

**TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME (TEQIP)
(PHASE-II)**

**FORMAT FOR
INSTITUTIONAL DEVELOPMENT PROPOSAL
for**

**Sub-Component 1.2: Scaling-up Postgraduate Education
and
Demand-driven Research & Development and Innovation**

1. INSTITUTIONAL BASIC INFORMATION

(Note: Please insert the name of applicant institution and the Sub-component number in the footer on each page of the proposal.)

1.1 Institutional Identity:

- Name of the Institution : _____
- Is the Institution AICTE approved? : Yes/No
- Furnish AICTE approval no. :
- Type of Institution : Govt. funded/ Govt. aided/Private unaided / Autonomous / Other
- Status of Institution : Autonomous Institute as declared by University / Non-autonomous / Deemed University / Constituent Institution
- Names of Heads of Institution and Project Nodal Officers

Heads and Nodal Officers	Names	Phone Numbers	Mobile Numbers	Fax Numbers	E-mail Addresses
Head of the Institution (Full time appointee)					
TEQIP Coordinator					
Project Nodal Officers for:					
Academic Activities					
Civil Works including Environment Management					
Procurement					
Financial Aspects					
Equity Assurance Plan Implementation					

1.2 Academic Information

- **Engineering programmes offered in Academic year 2009-10**

S. No	Title of programmes	Level (UG, PG, PhD)	Duration (Years)	Year of starting	AICTE sanctioned annual intake	Total student strength

- **Accreditation Status of UG programmes:**

Title of UG programmes being offered	Whether eligible for accreditation or not?	Whether accredited as on 31st March 2010?	Whether "Applied for" as on 31st March 2010?

- **Accreditation Status of PG programmes:**

Title of PG programmes being offered	Whether eligible for accreditation or not?	Whether accredited as on 31st March 2010?	Whether "Applied for" as on 31st March 2010?

1.3 Faculty Status (Regular/On-Contract Faculty as on March 31st, 2010)

Faculty Rank	No. of Sanctioned Regular Posts	Present Status : Number in Position by Highest Qualification												Total Number of regular faculty in Position	Total Vacancies	Total Number of contract faculty in Position
		Doctoral Degree				Masters Degree				Bachelor Degree						
		Engineering Disciplines		Other Disciplines		Engineering Disciplines		Other Disciplines		Engineering Disciplines		Other Disciplines				
		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= (3+5+7+9+11+13)	16= (2-15)	17= (4+6+8+10+12+14)
Prof																
Asso Prof																
Asst Prof																
Lec																
Total																

Prof = Professor, Asso Prof = Associate Professor, Asst Prof = Assistant Professor, Lec =Lecturer, R= Regular, C=Contract

1.4 Baseline Data(all data given for the following parameters must be restricted to engineering disciplines/fields only)

S. No.	Parameters	
1	Total strength of students in all programmes and all years of study in the year 2009-10	
2	Total women students in all programmes and all years of study in the year 2009-10	
3	Total SC students in all programmes and all years of study in the year 2009-10	
4	Total ST students in all programmes and all years of study in the year 2009-10	
5	Total OBC students in all programmes and all years of study in the year 2009-10	
6	Number of fully functional P-4 and above level computers available for students in the year 2009-10	
7	Total number of text books and reference books available in library for UG and PG students in the year 2009-10	
8	% of UG students placed through campus interviews in the year 2009-10	
9	% of PG students placed through campus interviews in the year 2009-10	
10	% of high quality under Graduates (>75% marks) in the year 2009-10	
11	% of high quality postgraduates (>75% marks) in the year 2009-10	
12	Number of research publications in Indian refereed journals in the year 2009-10	
13	Number of research publications in International refereed journals in the year 2009-10	
14	Number of patents obtained in the year 2009-10	
15	Number of patents filed in the year 2009-10	
16	Number of sponsored research projects completed in the year 2009-10	
17	The transition rate of students in percentage from 1 st year to 2 nd year in the year 2009-10 for : (i) all students (ii) SC (iii) ST (iv) OBC	
18	IRG from students fee and other charges in the year 2009-10 (Rs. in lakh)	
19	IRG from externally funded R&D projects, Consultancies in the year 2009-10 (Rs. in lakh)	
20	Total IRG in the year 2009-10 (Rs. in lakh)	
21	Total annual recurring expenditure of the applicant entity in the year 2009-10 (Rs. in lakh)	
22	Number of Joint publications with National authors in the year 2009-10	
23	Number of Joint publications with International authors in the year 2009-10	
24	Number of R&D products commercialized in the year 2009-10	
25	Number of joint MTech programmes with institutions undertaken in the year 2009-10	
26	Number of joint MTech programmes with Industry undertaken in the year 2009-10	
27	Number of joint PhD with institutions undertaken in the year 2009-10	
28	Number of joint PhD with Industry undertaken in the year 2009-10	
29	Number of joint consultancies undertaken with institutions in the year 2009-10	
30	Number of joint consultancies undertaken with Industry in the year 2009-10	

