filled as percentage of the total faculty positions sanctioned in accordance with the AICTE prescribed student-to-faculty ratio                                     | 50%                            |
| 5 | Faculty positions filled on full-time regular basis as percentage of the total faculty positions sanctioned in accordance with the AICTE prescribed student-to-faculty ratio          | 30%                            |
| 6 | Presence of Board of Governors with an eminent educationist or Industrialist as the Chairperson   | Yes                            |
| 7 | Proposal forwarded by state authorities   | Yes                            |

#### 6. Evaluation and Selection:

Duly forwarded Project Proposals submitted in the prescribed formats will be evaluated by Project Evaluation Committee (PEC) on the following parameters.

**Table-4**

#### Evaluation Scheme for Project Proposal

| S. No      | Evaluation Parameters  | Marks      |
|------------|--|------------|
| <b>I</b>   | <b>Institutional Preparedness and Implementation Feasibility</b>   |            |
|            | <ul style="list-style-type: none"> <li>• Clarity of Institutional basic information including baseline data</li> </ul>   | 5          |
|            | <ul style="list-style-type: none"> <li>• Quality of SWOT analysis</li> </ul>   | 10         |
|            | <ul style="list-style-type: none"> <li>• Overall implementation feasibility of Institutional project</li> </ul>  | 15         |
|            | <ul style="list-style-type: none"> <li>• Coherence of proposal with Implementation Schedule and milestones for disbursement.</li> </ul>  | 5          |
|            | <b>Sub-Total (I)</b>   | <b>35</b>  |
| <b>II</b>  | <b>Clarity and Quality of the Action Plans for:</b>  |            |
|            | <ul style="list-style-type: none"> <li>• Implementation of reforms</li> </ul>  | 15         |
|            | <ul style="list-style-type: none"> <li>• Improving learning outcomes of students in terms of higher pass rates and higher academic achievements</li> </ul>   | 10         |
|            | <ul style="list-style-type: none"> <li>• Identification of weak students and for improvement in their learning outcomes through finishing school</li> </ul>  | 5          |
|            | <ul style="list-style-type: none"> <li>• Improving employability of students</li> </ul>  | 5          |
|            | <ul style="list-style-type: none"> <li>• Strengthening of existing courses and starting new courses</li> </ul>   | 5          |
|            | <ul style="list-style-type: none"> <li>• Faculty development including pedagogical training</li> </ul>   | 10         |
|            | <ul style="list-style-type: none"> <li>• Enhanced interaction with Industry</li> </ul>   | 5          |
|            | <b>Sub-Total (II)</b>  | <b>55</b>  |
| <b>III</b> | <b>Faculty Qualification and Status</b>  |            |
|            | <ul style="list-style-type: none"> <li>• Quality of faculty in terms of qualifications, experience, industrial consultancy, PhD students guided, student projects guided, publications, awards, patents etc</li> </ul>                         | 5          |
|            | <ul style="list-style-type: none"> <li>• Status of qualified faculty in terms of availability vs requirements, vacancy position, filling up plans, guest faculty, industry participation in teaching, contractual or adhoc faculty,</li> </ul> | 5          |
|            | <b>Sub-Total (III)</b>   | <b>10</b>  |
|            | <b>Total (I+II+III)</b>  | <b>100</b> |

Institutions will be selected based on merit on the basis of marks obtained.

**7. Funding pattern:**

The financial allocation to each Government and Government aided Polytechnic is restricted to be in the range of Rs.5.00 crore and for Government and Government aided degree engineering institution the allocation will be Rs. 7.00 crore.

**8. Mentoring:**

Mentoring is a strengthening mechanism by the third party at the institutional level. Mentors will be appointed to provide clear guidance on reforms, implementations plans, and remedial actions to improve performance of the institutions. Mentors will be assigned to all project institutions to provide continuous guidance for Project implementation they may visit project institutions twice or thrice in a year based on institutional requirements. The Mentors will also act as the Performance Auditors at different Institutions and assess the progress made by individual Institutions.

**9. Institutional Level Implementation Arrangements:**

The Project at the Institutional level will be managed by two bodies (i) the Board of Governors (BoG) and (ii) an Institutional Project Unit.

**9.1 Board of Governors (BoG):**

**(a) Composition:**

- Each Institution will necessarily have its own BoG, (please see eligibility conditions) as per AICTE Guidelines and Composition, either appointed by the sponsoring Government or by itself through due procedure and
- The BoG will, in all cases, be headed by an eminent Industrialist/Engineering Education expert with adequate representation from other stakeholders.

**(b) Meeting:**

The BoG will meet at least quarterly for engineering institutions and thrice in a year for Polytechnic institutions or as often as required and the minutes of BoG meetings will be published on Institution's website as promptly as possible. It will perform the following functions in the context of this Project.

**(c) Functions:**

The BoG will monitor progress in the carrying out of all the proposed activities, resolve bottlenecks, and enable the Institution to achieve targets for all key indicators. It will ensure proper utilization of Project fund and timely submission of Progress Reports and Utilization Certificates.

**9.2 Institutional Project Unit:**

Each Institution will form an Institutional Project Unit (IPU) with appropriate representation from academic officials of the Institution, faculty, senior administrative officers, technical and non-technical support staff and students. The Institutional Project Unit will operate through required committees for effective and time bound implementation of the proposed activities as proposed in the project proposal

**10. Project Monitoring and Reviews:**

Project will be reviewed and monitored continuously by institutional project unit, by Mentor appointed under the project & BOG. The time bound progress reports will be submitted to AICTE by the institutions.



Progress of the Project will also be monitored by Project Monitoring Committee (PMC) and three types of reviews will be organized by the AICTE to assess the qualitative improvements achieved by the individual Institutions and milestones achieved to consider suitability of next disbursement.

- **Annual Review:** will be conducted annually by the AICTE to review the overall progress achieved against set targets during the year under the Project and to ascertain the proper utilization of disbursed grants and to assess the need for the next year and disbursement of grant for next year.
- **Bi Annual Review:** A Review after two years of commencement of the Project will be conducted by the AICTE to assess the achievements of project institutions against the set targets. The financial allocation of the Institutions for the remaining period of the Project will also be adjusted based on their needs and performance. It is basically meant for identifying corrective measures for maximizing gains from the Project.
- **Overall Review:** The overall Review under the Project will be conducted by the AICTE to assess the achievements of project institutions against the set targets and to acknowledge the overall improvement achieved as an outcome of the project.

## 11. Performance Indicators:

The project will be monitored through Performance Indicators & Key Performance Indicators with Target Values as given below:

**Table-5**

### 11.1 Performance Indicators

| Project components                             | Monitoring Parameters   |
|--|---|
| Improving Quality of Education in Institutions | <ul style="list-style-type: none"> <li>• Effectiveness of funds utilized for the teaching, training, learning and research equipment, library, computers, etc. by Institutions</li> <li>• Generation, retention and utilization of IRG</li> <li>• Existing teaching and staff vacancies and effort made by Institutions for filling the vacancies</li> <li>• Improvement in transition rate of students.</li> <li>• Efforts made by Institutions for upgrading qualifications of faculty members</li> </ul> |

**Table-6**

### 11.2 Key Performance Indicators with Target Values

| S. No | Indicators  | Target values                 |                               |                               |                               |
|-------|---|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
|       |   | Polytechnics                  |                               | Degree Institutions           |                               |
|       |   | After Completion of Two years | At the closure of the project | After Completion of Two years | At the closure of the project |
| 1.    | Share of supported eligible courses that are accredited or applied for  | 30%                           | 60%                           | 30% (UG+PG)                   | 60% (UG+PG)                   |
| 2.    | Increase in percentage of regular faculty with Masters degree in engineering disciplines of total engineering faculty in place, measured above baseline | 10%                           | 20%                           | 20%                           | 30%                           |
| 3.    | Increase in Percentage of regular faculty with  | 2%                            | 5%                            | 5%                            | 10%                           |

|    |  |   |  |   |  |
|----|--|---|--|---|--|
|    | Doctoral degree in engineering disciplines of total engineering faculty in place, measured above baseline`                                   |   |  |   |  |
| 4. | Faculty position filled  | 70% (with at least 50% on regular appointment and remaining on 11 months or longer contracts) | 90% (with at least 65% on regular appointment and remaining on 11 months or longer contracts)                | 70% (with at least 50% on regular appointment and remaining on 11 months or longer contracts) | 90% (with at least 65% on regular appointment and remaining on 11 months or longer contracts)                |
| 5. | Increase in the number of publications in the field of Engineering in refereed journals during the project duration measured above baseline. | 15  | 30   | 25  | 50   |
| 6. | Transition rate for students from the First year to the Second year of undergraduate Courses measured above baseline.                        |   | 10% every year<br><br>The transition rate needs to be improved by each institution during each Project-year. |   | 10% every year<br><br>The transition rate needs to be improved by each institution during each Project-year. |
| 7. | Enrolment of faculty for qualification upgradation   | 20%   | At least 30%   | 20%   | At least 30%   |
| 8. | IRG as % of total annual recurring expenditure   |   |  |   | As per Progress Report   |

## 12. Fund Allocation:

**Table-7**

### 12.1 The category-wise institutional funding will be as under:

(Rs. in crore)

| S. No     | Costing Parameters          |                           |   | No. of Institution s/ Entities | Cost per Instituti on/ Entity | Total Cost |
|-----------|-----------------------------|---------------------------|---|--------------------------------|-------------------------------|------------|
| 1         | Project Institution funding | Project Institutions (30) |   |                                |                               |            |
|           |                             | (i)                       | Govt. and Govt aided degree engg Institutions | 15                             | 7.0                           | 105.00     |
|           |                             | (ii)                      | Govt. and Govt. aided Polytechnics            | 15                             | 5.0                           | 75.00      |
| Sub-total |                             |                           |   | 30                             | 12.00                         | 180.00     |

**Table-8****12.2 Head wise indicative funding**

Head wise indicative funding for key activities that can be taken by the institutions under the project is as under:

| S. No. | Activities   | Category of Expenditure (Head of expenditure) | Degree         |                     | Polytechnic    |                     |
|--------|--|---|----------------|---------------------|----------------|---------------------|
|        |  |   | Percentage (%) | Cost (Rs. in crore) | Percentage (%) | Cost (Rs. in crore) |
| 1      | Procurement of Goods (equipment, furniture, books LRs, software and minor items) and civil works (including provision for additional facilities for SC/ST Students but total expenditure on civil works not to exceed 25% of the sanctioned grant) for improvement in teaching, training and learning facilities | Procurement                                   | 50             | 3.5                 | 50             | 2.5                 |
| 2      | Faculty and Staff development for improved competence & effective teaching   | FSD   | 10             | 0.7                 | 12             | 0.6                 |
| 3      | Academic support for weak, SC & ST Students  | Student support                               | 10             | 0.7                 | 15             | 0.75                |
| 4      | Providing Teaching and Research Assistantships to General, SC & ST Students increase enrolment in existing and new PG Courses in Engineering disciplines   | Assistantships                                | 5              | 0.35                | -              | 0                   |
| 5      | Enhanced interaction with Industry   | I-I Cells                                     | 5              | 0.35                | 3              | 0.15                |
| 6      | Institutional Management Capacity enhancement  | Capacity development                          | 2              | 0.14                | 2              | 0.1                 |
| 7      | Implementation of Institutional academic reforms   | Reforms                                       | 2              | 0.14                | 4              | 0.2                 |
| 8      | Enhancement of R&D and institutional consultancy activities  | R&D   | 6              | 0.42                | 4              | 0.2                 |
| 9      | Incremental Operating Cost   | IOC   | 10             | 0.7                 | 10             | 0.5                 |
| TOTAL  |  |   | 100            | 7.00                | 100            | 5.00                |

**Note:**

- Salary expenditure of faculty and staff appointed on contract against the existing vacancies at the time of submitting the project can not be charged to the Project.
- However, the salary expenditure of contractual faculty and staff appointed against a posts created under the Project either against the study leave of a permanent faculty granted on account of qualification improvement programme or for other purposes within the scope of the project strictly for the project duration can be charged to the Project.
- The Incremental Operating Cost means the costs of operation and maintenance of equipment acquired under the project, office expenses, hiring of vehicles, consumables, salaries and allowances of contractual faculty and staff against posts created under the Project as specified above. It will also include travel costs incurred for the Project Management activities.

### **13. Disbursements**

- The project institutions will submit “Progress Report” (PR) quarterly to the AICTE along with expenditure information for the previous quarter and a forecast of expenditure to be made in the next six months.
- The expenditure reported in progress report will be finally confirmed by AICTE subject to its certification in the Annual Audit Reports for each Institution.
- Timely submission of progress report by Institutions is mandatory for further disbursement of the grant by AICTE.

### **14. Auditing:**

#### **Statutory Audit at Institution level:**

Each Institution will appoint a firm of chartered accountants for the audit. The auditor will audit the project accounts of the institution. For this purpose, the institution is required to furnish all documents / records to the Auditor to facilitate timely audit. Each institution will put up the Audit Report to Board of Governors within a reasonable period of completion of audit.

The Institution will be required to submit the Audit Report to the AICTE by **31<sup>st</sup> July** of every project year.

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# ANNEXES

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**ALL INDIA COUNCIL FOR TECHNICAL EDUCATION  
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**FORMAT**

**INSTITUTIONAL DEVELOPMENT PROPOSAL**  
[2013 – 2016]



All India Council for Technical Education  
(A Statutory Body of the Government of India)  
7<sup>th</sup> Floor, Chanderlok Building, Janpath, NEW DELHI  
Website- [www.aicte-india.org](http://www.aicte-india.org), Ph- 011-23724179, Fax 011-23724192  
**(August 2013)**

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**SECTION 1**

**1. INSTITUTIONAL BASIC INFORMATION**

*(Note: Please insert the name of applicant institution in the footer on each page of the proposal)*

**1.1 Institutional Identity**

- Name of the Institution :
- AICTE permanent ID no :
- Furnish copy of AICTE approval letter for 2013-14 :
- Type of Institution :

|        |
|--------|
| Degree |
|--------|

|             |
|-------------|
| Polytechnic |
|-------------|
- Category of Institution :

|           |
|-----------|
| Govt Inst |
|-----------|

|                |
|----------------|
| Govt.<br>Aided |
|----------------|

|                      |
|----------------------|
| University<br>Deptt. |
|----------------------|
- Status of Institution :

|                          |
|--------------------------|
| <input type="checkbox"/> |
|--------------------------|

 Autonomous Institute as declared by  
ing University
- |                          |
|--------------------------|
| <input type="checkbox"/> |
|--------------------------|

 Non autonomous and Affiliated to  
University
- |                          |
|--------------------------|
| <input type="checkbox"/> |
|--------------------------|

 Constituent college/Department of  
University
- |                          |
|--------------------------|
| <input type="checkbox"/> |
|--------------------------|

 Affiliated to Deptt of Technical Education  
State Government
- |                          |
|--------------------------|
| <input type="checkbox"/> |
|--------------------------|

 Affiliated to Technical Board of State  
Government
- |                          |
|--------------------------|
| <input type="checkbox"/> |
|--------------------------|

 Any other (specify)
- Name of Affiliating State Deptt / Board/University: \_\_\_\_\_

- **Full time Head of the Institute available** :
- **Name & Designation of Head of the Institution** : \_\_\_\_\_
- **Nature of Full time appointment** :

## 1.2 Academic Information:

- Diploma, UG and PG courses in Engineering offered in Academic year 2013-14:
- Total number of courses being conducted by Institute: \_\_\_\_\_
- **Details of the courses :**

| S. No | Level (Diploma, UG, PG, PhD) | Programmes | Course | Duration (Years) | Year of starting | No. of Batches passed out | AICTE sanctioned annual intake |       |       |       | Total student strength |
|-------|------------------------------|------------|--------|------------------|------------------|---------------------------|--------------------------------|-------|-------|-------|------------------------|
|       |                              |            |        |                  |                  |                           | 10-11                          | 11-12 | 12-13 | 13-14 |                        |
|       |                              |            |        |                  |                  |                           |                                |       |       |       |                        |
|       |                              |            |        |                  |                  |                           |                                |       |       |       |                        |
|       |                              |            |        |                  |                  |                           |                                |       |       |       |                        |

- **NBA Accreditation Status of eligible Diploma courses:**

| Course | Whether accredited as on date of submitting application | Reference Number and date of Accreditation letter (attach copy) | Accreditation valid up to (specify date) |
|--------|---|---|--|
|        |   |   |  |
|        |   |   |  |
|        |   |   |  |
|        |   |   |  |

- **NBA Accreditation Status of eligible UG courses:**

| Course | Whether accredited as on date of submitting application | Reference Number and date of Accreditation letter (attach copy) | Accreditation valid upto (specify date) |
|--------|---|---|---|
|        |   |   |   |
|        |   |   |   |
|        |   |   |   |
|        |   |   |   |
|        |   |   |   |



- **NBA Accreditation Status of eligible PG courses:**

| Course | Whether accredited as on date of submitting application | Reference Number and date of Accreditation letter (attach copy) | Accreditation valid upto (specify date) |
|--------|---|---|---|
|        |   |   |   |
|        |   |   |   |
|        |   |   |   |
|        |   |   |   |

- **Details of Diploma courses which will become eligible for Accreditation during 2013-16:**

| Course | Date on which the course will become eligible for applying for NBA accreditation |
|--------|--|
|        |  |
|        |  |
|        |  |
|        |  |

- **Details of UG courses which will become eligible for Accreditation during 2013-16:**

| Course | Date on which the course will become eligible for applying for NBA accreditation |
|--------|--|
|        |  |
|        |  |
|        |  |
|        |  |

- **Details of PG courses which will become eligible for Accreditation during 2013-16:**

| Course | Date on which the course will become eligible for applying for NBA accreditation |
|--------|--|
|        |  |
|        |  |
|        |  |
|        |  |

**1.3 Status of Faculty Associated with Teaching Engineering Students (Regular & Contract) as on date of submitting the application:**

| Faculty Position | Number of Faculty required as per AICTE norms | Present Status : Number in Position by Highest Qualification |   |   |   |                         |   |   |    |                         |    |   |    |                         |    |   |    |    |                              | Total Number of regular faculty in Position | % of faculty positions filled on regular basis | Total Shortfall against sanctioned post | Total Number of contract faculty in Position | % of Total faculty positions filled |
|------------------|---|--|---|---|---|-------------------------|---|---|----|-------------------------|----|---|----|-------------------------|----|---|----|----|------------------------------|---|--|---|--|-------------------------------------|
|                  |   | Doctoral Degree  |   |   |   | Masters Degree          |   |   |    | Bachelor Degree         |    |   |    | Diploma                 |    |   |    |    |                              |   |  |   |  |                                     |
|                  |   | Engineering Disciplines                                      |   | Supporting Disciplines (Physics, Chemistry, Maths and Humanities) |   | Engineering Disciplines |   | Supporting Disciplines (Physics, Chemistry, Maths and Humanities) |    | Engineering Disciplines |    | Supporting Disciplines (Physics, Chemistry, Maths and Humanities) |    | Engineering Disciplines |    | Supporting Disciplines (Physics, Chemistry, Maths and Humanities) |    |    |                              |   |  |   |  |                                     |
|                  |   | R  | C | R   | C | R                       | C | R   | C  | R                       | C  | R   | C  | R                       | C  | R   | C  |    |                              |   |  |   |  |                                     |
| 1                | 2   | 3  | 4 | 5   | 6 | 7                       | 8 | 9   | 10 | 11                      | 12 | 13  | 14 | 15                      | 16 | 17  | 18 | 19 | 20<br>(4+6+8+10+12+14+16+18) | 21  | 22<br>(3-20)                                   | 23<br>(5+7+9+11+13+15+17+19)            | 24   |                                     |
| Director         |   |  |   |   |   |                         |   |   |    |                         |    |   |    |                         |    |   |    |    |                              |   |  |   |  |                                     |
| Prof             |   |  |   |   |   |                         |   |   |    |                         |    |   |    |                         |    |   |    |    |                              |   |  |   |  |                                     |
| Asso Prof        |   |  |   |   |   |                         |   |   |    |                         |    |   |    |                         |    |   |    |    |                              |   |  |   |  |                                     |
| Asst Prof        |   |  |   |   |   |                         |   |   |    |                         |    |   |    |                         |    |   |    |    |                              |   |  |   |  |                                     |
| Lecturer         |   |  |   |   |   |                         |   |   |    |                         |    |   |    |                         |    |   |    |    |                              |   |  |   |  |                                     |
| Any Other        |   |  |   |   |   |                         |   |   |    |                         |    |   |    |                         |    |   |    |    |                              |   |  |   |  |                                     |
| Total            |   |  |   |   |   |                         |   |   |    |                         |    |   |    |                         |    |   |    |    |                              |   |  |   |  |                                     |