1.5 Institutions to be eligible for participation in the Project under the Sub-component 1.2 must fulfill the following benchmarks:

Table-33
Benchmarks for Institutions to Qualify for Sub-component-1.2

S. No.	Attainment Parameters	Benchmark values	Institution's response (Yes/No)
1.	Does the institution agree to implement all academic and non-academic reforms given as below: <ul style="list-style-type: none"> • Implementation of curricular reforms • Exercise of autonomies • Establishment of Corpus Fund, Faculty Development Fund, Equipment Replacement Fund and Maintenance Fund • Generation, retention and utilization of revenue generated through variety of activities • Institutions to fill-up all existing teaching and staff vacancies • Delegation of decision making powers to senior functionaries with accountability • Improve student performance evaluation • Improvement performance appraisal of faculty by students • Provide faculty incentive for Continuing Education (CE), consultancy and R&D • Obtaining accreditation 	Yes	
2.	Availability of academic autonomy as recognized by UGC for both UG and PG programmes	Yes	
3.	Presence of Board of Governors with an eminent academician or industrialist as the Chairperson	Yes	
4.	Percentage of eligible UG programmes accredited or applied for	60%	
5.	Percentage of eligible PG programmes accredited or applied for	40%	
6.	Cumulative number of PhDs produced in the last three academic years (2007-08, 2008-09 and 2009-10) or Cumulative number of MTech produced in the last three academic years (2007-08, 2008-09 and 2009-10)	5 50	
7.	Faculty positions filled on regular full time basis as percentage of total faculty positions sanctioned in accordance with the AICTE prescribed student to faculty ratio	65%	
8.	Percentage of regular faculty with PhD in engineering* as percentage of total faculty	15%	

* For Special Category States, the desired levels is faculty with PhD in Engineering and Sciences disciplines as percentage of total faculty