**Prof = Professor; Asso. Prof = Associate Professor; Asst Prof = Assistant Professor; R=Regular, C=Contract**

[Kindly provide separate one page faculty profile in the format given at **Appendix- I.**]

**1.4 Status of Board of Governors:**

- Whether Board of Governors is in place :
- Whether an eminent educationist or industrialist is made the Chairperson of BOG

[Kindly attach a copy BOG notification]

## SECTION 2

### **2. DETAILED INSTITUTIONAL DEVELOPMENT PROPOSAL**

**2.1 Executive Summary of the IDP :**

**2.2 Details of SWOT analysis :**

**2.3 “Strategic Plan” developed for institutional development :**

**2.4 Objectives and expected results in terms of, “Institutional strengthening and improvements in employability and learning outcomes of graduates”:**

**2.5 Action plan and Implementation Schedule : (max 1 page each for the objectives and activities planned under each head proposed by the Institute under the project ) :**

#### **Implementation Schedule**

| Sl. No | Activities  | Action Plan<br>(Details to be given separately) |         |         |   |
|--------|---|---|---------|---------|---|
|        |   | 2013-14   | 2014-15 | 2015-16 | Appendix<br>Number to be<br>indicated<br>here |
| 1.     | Starting new UG and PG courses in Engineering discipline                                  |   |         |         |   |
| 2.     | Modernization and strengthening of existing laboratories                                  |   |         |         |   |
| 3.     | Establishment of new laboratories for existing and new UG and PG courses                  |   |         |         |   |
| 4.     | Modernization of classrooms   |   |         |         |   |
| 5.     | Updating of learning resources  |   |         |         |   |
| 6.     | Procurement of furniture  |   |         |         |   |
| 7.     | Establishment / upgradation of Central and Departmental Computer Centres                  |   |         |         |   |
| 8.     | Modernization / improvements of supporting departments                                    |   |         |         |   |
| 9.     | Modernization and strengthening of libraries and increasing access to knowledge resources |   |         |         |   |
| 10.    | Civil works   |   |         |         |   |
| 11.    | Enhancement of R&D and institutional consultancy activities                               |   |         |         |   |
| 12.    | Faculty and Staff development for improved competency                                     |   |         |         |   |
| 13.    | Faculty Development for effective teaching.   |   |         |         |   |
| 14.    | Enhanced interaction with Industry  |   |         |         |   |
| 15.    | Institutional management capacity enhancement   |   |         |         |   |
| 16.    | Implementation of institutional reforms   |   |         |         |   |
| 17.    | Academic support for weak, SC&ST Students   |   |         |         |   |
| 18.    | Finishing School training   |   |         |         |   |

|     |   |  |  |  |  |
|-----|---|--|--|--|--|
| 19. | For ensuring that the project activities would be sustained after the end of the Project.                             |  |  |  |  |
| 20. | Procurement Plan for the first 18 months for Goods and Civil Works and Consultant Services with budget and timeframe. |  |  |  |  |
| 21. | Any other information related to specific academic achievements of the institution                                    |  |  |  |  |

## 2.6 Institutional Project Budget

(Rs. in Crore)

| Sl. No       | Activities   | Total Allocation | Yearly requirement |         |         |
|--------------|--|------------------|--------------------|---------|---------|
|              |  |                  | 2013-14            | 2014-15 | 2015-16 |
| 1            | Improvement in teaching, training and learning facilities through:   |                  |                    |         |         |
|              | (i) Starting new diploma/UG/PG programmes (as applicable)  |                  |                    |         |         |
|              | (ii) Modernization and strengthening of laboratories   |                  |                    |         |         |
|              | (iii) Establishment of new laboratories for existing diploma/ UG/ PG programmes  |                  |                    |         |         |
|              | (iv) Establishment of new laboratories for new diploma/UG/ PG programmes.  |                  |                    |         |         |
|              | (v) Modernization of classrooms  |                  |                    |         |         |
|              | (i) Updation of Learning Resources   |                  |                    |         |         |
|              | (ii) Procurement of furniture  |                  |                    |         |         |
|              | (iii) Establishment/Up gradation of Central and Departmental Computer Centers  |                  |                    |         |         |
|              | (iv) Modernization/improvements of supporting departments  |                  |                    |         |         |
|              | (v) Modernization and strengthening of libraries and increasing access to knowledge resources  |                  |                    |         |         |
|              | (vi) Civil Works   |                  |                    |         |         |
| 2            | Providing Teaching and Research Assistantships to increase enrolment in existing and new PG/Doctoral programmes in Engineering disciplines*  |                  |                    |         |         |
| 3            | Enhancement of R&D and institutional consultancy activities  |                  |                    |         |         |
| 4            | Faculty and Staff Development (including faculty qualification up gradation, pedagogical training, and organising/participation of faculty in workshops, seminars and conferences) for improved competence |                  |                    |         |         |
| 5            | Enhanced Interaction with Industry   |                  |                    |         |         |
| 6            | Institutional Management Capacity enhancement  |                  |                    |         |         |
| 7            | Implementation of institutional academic reforms   |                  |                    |         |         |
| 8            | Academic support for weak , SC & ST students   |                  |                    |         |         |
| 9            | Incremental Operating Cost   |                  |                    |         |         |
| <b>TOTAL</b> |  |                  |                    |         |         |

\* For degree institutions only.

### **SECTION 3**

#### **3. BASELINE DATA**

**Baseline Data (all data given for the following parameters must be restricted to project disciplines/fields only):**

| <b>Sl. No</b> | <b>Parameters</b>   | <b>As on 2013<br/>(give date)</b> |
|---------------|---|-----------------------------------|
| 1.            | Total strength of students in all programmes and all years of study   |                                   |
| 2.            | Total women students in all programmes and all years of study   |                                   |
| 3.            | The transition rate of students in percentage from 1 <sup>st</sup> year to 2 <sup>nd</sup> year course wise:                                      |                                   |
| 4.            | % of diploma students passed out with distinction (>75% marks)  |                                   |
| 5.            | % of UG students passed out with distinction (>75% marks)   |                                   |
| 6.            | % of postgraduates students passed out with distinction (>75% marks)  |                                   |
| 7.            | % of Diploma students placed through campus interviews  |                                   |
| 8.            | Average salary of placement package for (Rs. in lakh) for Diploma Students  |                                   |
| 9.            | % of UG students placed through campus interviews   |                                   |
| 10.           | Average salary of placement package for (Rs. in lakh) for UG students   |                                   |
| 11.           | % of PG students placed through campus interviews   |                                   |
| 12.           | Average salary of placement package for (Rs. in lakh) for PG students   |                                   |
| 13.           | % Vacancy against AICTE requirement at Lecturer level   |                                   |
| 14.           | % Vacancy against AICTE requirement at Assistant Professor level  |                                   |
| 15.           | % Vacancy against AICTE requirement at Associate Professor level  |                                   |
| 16.           | % Vacancy against AICTE requirement at Professor level  |                                   |
| 17.           | % Vacancy against AICTE requirement at supporting staff level   |                                   |
| 18.           | Percentage of regular faculty having a Bachelors Degree in Engineering disciplines of total engineering faculty in place measured above baseline. |                                   |
| 19.           | Percentage of regular faculty having a Masters Degree in Engineering disciplines of total engineering faculty in place measured above baseline.   |                                   |
| 20.           | Percentage of regular faculty having a Doctoral Degree in Engineering disciplines of total engineering faculty in place measured above baseline.  |                                   |

|     |  |  |
|-----|--|--|
| 21. | Enrolment of faculty with only Diploma for qualification up gradation  |  |
| 22. | Number of research publications in Indian refereed journals  |  |
| 23. | Number of research publications in International refereed journals   |  |
| 24. | Number of co-authored publications in Indian refereed journals   |  |
| 25. | Number of co-authored publications in International refereed journals  |  |
| 26. | Number of patents obtained   |  |
| 27. | Number of patents filed  |  |
| 28. | Number of sponsored research projects completed  |  |
| 29. | Number of collaborative programmes with Industry   |  |
| 30. | Number of fully functional P-4 and above level computers available for students                                    |  |
| 31. | Total number of text books and reference books available in library for Diploma/UG and PG students (as applicable) |  |
| 32. | Availability of e-journals   |  |
| 33. | Availability of Hostel/Auditorium /Tutorial rooms  |  |
| 34. | IRG from students fee and other charges (Rs. In lakh)  |  |
| 35. | IRG from externally funded R&D projects, consultancies (Rs. in lakh)   |  |
| 36. | Total IRG (Rs. in lakh)  |  |
| 37. | IRG as % of total annual recurring expenditure   |  |
| 38. | Share of supported eligible programmes that are accredited or applied for  |  |

**Note:** Academic year for academic data is : July – June  
Financial year for financial data is : April – March

## **SECTION 4**

### **4. INDICATIVE PROJECT TARGETS**

Targets to be achieved against each activity as per action plan and implementation schedule given under 2.5 of Section 2 to be defined in the table below:

| Sl. No | Activities   | Baseline data 2013<br>(Give date) | Targets to be achieved                         |                    |
|--------|--|-----------------------------------|--|--------------------|
|        |  |                                   | At the end of two years of joining the Project | By Project Closing |
| 1.     | Increase in Total strength of students in all programmes and all years of study  |                                   |  |                    |
| 2.     | Increase in Total women students in all programmes and all years of study  |                                   |  |                    |
| 3.     | Increase in The transition rate of students in percentage from 1 <sup>st</sup> year to 2 <sup>nd</sup> year course wise:   |                                   |  |                    |
| 4.     | Increase in % of diploma students passed out with distinction (>75% marks)   |                                   |  |                    |
| 5.     | Increase in % of UG students passed out with distinction (>75% marks)  |                                   |  |                    |
| 6.     | Increase in % of postgraduates students passed out with distinction (>75% marks) % of High quality of post graduates (>75% marks) passed out in the year 2008-09 |                                   |  |                    |
| 7.     | Increase in % of Diploma students placed through campus interviews   |                                   |  |                    |
| 8.     | Increase in Average salary of placement package for (Rs. in lakh) for Diploma Students   |                                   |  |                    |
| 9.     | Increase in % of UG students placed through campus interviews  |                                   |  |                    |
| 10.    | Increase in Average salary of placement package for (Rs. in lakh) for UG students  |                                   |  |                    |
| 11.    | Increase in % of PG students placed through campus interviews  |                                   |  |                    |
| 12.    | Increase in Average salary of placement package for (Rs. in lakh) for PG students  |                                   |  |                    |
| 13.    | Filling up of % Vacancy against AICTE requirement at Lecturer level  |                                   |  |                    |
| 14.    | Filling up of % Vacancy against AICTE requirement at Assistant Professor level   |                                   |  |                    |
| 15.    | Filling up of % Vacancy against AICTE requirement at Associate Professor level   |                                   |  |                    |
| 16.    | Filling up of % Vacancy against AICTE requirement at Professor level   |                                   |  |                    |
| 17.    | Filling up of % Vacancy against AICTE requirement at supporting staff level  |                                   |  |                    |
| 18.    | Increase in Percentage of regular faculty  |                                   |  |                    |

|     |  |  |  |  |
|-----|--|--|--|--|
|     | having a Bachelors Degree in Engineering disciplines of total engineering faculty in place measured above baseline.  |  |  |  |
| 19. | Increase in Percentage of regular faculty having a Masters Degree in Engineering disciplines of total engineering faculty in place measured above baseline.  |  |  |  |
| 20. | Increase in Percentage of regular faculty having a Doctoral Degree in Engineering disciplines of total engineering faculty in place measured above baseline. |  |  |  |
| 21. | Increase in Enrolment of faculty with only Diploma for qualification up gradation  |  |  |  |
| 22. | Increase in Number of research publications in Indian refereed journals  |  |  |  |
| 23. | Increase in Number of research publications in International refereed journals   |  |  |  |
| 24. | Increase in Number of co-authored publications in Indian refereed journals   |  |  |  |
| 25. | Increase in Number of co-authored publications in International refereed journals  |  |  |  |
| 26. | Increase in Number of patents obtained   |  |  |  |
| 27. | Increase in Number of patents filed  |  |  |  |
| 28. | Increase in Number of sponsored research projects completed  |  |  |  |
| 29. | Increase in Number of collaborative programmes with Industry   |  |  |  |
| 30. | Increase in Number of fully functional P-4 and above level computers available for students  |  |  |  |
| 31. | Increase in Total number of text books and reference books available in library for Diploma/UG and PG students (as applicable)                               |  |  |  |
| 32. | Increase in Availability of e-journals   |  |  |  |
| 33. | increase in Availability of Hostel/Auditorium /Tutorial rooms  |  |  |  |
| 34. | IRG from students fee and other charges (Rs. In lakh)  |  |  |  |
| 35. | IRG from externally funded R&D projects, consultancies (Rs. in lakh)   |  |  |  |
| 36. | Increase in Total IRG (Rs. in lakh)  |  |  |  |
| 37. | Increase in IRG as % of total annual recurring expenditure   |  |  |  |
| 38. | Increase in Share of supported eligible programmes that are accredited or applied for  |  |  |  |



|     |  |  |  |  |
|-----|--|--|--|--|
| 39. | Any other academic deliverables<br>(maximum 3) |  |  |  |
|     | i).  |  |  |  |
|     | ii).   |  |  |  |
|     | iii).  |  |  |  |

**Note:** *The accreditation targets for diploma, Undergraduate and Postgraduate programme are for accreditation by NBA /AICTE approved accrediting body.*

**FACULTY PROFILE**

|  |          |
|--|----------|
| <b>Name</b>  | <b>:</b> |
| <b>Designation</b>   | <b>:</b> |
| <b>Nature of Appointment</b>   | <b>:</b> |
| <b>Date of joining the government service</b>                            | <b>:</b> |
| <b>Educational qualifications</b>  | <b>:</b> |
| <b>Teaching Experience</b>   | <b>:</b> |
| <b>Research Experience</b>   | <b>:</b> |
| <b>Industrial Experience</b>   | <b>:</b> |
| <b>Research Publications In Refereed Indian journals</b>                 | <b>:</b> |
| <b>Research Publications In Refereed international journal</b>           | <b>:</b> |
| <b>Books published</b>   | <b>:</b> |
| <b>Ph D students guided</b>  | <b>:</b> |
| <b>Patents applied</b>   | <b>:</b> |
| <b>Patents awarded</b>   | <b>:</b> |
| <b>Papers Presented in International Conferences</b>                     | <b>:</b> |
| <b>Industrial consultancy projects undertaken during last five years</b> | <b>:</b> |
| <b>Memberships of professional Societies</b>                             | <b>:</b> |

**INSTRUCTIONS FOR PREPARING INSTITUTIONAL DEVELOPMENT PROPOSAL (IDP)**

- 1) The applicants should submit the Institutional Development Proposal for AICTE – NEQIP scheme in prescribed format given in Annexure-I, along with a soft copy on a CD in word file duly forwarded by State Authorities along with required supporting documents before cut-off date.
- 2) The application format for NEQIP has following four sections:
  - Section 1 -Institutional Basic Information
  - Section 2 - Detailed Institutional Development Proposal
  - Section 3 - Baseline Data
  - Section 4 -Indicative Project Targets
- 3) **Section 1 -Institutional Basic Information :** Fill up all the required data matching with information provided under self-disclosure on AICTE portal in this section.
- 4) **Section 2 - Detailed Institutional Development Proposal :** Following information needs to be given in this section.
  - **Executive Summary of the IDP:** Give the Executive Summary of the IDP
  - **Details of SWOT analysis:** Provide the details of SWOT analysis (see Annexure-III) carried out (in terms of methodology used, analysis and information and data as collected and inferences derived with respect to strengths, weaknesses, opportunities and threats).
  - **“Strategic Plan” developed for institutional development:** Based on SWOT analysis, provide the “strategic plan” developed for institutional development. institutions should clearly explain under this section "How the key activities proposed in the Institutional Development Proposal are linked with the results of SWOT Analysis?"
  - **Objectives and expected results in terms of, “Institutional strengthening and improvements in employability and learning outcomes of graduates”:** State the specific objectives and expected results of your proposal in terms of, “Institutional strengthening and improvements in employability and learning outcomes of graduates”. These objective and results should be linked to the SWOT analysis.
  - **Action plan:** A list of activities has been suggested in the Scheme Document. Institutions can pick up all or maximum activities which they want to take up for strengthening of their institutions. A detailed action plan must be given separately on one page for each for the activities proposed under the project.

The various steps, actions which can be planned under these activities are suggested below:

| Sl. No | Activities   | Proposed Actions/Steps   |
|--------|--|--|
| 1.     | Starting new UG and PG courses in Engineering discipline | New UG and PG courses may be planned for starting as per demand and local needs.                                   |
| 2.     | Modernization and strengthening of existing              | New equipments and latest models of machinery may be purchased for meeting additional/new requirement of curricula |

|    |   |  |
|----|---|--|
|    | laboratories  | and for strengthening of existing laboratories as per course demands and making the department as centre of excellence for carrying out high quality research and innovation.  |
| 3. | Establishment of new laboratories for existing and new UG and PG courses                  | Equipments and latest models of machinery may be purchased for new laboratories for existing and new UG and PG courses as per course demands and making the department as centre of excellence for carrying out high quality research and innovation.  |
| 4. | Modernization of classrooms   | <ul style="list-style-type: none"> <li>Classrooms could be modernized to have Smart Boards and Computers linked to LCD Projectors with screen, which would hold greater attention of the students than mere lecturing.</li> <li>Guest lecturers or class lectures organized through V-SAT, Video Conferencing and Audio-Conferencing can also be considered depending upon need and feasibility. The classrooms need to be equipped accordingly.</li> </ul>  |
| 5. | Updating of learning resources  | Procurement of Goods [equipment, furniture, books & LR, software, and minor items] that may be required for improvement in teaching, training and learning facilities can be proposed for procurement.   |
| 6. | Procurement of furniture  | Furniture may be required for modernization of existing laboratories, establishment of new laboratories, libraries, Computer Centres and classrooms. Provision may be made for such procurement in the Institutional Development Proposal.   |
| 7. | Establishment / up gradation of Central and Departmental Computer Centres                 | <ul style="list-style-type: none"> <li>Institutions may propose for modernization/up gradation of Computer Centres to meet curricular and research requirements. Proper connectivity with Campus-wide Networking is desirable. Purchase of the required Computers at one go may be avoided; it may be phased to ensure that the latest systems are procured. The IDP should include the number of computer systems required with purpose, cost estimates and time frame.</li> <li>Institutions would need to enter into Annual Maintenance Contracts after the expiry of warranty period for the computers and associated hardware procured under the Project. Wherever possible, replacement of computers/components by the suppliers/manufacturers to ensure up gradation of the computers procured may be considered</li> </ul> |
| 8. | Modernization / improvements of supporting departments                                    | Up gradation of teaching and training facilities in the supporting Departments may be considered and included in the IDP so that their contribution is enhanced. The faculty belonging to these supporting Departments may also be extended benefits under Faculty Development limited to subject area training.   |
| 9. | Modernization and strengthening of libraries and increasing access to knowledge resources | <ul style="list-style-type: none"> <li>Modernization of libraries could include conversion to Digital Libraries, which would occupy lesser space and make space available for other activities.</li> <li>The institutions can also become member of Indian National Digital Library in Engineering Sciences and Technology Consortium (INDEST-AICTE Consortium).</li> <li>Purchase of books should be through CDs to the extent possible. Even old books, which are available on CDs, should be located and purchased. There needs to be a CD</li> </ul>   |

|     |   |  |
|-----|---|--|
|     |   | <p>Bank with proper identification and accessibility.</p> <ul style="list-style-type: none"> <li>• The library could be reorganized with adequate computers and connectivity to hostels and Departments through Campus-wide Networking.</li> <li>• Subscription to the latest e-Journals could be made.</li> <li>• The IDP should clearly indicate the actions that are proposed to be taken for Modernization of Libraries including the cost involved.</li> </ul>  |
| 10. | Civil works   | <p>The civil works to be undertaken by the institutions are to be prioritized as suggested below:</p> <ul style="list-style-type: none"> <li>• Repair works: The works under this category could be repair of old structures and/or non-functional components of the existing building.</li> <li>• Refurbishment works: The works under this category could be related to changing the existing functions of a room to a new proposed function. For example: provision of electrical, water supply and/or waste disposal arrangements in an existing room which is proposed to be used as a laboratory.</li> <li>• Extension to Existing Buildings: Institutions can construct an additional area in continuation to an existing building within the campus. However, institutions will need to provide justification on the extension works proposed.</li> <li>• New original Civil works</li> </ul>  |
| 11. | Enhancement of R&D and institutional consultancy activities | <p>The selected institutions need to promote increased participation of faculty in research, R&amp;D projects and consultancy through merit recognition and fiscal and career incentives.</p> <ul style="list-style-type: none"> <li>• Institutions that already have Doctoral programmes should depute Masters Students to join Doctoral programmes.</li> <li>• Institutions need to market their services to the Industry. The Industry should be encouraged to give live problems to the institution for solutions.</li> <li>• The faculty who have expertise should be encouraged to take up consultancy assignments, Care should be taken that consultancy services offered to Industry do not affect the teaching schedules and processes.</li> <li>• Institutions need to develop a strategy for enabling faculty to secure consultancy assignments and to complete them timely and successfully.</li> </ul> <p>The strategy in this regard is to be detailed in the IDP.</p> |
| 12. | Faculty and Staff development for improved competency       | <p>A detailed action plan to be submitted giving due importance to the following areas:</p> <ul style="list-style-type: none"> <li>• Up gradation of qualifications</li> <li>• Improving competence in teaching-Pedagogies</li> <li>• Development of modern learning resources and teaching aids</li> <li>• New techniques in research</li> <li>• Improving competence in research and consultancy</li> <li>• Deputation to seminars, conferences and presentation of research papers in India and abroad</li> <li>• Interaction with peer groups within India</li> <li>• Establishing linkages with academic and research</li> </ul>  |

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|  |  | <p>institutions and Industry.</p> <ul style="list-style-type: none"> <li>• Management of Industry interactions</li> <li>• Student counselling</li> <li>• Student performance evaluation</li> <li>• Continuing Education (CE) Programme</li> </ul> <p>The major activities to be conducted are:</p> <p><b>(i) Qualification Upgradation :</b><br/>Institutions are expected to encourage faculty to upgrade their qualification. If the facilities are available within the institution, the same need to be maximally utilized. Alternatively, the faculty could be deputed to other institutions (within India) for enhancement of qualification. Part-time or sandwich programmes may also be made use of where feasible and necessary.</p> <p><b>(ii) Enhancing knowledge and research competence:</b></p> <ul style="list-style-type: none"> <li>• <b>Subject knowledge upgradation and research competence :</b> Short-term and long-term courses are available within India including Summer Schools arranged by Government organizations, institutions and professional Societies. Faculty should be deputed for appropriate opportunities.</li> <li>• <b>Continuing Education Programmes (CEPs):</b> The CEPs at project institutions are to be targeted for the working professionals. The duration of the programmes must be at least one week (5 working days). The participants should preferably have representations from industries, faculty from other AICTE recognized Engineering institutions/Polytechnics and few faculty of the host institution. The Continuing Education Programmes should be conducted preferably in cutting edge technologies.</li> <li>• <b>Participation in Seminars, Conferences, Workshops, etc.:</b> Faculty is to be encouraged to participate in seminars, conferences and workshops, both National and International. Participation in these would give a good exposure towards the developments taking place in different areas.</li> <li>• <b>The Technical Staff</b> in laboratories and workshops needs to be trained in their functional areas including operation and routine maintenance of both the existing and new equipment. They also need training on workshop instructions, upkeep of institutional service facilities, etc. The training can be organized within the institution or at the supplier/manufacturer premises or at reputed technical training institutions.</li> <li>• The Technical Staff also needs to be motivated and encouraged to participate in training and to use the newly acquired expertise for the benefit of students and the institution.</li> <li>• <b>Administrative Staff:</b> The Administrative Staff also to be trained in respective functional areas, particularly in the use of modern office equipment, software, office automation, maintenance of records, procedures, etc. The</li> </ul> |
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|     |   | training should also cover motivation for time and material efficiency, and friendliness towards faculty and students. The training may preferably be organized within the institution with the help of suitable organizations.  |
| 13. | Faculty Development for effective teaching.   | <ul style="list-style-type: none"> <li>• All project Institutions need to organize Pedagogical Training on their campus and cover maximum faculty members from their Institutions to improve competence of faculty through Pedagogical Training for effective teaching to improve the learning outcomes of Engineering Students.</li> <li>• The training may be provided through faculty of institutions of eminence.</li> </ul>   |
| 14. | Enhanced interaction with Industry            | <ul style="list-style-type: none"> <li>• Activities may be undertaken to facilitate Guest Lectures, Interactive workshops, conferences, seminars, Brain Storming Sessions, Technical Discussions etc. with Members of the Industry, outside Experts, eminent personalities at regular interval.</li> <li>• Conduct Industrial Training, Orientation Courses, Industrial Visits etc for faculty and students at regular intervals.</li> <li>• Facilitate joint research work, consultancy involving faculty and students.</li> <li>• Conduct industrial exhibitions to highlight research facilities and expertise available with the institution.</li> <li>• Facilitate professionals from Industry to work as visiting faculty in institutions and short or long period's deployment of faculty from institutions to Industry for gaining industrial experience and/or work on projects in Industry.</li> <li>• Seek and associate Experts from Industry in Curriculum improvement and review.</li> <li>• Identify Continuing Education opportunities, short-term programmes and training needs of the Industry, which the institution can provide.</li> <li>• Promote revenue generating activities for the institution like Lab Testing, Calibration, consultancy and R&amp;D etc.</li> </ul> |
| 15. | Institutional management capacity enhancement | Improving Managerial and Administrative abilities of Heads of Institutions, Deans, Heads of Departments, senior faculty and officials through specifically designed training programmes will be an important Project activity to support effective implementation of reforms, to improve development, planning and implementation, and monitoring.   |
| 16. | Implementation of institutional reforms       | <p>Institutions may pickup following steps for implementation:</p> <p>(i) <b>Curricular Reforms:</b></p> <ul style="list-style-type: none"> <li>• The institutions should exercise innovative approaches in undertaking periodic revision of curriculum to effectively prepare students to meet the labour market requirements. Involvement of employers including core Industry in curricular reforms is an essential requirement.</li> <li>• Project institutions, which are affiliated to Universities, or recognised by State Technical Boards, will need to get the revisions in the curricula approved by the Competent Authorities of the University / State Board respectively.</li> <li>• Institutions, which are autonomous, can carry out the</li> </ul>  |

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|  |  | <p>curricula development and revision themselves by establishing mechanism that would ensure that the curricula meet labour market requirements.</p> <p><b>(ii) Improved Student Performance Evaluation:</b></p> <ul style="list-style-type: none"> <li>• Evaluation of students to be done on a continuous basis, in order to provide opportunities for improvement. Publication of results in the shortest period and allowing the students to see the evaluated papers are some of the innovative measures that can be adopted.</li> <li>• The faculty may identify the academic weaknesses and then counsel the students as to how they may improve their performance. A brainstorming by faculty with students can help to identify various options for performance improvement.</li> <li>• The student may be allowed to see the evaluation. Weak students should be given every opportunity to improve.</li> </ul> <p><b>(iii) Performance appraisal of faculty by students:</b></p> <ul style="list-style-type: none"> <li>• Evaluation of faculty performance on a periodic basis should be implemented. The results of this should be used for taking remedial actions for improvement of teaching learning processes. The main purpose is to help a faculty to improve his/her teaching/training skills.</li> <li>• The assessment by students and the counselling which may follow such assessment needs to be aimed at helping faculty recognize weaknesses and remedy them to improve student learning.</li> <li>• An exit assessment taken at the end of the course gives an insight into the total effectiveness of the course, learning achievements and shortcomings and may be useful for future delivery of the course by the faculty.</li> </ul> <p><b>(iv) Faculty incentive for Continuing Education (CE), Consultancy and R&amp;D:</b></p> <p>The initiatives taken by faculty should be encouraged through proper incentives and clear guidelines.</p> <p><b>(v) Accreditation of eligible programmes:</b></p> <p>Accreditation of programmes is one of the quality assurance mechanisms. Institutions need to take appropriate actions to obtain accreditation of eligible programmes within the specified time-frame and also for renewal of accreditation during the Project period. Institutions are required to give their Plan of Action for getting the eligible programmes accredited in the Institutional Development Proposals (IDPs).</p> <p><b>(vi) Non-Academic Reforms:</b></p> <ul style="list-style-type: none"> <li>• <b>Exercise of autonomies-- Academic, Administrative, Managerial and Financial:</b> Institutions would thrive to obtain and exercise reasonable levels of Administrative, Financial and Managerial autonomies.</li> <li>• <b>Generation, retention and utilization of revenue generated through variety of activities:</b> The project</li> </ul> |
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|     |   | <p>institutions may be permitted to generate, retain and utilize the entire or part of revenue generated by them including income from tuition fee and other fees and charges from students. All project institutions are expected to increase revenue generation from a variety of activities such as conducting self-financing teaching and training programmes, testing services, consultancy and research, innovations, patents, commercialization of R&amp;D outputs, sharing of high-tech equipment with Industries, public usage of infrastructure for academic activities, etc.</p> <p>Institutions may utilize the revenue for building up the four funds, development activities, offering incentives to faculty and staff, instituting awards and rewards for students, faculty and staff, etc. with approval from the BoG in accordance with rules developed in consonance with Government Guidelines, if any.</p> <ul style="list-style-type: none"> <li>• <b>Filling-up existing teaching and staff vacancies:</b> In accordance with prevailing provisions of AICTE regulations for Pay Scales, Service Conditions and qualifications for the teachers and other academic staff, States will propose action plan for filling-up all faculty vacancies of project institutions on a regular basis. Till such time that these vacancies are filled-up on a regular basis, appointments on 11-month or longer contract needs to be permitted to the institutions by the States.</li> <li>• Delegation of decision-making powers to senior institutional functionaries with accountability: Delegation of adequate powers to senior functionaries like Deans and HoDs with accountability would help better implementation of institutional projects.</li> </ul> |
| 17. | Academic support for weak, SC&ST Students   | Support for improving the academic performance of SC/ST/OBC/ academically weak students through innovative methods, such as remedial and skill development classes may be planned for increasing the transition rate and pass rate with the objective of improving their employability.   |
| 18. | Finishing School training   | Finishing School training for imparting soft skills to the students in general for enhanced employability may be planned with industrial collaboration  |
| 19. | Providing Teaching and Research Assistantships to increase enrolment in existing and new PG programmes in engineering disciplines | <p>The meritorious students admitted by the institutions for Masters Courses that do not receive GATE scholarships, may receive Teaching Assistantships from Project funds.</p> <p>The institutions could also provide Research Assistantships through Project funds to the enrolled Doctoral students that do not get any scholarships through AICTE-NDF/other schemes.</p> <p>The Teaching and Research Assistantships are to be provided by institutions as per the prevalent AICTE norms. The students receiving Teaching or Research Assistantships will be required to devote 8-10 hours per week for teaching or research, as the case may be.</p>   |
| 20. | For ensuring that the project activities would be sustained after the end of the Project.   | Establishment of Corpus Fund, Faculty Development Fund, Equipment Replacement Fund and Maintenance Fund is desirable to ensure that the developmental activities continue beyond the Project period. It is, therefore, advantageous that  |

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|     |   | all institutions establish the Four Funds and put substantial amount in each Fund, as per the prescribed mechanism from the institutions own funds but not from the project funds. |
| 21. | Procurement Plan for the first 18 months for Goods and Civil Works and Consultant Services with budget and timeframe. |  |
| 22. | Any other information related to specific academic achievements of the institution                                    |  |

- 5) Provide Implementation Schedule for all the activities proposed under action plan for three years clearly specifying the activities to be undertaken, target date for commencement & date of completion .
- 6) Provide an Institutional project budget matching with implementation schedule
- 7) Section 3- **Baseline Data** : Information and data in this section needs to be given as on the date of submitting the application.
- 8) Section 4-**Indicative Project Targets** : Anticipated targets after completion of two years and at the closure of project needs to be given here

**GUIDELINES ON STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS  
(SWOT) ANALYSIS**

**1) Introduction:**

SWOT, is an analysis method, which is used in strategic planning for the institutions and consists of the initial letters of concepts of Strengths, Weaknesses, Opportunities and Threats.

Strategic planning is a process in which future aims are determined together with the stakeholders and responsibilities and resources are allocated in accordance with these future aims. It is a process between the points an institution stands presently and the points it tries to reach in a certain period of time. The concept of strategic planning is closely related with the concept of foresight. In this regard, strategic planning can be considered as the collection of systematic efforts of experts for the best choice of the future.

The aim of strategic planning is to produce planned facilities, embody the appointed policies, follow the application efficiently and take the initiative and provide for effective participation. In the process of strategic planning, some of the fundamental questions are needed to be answered. Those are “Where are we?”, “How can we reach our desired goal? And “How can we evaluate our success?”

Institutions are expected to make a Strategic Plan to gain a better perception of ongoing quest for quality education and fulfilling its mission and realizing its vision.

**2) Salient Points:**

- As a medium of administration, SWOT analysis is used in making a plan, defining a problem and also identifying a solution for it, making a strategy and giving an analytical decision. It is a tool for auditing an institution and its environment. It is a first stage of planning which helps to focus on key issues.
- The role of SWOT analysis is to take the information from the environmental scan and separate it into internal and external issues. SWOT analysis determines if the information indicates something that will assist the institution in accomplishing its objectives or if it indicates an obstacle that must be removed or minimized to achieve desired results.
- SWOT analysis is scalable, collaborative, integrateable, simple and cost efficient.

**3) Steps to conduct a SWOT Analysis:**

- **Teamwork and Stakeholder Participation:** The first step involves setting up a team of the key stakeholders of the institution to carry out the consultations/brainstorming. The team essentially has to be participatory and should encourage all participants to be candid and constructive. Involving maximum students, faculty and staff in the brainstorming will help to bring out information, determine the most important Strengths, Weaknesses, Opportunities and Threats, and prioritize the actions.  
The brainstorming may be carried out in separate groups of students, using an appropriate facilitator for each group. Alternatively, the internal Strengths and Weaknesses could be identified separately by each group and brought together to discuss the external Opportunities and Threats, and the Strategic Planning. For a very large institution, the SWOT analysis may be done department-wise to reveal the Strengths, Weaknesses, Opportunities and Threats.
- **Data Analysis:** Collect all the participants in a room with a blackboard/flip charts/computer projection. Explain the objective and process of the exercise to them. Encourage a congenial atmosphere for a free flow of information, insisting on focus, specificity and brevity. The facilitator should keep the discussion going and a rapporteur should be writing the points on the board/charts/computer for all to see.

Collectively list all strengths that exist. Then list all weaknesses by avoiding modesty and over-estimation. Be realistic. List all opportunities that exist for the future. Then list all threats that exist in the future. Data, which is gained through either formal or informal information, can be used in the process of strategic planning. By this way, with the help of SWOT analysis, it is easy to determine an institution's present situation and whether that institution functions properly or not. The institution needs to review the SWOT analysis and do the strategic planning to meet the objectives, addressing each of the four areas.

- **Strategic Planning:**

i). **Strengths:** The Strengths can be identified by thinking in terms of capabilities, recognition, competitive advantages, resources, assets, people (experience, knowledge, their culture, values, attitudes and behaviours), innovative aspects, marketing, quality of programmes, location, accreditations, qualifications, certifications, and processes/systems through the following:

- Resources and capabilities that can be used as a basis for developing a competitive advantage.
- Strengths should be realistic and not modest.
- Strengths should answer:
  - Advantages of the institution
  - The activities the institution can plan to do better
  - The relevant resources on which the institution has access to
  - Vision of others about institution's strengths
  - Unique Selling Points (USPs)
  - Financial reserves of the institutions along with returns from fees and other sources

- **Method to use each strength:** The strengths would normally support the achievement of the objective, may be useful to leverage other benefits.

ii). **Weaknesses:** The Weaknesses can be identified by thinking in terms of disadvantages, gaps in capabilities; lack of competitive strength, reputation, financial, timescales/deadlines, weak core activities, distractions, morale, leadership, accreditations, continuity, robustness and processes/systems through the following:

- Internal forces that could serve as a barrier to maintain or achieve a competitive advantage, a limitation, fault or defect of the institution.
- Weaknesses should be truthful so that they may be overcome as quickly as possible.
- Weaknesses should answer:
  - The possibility of improvements
  - Weak processes and systems and inadequate facilities
  - Lack of competitive strengths
  - Lack of Industry/network partners
  - Plan predictability
  - Financial situation, cash flow and cash-drain of the institution
  - Means to perform in a more effectively and efficient manner, changes in the institutions to help them function more efficiently

**Method to stop each Weakness:** The institutions need to identify the Weaknesses and take remedial measures to overcome them.

iii). **Opportunities:** The Opportunities can be identified by thinking in terms of market developments, competitor vulnerabilities, industry trends, and geographical partnerships through the following:

- The good opportunities facing us
- The interesting trends we are aware of
- Technology development and innovation
- Growing student demand
- Increased attraction for qualified future faculty
- Research in niche areas
- Geographical expansion
- Employment and industry trends
- Unique Selling Points (USPs)
- Industry Institution partnership
- Innovations, product development, patent, business development
- Global influences, opportunities

**Method to exploit each opportunity:** These are attractive external factors that can help the institution develop and improve. They need to be prioritized on the basis of their benefits to the institution in the short (1-2 years), medium (4-5 years) and long-term (8-10 years).

iv). **Threats:** The Threats can be identified by thinking in terms of external forces that could inhibit the maintenance or attainment of a competitive advantage or any unfavorable situation in the external or internal environment that is potentially damaging at the present and in future through the following:

- Obstacles faced by the institution - social, political and managerial
- Doings of the competitors
- Change in the required specifications for services of the institution
- Threats of changing technology
- Declining supply of qualified faculty
- Loss of key faculty and staff
- Declining quality of students
- Difficulty of sustaining internal capabilities
- Lack of new ideas and access to fast-changing technology
- Lack of industry-Institution partnership
- Financial status and sustainable financial backing of the institution

**Method to defend against threats:** These are external factors beyond the institution's control, but the institution must have a 'Plan' to address the ones that have a high probability of occurring and present a serious risk to the achievement of the objective. If there are sufficient Strengths and Opportunities in the institution, all the risks need not be addressed.

#### 4) SWOT Analysis limitations:

The classification of some factors as Strengths or Weaknesses, or as Opportunities or Threats is somewhat arbitrary. For example, a particular institution's culture can be either Strength or a Weakness. A technological change can be either a Threat or an Opportunity. Perhaps what are more important than the superficial classification of these factors are the institution's awareness of them and its development of a strategic plan to use them to its advantage.

**GUIDELINES ON INDUSTRY-INSTITUTION-INTERACTION CELL (I-I-I-C)**

**1. Objective:**

To explore and identify common avenues of interaction with Industry as per the requirements of the institution.

**2. Scope:**

All the institutions covered under the Project will form Industry-Institution-Interaction Cell (I-I-I-C) to establish purposeful interaction between Industry and institution.

For the Cell to function smoothly and to meet its objectives effectively, I-I-I-C must have some core staff. The core staff should include a Coordinator (not less than an Assistant Professor) from the institution who will be assisted by a Project Assistant and an Office Assistant. The Cell should meet at least twice per semester. The proposed composition of the Cell may be:

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| a) Director/ Principal of the institution                 | - | Chairman |
| b) HOD and one faculty from each department               | - | Member   |
| c) Two Members from Industry/ Entrepreneurs of the region | - | Member   |
| d) Training and Placement Officer                         | - | Member   |
| e) Coordinator of the Cell                                | - | Convener |

**3. Strategy:**

IIIC will be responsible for designing the roadmap for interaction with Industry recognising the inherent strengths as well as the weaknesses of the institution. The Government organizations in the region also can participate in the Industry-Institution-Interaction-Cell.

**4. Suggested Activities under IIIC:**

- a) To identify and facilitate Guest Lectures, Interactive workshops, conferences, seminars, Brain Storming Sessions, Technical Discussions etc. with Members of the Industry, outside Experts, eminent personalities at regular interval.
- b) To conduct Industrial Training, Orientation Courses, Industrial Visits etc for faculty and students at regular intervals.
- c) To facilitate joint research work, consultancy involving faculty and students.
- d) To conduct industrial exhibitions to highlight research facilities and expertise available with the institution.
- e) To facilitate professionals from Industry to work as visiting faculty in institutions and short or long periods deployment of faculty from institutions to Industry for gaining industrial experience and/or work on projects in Industry.
- f) To seek and associate Experts from Industry in Curriculum improvement and review.
- g) To identify Continuing Education opportunities, short-term programmes and training needs of the Industry, which the institution can provide.
- h) To promote revenue generating activities for the institution like Lab Testing, Calibration, consultancy and R&D etc.
- i) To assess periodically the scientific and technological scenario/ happenings in India and abroad in order to translate it into action for taking up future R&D work.

**5. Deliverables:**

I-I-I-C will be responsible for the following deliverables:

- Increase in collaboration with Industry
- Increased rate of campus placement of students
- Increase in industrial training for students arranged by institution

- Absorption of students by same industries providing industrial training
- Increase in IRG by collaborating with Industry
- Increase in utilization of institutional resources by Industry
- Increase in solving the real life problems of the region

## **GUIDELINES FOR IMPLEMENTATION OF PROJECTS**

The principle objective of this project is to strengthen the govt, govt aided engineering institutions of the NER. It is expected that institutions would make utmost efforts in achieving these objectives of the project.

### **1. Exercise of autonomies:**

Autonomous Institutions under a University will be able to exercise full academic autonomy except for the award of degrees, which will continue to be conferred by the University. The institutions which are not autonomous would also evolve some mechanism with reasonable autonomies in consultation with state government for smooth and time bound implementation of the project.

All institutions are required to have a Board of Governors with eminent educationist or industrialist as Chairperson. The BoG will in turn suitably evolve the administrative and financial provisions granting autonomy to various institutional functionaries and committees working for effective and time bound implementation of the project with due approval of the State Governments under the provisions of State Rules and regulations.

It is expected that institutions would evolve suitable mechanism for exercising following types of autonomies for smooth implementation.

- I. Managerial Autonomy:
- II. Administrative Autonomy:
- III. Financial Autonomy:

### **2. Governance system with participation of stakeholders:**

Stakeholders in Technical Education institutions are students and their parents, faculty, staff, employers, community leaders, Government, quality assurance bodies, University, Industry etc. It may not be possible to include all stakeholders in the governance of an institution but mechanism should be evolved for interacting with those who find no direct representation in the governance system.

It is suggested that the following bodies may be formed for governance of institutions:

### **3. Board of Governors (BoG):**

The BoG is to be constituted with the relevant structure according to AICTE guidelines (*refer AICTE's Approval Process Hand Book: 2013-2014*) for project institutions. The BoG of degree institutions should meet at least four times and that of polytechnics three times in a year.

### **4. Establishment of Four Funds:**

- a) Creation and establishment of Four Funds is a Project requirement that is to be complied with by all institutions.
- b) The purpose of these Funds is to ensure sustainability of the reform process beyond the Project period.
- c) preferably Separate Accounts to be maintained for each of the Four Funds namely;
  - Corpus Fund
  - Faculty Development Fund
  - Equipment Replacement Fund
  - Maintenance Fund



- d) These Funds should not be used during the Project period as funds for various activities are available under the Project.
- e) Each project institution may build these Funds through definite percentage of fee collection from students, donations from alumni and charitable organizations, IRG including commercial use of facilities, consultancy earnings (institutional share), and matching Grants from Government/management on IRG etc. and may additionally contribute from annual savings to the Corpus Fund.

#### **5. Revenue Generation:**

- a) In order that faculty and staff feel encouraged to develop and take up revenue raising activities and programmes over and above their routine academic and other duties in the institution, they should be given an appropriate share of the revenue earned as an incentive.
- b) Contributions and performance of faculty and staff in such activities needs to be recognised through awards, rewards or promotions.
- c) The concerned persons (faculty and staff involved in revenue generating activity) should be given due freedom to utilize part of the earnings to develop office and laboratory facilities, purchase of literature and attendance at conferences.
- d) Revenue generation activities could include:
  - Consultancy projects sponsored by private or public sector industry,
  - Sponsored research projects,
  - Offering specially tailored continuing education programmes,
  - Offering specially designed Degree programmes for candidates from public sector undertakings,
  - Industry-Institute interactive programmes ensuring mutual benefits including revenue generation for the institution, and
  - Commercial activities [commercial use of facilities, earning from Incubation Centres and Scientific and Technology Entrepreneurship Programme (STEP)].
- e) Improving facilities for personal academic research and travel for attending conferences could be permitted from the sponsored project funds as per rules of the sponsoring organisation.

#### **6. Filling-up Faculty and Staff Vacancies:**

Vacancies must be filled subject to any rationalization of cadre necessitated by student increase/decrease, and curricula compulsions as per AICTE norms. Ban on filling vacancies, if any, needs to be lifted by the concerned Government/management for the overall growth of the institutions. Till such time regular appointments are made by the concerned Government/management, BoGs need to be empowered to appoint faculty and staff with the required qualifications and experience on contract basis for 11 months or longer terms.

#### **7. Student Performance Evaluation:**

Student Performance Evaluation is generally of two types: Summative and Formative. The Summative ones carry marks/grades and lead to the student's final performance grading as per university rules and regulations, while the Formative ones are used to encourage the student to do better by pointing out their weaknesses /mistakes and advising them how to perform better. Such evaluations are instrumental in real learning promotion since these are not used for grading purposes although grades/marks are given to keep track of improvement in performance. To make the Summative Evaluation of university robust and improved, a number of class tests must be taken by the institutions as additional measure for enhancing the learning outputs.

- The examples of using Formative approach are giving open and closed-book mock tests, mock assignments, mock quizzes, mock presentations, orals, individual and group assignments, etc. Note that these are not meant for student evaluation for grading. These are to be used for identifying the areas for improvement.
- Such Formative evaluations are useful in real learning promotion, as it is not used for grading purposes. A brainstorming by faculty with students can help to identify various Formative options that may add significant value addition. It should be made amply clear to the students that Formative tests are for improvement only.
- While Summative evaluation involves marks and/or grade assessment (present practice), the Formative ones must be used to encourage the students to perform better.
- Weak students should be given every opportunity to improve. This will develop a greater respect for the institution by the students.
- Many a times, the student does not have an idea of how he/she can perform better, though he/she possesses the knowledge. The Formative approach will help achieve this.

#### **8. Performance appraisal of faculty by students and faculty counselling:**

This is a very useful tool in improving teaching effectiveness. The purpose of this evaluation should be clearly understood. The main purpose should be to help a faculty to improve his/her teaching/learning management skills. Both, the assessment by students and the counselling followed by such assessment are to help a faculty recognize his/her weakness and remove them to improve the learning of students. There are various variations of the frequency of such assessments. Weaknesses in delivery, lack of interactivity, emphasis on self-learning and choice of assignments can all be remedied if the assessment is done during the early part of the course, say after 10 lectures. An exit assessment taken at the end of the course gives an insight into the total effectiveness of the course and the learning achievement and deficiencies. This assessment is useful both for the faculty who is going to take the next level of the course with the same batch of students (to ascertain the level of knowledge and skills gained in the prerequisite course) and the faculty who delivered the course to rectify his/her shortcomings for the next batch of students taking the same course (by noting what portions require more emphasis, what additional knowledge skills and applications to be included). A combination of an initial assessment and an exit assessment along with a mid-term assessment would be the ideal solution as this would allow self-correction by the faculty as the course progresses and would enhance teaching /learning effectiveness.

Faculty must be taken into confidence for these assessments and the instruments should be so designed as to eliminate casual, bogus or faulty assessment. The faculty should share the results of the assessment only with his/her Head of Department. Some institutions publish the assessment to reward good teaching in the form of best faculty awards, etc. Faculty is always apprehensive that these assessments could affect their promotion or vertical mobility. They must be assured that this is not the purpose and in any case since promotion opportunities occur only once in five years, counselling would have improved the assessment grading of even the poorest faculty over this period.

- a) Preferably there must be three stages for faculty evaluation--Early (by 1 month), Mid-Course (by 2-3 months) and Final (by end-of-course)
- b) The first two should be utilized for mid-course corrections to help faculty to become more effective.
- c) The final assessment is aimed at both assessing the improvements as well as collecting feedback that may be useful for future delivery of the course by the faculty.
- d) Faculty must be taken into confidence during each assessment and the benefits to the faculty and students and the improvement in quality of education should be well explained. Process must be designed for effective data collection for faculty evaluation.

- e) Each faculty must be motivated for regular self assessment. This will give the faculty a clear perspective of what is expected from him/her for providing quality education.
- f) Student feedback and self assessment must be shared only with HoD (for purely facilitative purposes and towards improvements).
- g) The BoG must ensure that these assessments are used only for faculty improvement not for promotion, giving incentives, etc.
- h) The HoD may appoint a suitable Counsellor (e.g. someone senior enough/ highly respectful with good teaching qualities) to help the faculty.
- i) Improvement in teaching may be monitored and results shared with the faculty.
- j) Institutions may take up following Steps for impartial faculty performance assessment:
  - Develop formats for student feedback regarding the assessment of a faculty on a course.
  - Similarly, develop the faculty self-assessment formats. This should have important teaching parameters including use of teaching aids, development of course file, accessibility of faculty, summary of formative work done by him/her, syllabus covered, beyond syllabus efforts, types of tests given, man-days devoted to formative efforts, etc.
  - Promote faculty self-assessment and facilitate faculty's self-improvement efforts. This may need sharing of improvement areas, joining special courses, etc. The focus must remain self-improvement. So approach must be motivational and constructive.
  - Plan to collect the comprehensive students' feedback for faculty evaluation (at least three times per semester):
    - Early (by 1 month) i.e. macro level feedback on the basis of knowledge, skills, attitude and values.
    - Mid-Course (by 2-3 months) detailed feedback on the basis of total effectiveness of the course contents, delivery and teaching-learning process. Student suggestions may help in mid-semester corrections.
    - Final (by end-of-course) detailed feedback regarding achievement of objectives, knowledge skills and improvements needed further.
  - Student feedback and self-assessment must be shared with HoD only.

#### **9. Incentivization Faculty for Continuing Education, Consultancy, Research and Development, etc.:**

All faculties should be encouraged to participate in organizing and/or contributing to and attending Continuing Education (CE) Programmes, to offer consultancy to Industry and to take part in Research and Development (R&D) activities in the institution. Institutions should prepare, at the beginning of every semester, a faculty engagement chart which should indicate not only the faculty's teaching commitments, but also his/her expected involvement in administration, Continuing Education, network activities, research and development activities including curriculum and laboratory development, consultancy, etc. At the beginning of the next semester, every faculty should fill in the Faculty Achievement Chart indicating the actual hours spent in various activities in the previous semester including the vacation period (if used for some of these activities). The reasons for over or under achievement from planned hours should be explained. He/ She should also indicate his/her achievements during the period e.g. publications, recognition and awards, patents, invited lectures, participation in National Policy making bodies, student assessment grading, consultancy earnings, etc.

## **SCHEMES FOR EVALUATION OF INSTITUTIONAL DEVELOPMENT PROPOSAL (IDP)**

### **Scheme for Evaluation of Institutional Development Proposal (IDP)**

| S. No.           | Evaluation Parameters                                       |  |  | Marks |
|------------------|---|--|--|-------|
| I                | Institutional Preparedness and Implementation Feasibility:- |  |  |       |
|                  | A   | Clarity of institutional basic information including baseline data   |  | 5     |
|                  | B   | Quality of SWOT analysis   |  |       |
|                  |   | 1  | Appropriateness for the procedure adopted for the conduct of SWOT analysis and adequacy of participation of stakeholders                                   | 5     |
|                  |   | 2  | Clarity in the identification of strengths, weaknesses, opportunities and threats  | 5     |
|                  | C   | Overall implementation feasibility of institutional project  |  |       |
|                  |   | 1  | Clarity in the identification of general development objectives, related specific objectives, their expected results, and its coherence with SWOT analysis | 5     |
|                  |   | 2  | Have the key activities been identified clearly and adequately for each specific-objective   | 5     |
|                  |   | 3  | Adequacy of the Institutional Project Implementation arrangements  | 5     |
|                  | Sub-total (I)   |  |  | 30    |
| II               | Clarity and Quality of the Action Plans for:                |  |  |       |
|                  | D   | Implementation of reforms  |  |       |
|                  |   | 1  | Quality and adequacy of proposed actions for exercising of the granted autonomy  | 5     |
|                  |   | 2  | Quality and adequacy of proposed actions for obtaining accreditation of programmes   | 5     |
|                  |   | 3  | Quality and adequacy of action plan to implement all the academic and non-academic reforms   | 5     |
|                  | E   | Improving learning outcomes of students in terms of higher pass rates and higher academic achievements   |  | 10    |
|                  | F   | Identification of weak / SC /STstudents and for improvement in their learning outcomes through remedial classes  |  | 5     |
|                  | G   | Improving employability of graduates   |  | 5     |
|                  | H   | Strengthening of existing PG programmes and starting new PG programmes   |  | 5     |
|                  | I   | Faculty development including pedagogical training to:   |  |       |
|                  |   | 1  | Develop faculty/technical staff in subject domain  | 5     |
|                  |   | 2  | Improve pedagogical skills of faculty for better student learning  | 5     |
|                  | J   | Enhanced interaction with industry   |  | 5     |
|                  | Sub-total (II)  |  |  | 55    |
| III              | Faculty Qualification & Status                              |  |  |       |
|                  | K   | Quality of faculty (faculty with PhD & Masters degree as percentage of total faculty)  |  | 3*    |
|                  |   | Quality of faculty in terms of qualifications, experience, industrial consultancy, PhD students guided, student projects guided, publications, awards, patents etc                         |  | 3     |
|                  | L   | Status of faculty (full time faculty as percentage of total faculty)   |  | 3**   |
|                  |   | Status of faculty (full time faculty on regular basis as percentage of total faculty)  |  | 3***  |
|                  |   | Status of qualified faculty in terms of availability vs requirements, vacancy position, filling up plans, guest faculty, industry participation in teaching, contractual or adhoc faculty, |  | 3     |
| Sub-total (III)  |   |  | 15   |       |
| TOTAL (I+II+III) |   |  | 100  |       |

\* Less than 20%=0, 21-39%=1, 40-49%=2, 50-69%=2, 70% and above = 3 marks

\*\* Less than 50%=0, 50-59%=1, 60-69%=1.5, 70-79%=2, 80-89%=2.5, 90% and above = 3 marks

\*\*\* Less than 30%=0, 31-49%=1, 50-59%=1.5, 60-69%=2, 70% and above = 3 marks

**MEMORANDUM OF UNDERSTANDING  
BETWEEN  
ALL INDIA COUNCIL FOR TECHNICAL EDUCATION (AICTE)  
AND  
(NAME OF THE INSTITUTION)  
FOR IMPLEMENTATION OF PROJECT (AICTE-NEQIP) UNDER  
QUALITY IMPROVEMENT PROGRAMME FOR NORTH EASTERN REGION**

THIS MEMORANDUM OF UNDERSTANDING is made on this \_\_\_\_ day of \_\_\_\_\_ 2013 between \_\_\_\_\_ the \_\_\_\_\_, AICTE through Shri \_\_\_\_\_, (hereinafter called the 'THE FIRST PARTY') and \_\_\_\_\_ (name of Institution) acting through Prof \_\_\_\_\_, the Director/Principal \_\_\_\_\_ (hereinafter called the 'THE SECOND PARTY').

WHEREAS, it has been the concern of the 'THE FIRST PARTY' to scale-up and support ongoing efforts to improve quality of Technical Education and enhance existing capacities of the institutions in North Eastern Region of India to become dynamic, demand-driven, quality conscious, efficient and forward looking, responsive to rapid economic and technological developments occurring both at National and International levels.

AND WHEREAS, Special attention has to be given to the economic development of the North eastern region in pursuance of the Central Government's announcement of 'New Initiatives for the North Eastern Region' In order to mobilize financial resources, a policy decision was taken to earmark at least 10% of the Plan Budget(s) of the Central ministries/departments for development of the North Eastern states.

Accordingly, the AICTE launched a Project "AICTE -North East Quality Improvement Programme" (AICTE-NEQIP) providing 100% of the project cost as grant-in-aid support to the eligible institutions. The duration of the project is 3 years.

AND WHEREAS, in pursuance of this concern, following Project objectives have been identified :

- Strengthening institutions in terms of infrastructure.
- Strengthening institutions in terms of faculty competence and quality of teaching, research and consultancy.
- Strengthening institutions in terms of academics to improve learning outcomes and employability of students.

AND WHEREAS, the comprehensive description and operating conditions for the Project are contained in the Document entitled the Institutional Document Proposal (hereinafter called 'THE IDP').

THE PARTIES AGREE AS FOLLOWS:

**SECTION A:**

As conditions for participation in 'THE PROJECT', 'THE SECOND PARTY' agrees to:

- follow the Project guidelines and procedures prescribed in the Scheme Document(SD) and as may be prescribed from time to time by the AICTE for implementation of the Project.
- follow the procedures for Procurement of all Goods, Works and Services in accordance with the State Government Guidelines and the agreed procedures and limits described in the SD and IDP.
- achieve targets given in the Institutional Development Proposal (IDP).

- implement all academic and non-academic reforms as committed under the IDP and suggested in Scheme Document.
- constitute an Institutional Project Unit with senior faculty experienced in their respective functional areas and sustain it with continuity throughout Project life.
- secure pedagogical training for institutional faculty.
- comply with the terms and conditions for the release of first and subsequent Grants by 'THE FIRST PARTY' and suggested by Second Party at Section -2 of IDP.
- submit to THE FIRST PARTY all reports and documents relating to progress of the Project, Accounts, Audit, Procurement, Disbursement and Annual Work Plan, as specified in the IDP and SD and at such frequency as may be required by 'THE FIRST PARTY'.
- maintain a separate Account and record of the Project Grant received from 'THE FIRST PARTY' and render annual Accounts and Utilization Certificates.
- furnish to 'THE FIRST PARTY' the Quarterly Progress Reports (QPRs) in the prescribed format in accordance with the procedures.
- get the Accounts of 'THE SECOND PARTY' (Name of the Institution) audited as indicated in the IDP. The audited accounts along with a copy of the Audit Report shall be furnished to 'THE FIRST PARTY' every year as per the schedule indicated in the IDP.
- submit necessary Utilization Certificates to 'THE FIRST PARTY' for release of subsequent Grants.
- meet all necessary and incidental expenses for the performance of responsibilities like expenses for meetings, travel, professional fees, cost for pre-project activities etc. and will not be the liability of 'THE FIRST PARTY', unless specifically mentioned under this MoU or otherwise agreed in writing.

#### **SECTION B:**

'THE FIRST PARTY' agrees to:

- release the Grant as described at Section C.
- render or arrange to render such technical assistance and guidance as may be needed by 'THE SECOND PARTY', from time to time for an effective and efficient implementation of the Project.
- supervise the Project in the Institutions.
- take corrective actions with regard to the non-performing Institutions.
- review the findings of audits and maintain the policy reforms and conduct evaluation studies.

#### **SECTION C:**

- 'THE FIRST PARTY' will release funds towards the approved project cost of the Institutions in four instalments in a timely manner for the anticipated expenditures for implementation of eligible activities. Disbursement of Grant to the Institutions will be based on Progress Reports (PRs).
- 'THE FIRST PARTY' and 'THE SECOND PARTY' agree to accept the Key Performance Indicators (KPIs) mentioned in the SD and IDP:
  - Percentage of diploma, UG and PG programmes that are accredited
  - Percentage of faculty with a Bachelors, Masters or a PhD degree
  - Number of Diploma, Masters and PhD students enrolled
  - Percentage revenue from externally funded R&D projects and Consultancies in total revenue
  - Increase in the number of publications in referred journals

- Transition rate for students from first year to second year.

#### SECTION D:

- 'THE FIRST PARTY' will provide all necessary support to 'THE SECOND PARTY' in particular, through a Project Implementation Unit (hereinafter called 'THE PIU'). The functions of 'THE PIU' are indicated in Section-5 of 'THE SD'.

#### SECTION E:

The Project implementation schedule:

- The Project shall become effective on ----- 2013.
- The Project is expected to proceed at uniform rate over three years commencing on -----2013 and expected to be completed in ----- 2016.

#### SECTION F:

- By this Memorandum of Understanding both parties affirm their commitment to carry out the activities and achieve the objectives mutually agreed upon.
- Any dispute between the parties shall always be resolved by mutual consultation without any resort to arbitration or other form of legal remedy including resort to Court of Law.
- This Memorandum of Understanding will continue to be effective up to the closure of the Project.
- Adherence to the implementation of the MoU will be monitored annually.
- Amendment to this MoU, if required, shall be carried out in writing duly authenticated and executed by both the parties.

Signed at ..... on .....this day of .....2013.

FOR AND ON BEHALF OF  
Chairman, Board of Governors  
(Name of the Institution)

(-----)  
Director/Principal  
(Name of the Institution)

FOR AND ON BEHALF OF

(-----)  
All India Council for Technical Education  
Government of India, New Delhi

Witness 1\_\_\_\_\_

Witness 2\_\_\_\_\_