2. INSTITUTIONAL DEVELOPMENT PROPOSAL (IDP)

- 2.1 Give the executive summary of the IDP (maximum ½ page)
- 2.2
 - Provide the details (in terms of methodology used, analysis carried out of the data and information collected and inferences derived with respect to strengths, weaknesses, opportunities and threats) of SWOT analysis (see Annex-V of the PIP) carried out.
 - Based on SWOT analysis, provide the strategic plan developed for institutional development.
 - Show how the results of SWOT analysis are linked to the key activities proposed in the proposal.
- 2.3 State the specific objectives and expected results of your proposal in terms of, “Scaling-up Postgraduate Education and demand-driven Research & Development and Innovation”. These objective and results should be linked to the SWOT analysis.
- 2.4 Provide an action plan for scaling-up enrollment into Masters and Doctoral programmes (include measures to attract qualified students and maintain high quality standards)
- 2.5 Provide an action plan for improving collaboration with Industry.
- 2.6 Provide an action plan for:
 - quantitatively increasing and qualitatively improving research by their faculty individually, jointly and collaboratively,
 - developing research interest among undergraduate students, and
 - collaborating with Indian and foreign institutions in academic and research area through MoUs
- 2.7 Attach the summary of Training Needs Analysis carried out. Also, provide Faculty Development Plan from the first 18 months to achieve improved competence based on Training Needs Analysis (TNA) in the following areas.
 - Basic and advanced pedagogy training
 - Subject / domain knowledge enhancement
 - Attendance in activities such as workshops, seminars, etc.
 - Improvement in faculty qualifications.
 - Improving research capabilities
- 2.8 Provide an action plan for training technical and other staff in functional areas.
- 2.9 Describe the relevance and coherence of Institutional Development Proposal with State’s/National (in case of CFIs) Industrial / Economic Development Plan.
- 2.10 Describe briefly the participation of departments/faculty in the proposal preparation and implementation.
- 2.11 Describe the institutional project implementation arrangements.
- 2.12 Provide an institutional project budget in Table No.34.

**Table-34:
Institutional Project Budget for Sub-Component 1.2**

Note: For details of permissible and non-permissible expenditures, please see Table-18 (for Government funded and aided institutions) and Table-19 (for private unaided institutions)

(Rs. In Crore)

S. No	Activities	Project Life Allocation	Financial year				
			2010-11	2011-12	2012-13	2013-14	2014-15
1	Infrastructure improvements for teaching, training and learning through:						
	(i) Establishment of new laboratories for new and existing PG programmes, faculty research, etc.						
	(ii) Updation of learning resources						
	(iii) Procurement of furniture						
	(iv) Modernization and strengthening of libraries and increasing access to knowledge resources						
	(v) Refurbishment (Minor Civil Works)						
2	Providing Teaching and Research Assistantships for significantly increasing enrolment in existing and new Masters and Doctoral programmes in Engineering disciplines						
3	Enhancement of R&D and institutional consultancy activities						
4	Faculty and Staff development for improved competence based on TNA						
5	Enhanced interaction with Industry						
6	Institutional Management Capacity enhancement						
7	Implementation of institutional reforms						
8	Academic support for weak students						
9	Incremental Operating Cost						
TOTAL							

2.13 (a) Provide the targets against the deliverables given in Table 35.

Table-35
Project Targets¹ for Institutions under Sub-component 1.2

S. No.	Deliverables	Base-line	Targets to be achieved	
			At the end of 2 years of joining the Project	By Project closing
1	Number of students registered for (a) Masters in Engineering programme (b) Doctoral Programme in Engineering			
2	Revenue from externally funded R&D projects and Consultancies in total revenue (Rs. in lakh)			
3	Number of (a) Research publications in refereed journals • National journals • International journals (b) Citations (c) Patents obtained / filed (d) Books (e) No. of R&D projects commercialized			
4	IRG as % of total recurring expenditure			
5	Number of co-authored publications in refereed journals (a) National (b) International			
6	Student credentials (a) Campus placement rate of • UG students • PG students (b) Average salary of placement package for (Rs. in lakh) • UG students • PG students			
7	Number of collaborative programmes with Industry		At least 2	
8	Accreditation Status (obtained and applied for)		At least 75% of eligible UG programmes and 60% of eligible PG programmes	100% for UG and PG programmes
9	Vacancy position for faculty and staff		Vacancy reduced to 5% or less	Zero vacancy
10	Percentage of regular faculty with PhD in Engineering disciplines		At least 20%	At least 25%
11	Any other (maximum three)			
	(i)			
	(ii)			
	(iii)			

(b) Describe the Plan in detail for achievement of the above targets enumerated in Table-35.

- 2.15 Give an action plan to ensure that the project activities would be sustained after the end of the Project.
- 2.16 Provide Procurement Plan for the first 18 months for Goods and Civil Works in Table-36 and Consultant Services in Table-37 with budget and timeframe.
- 2.17 Provide any other information related to special academic achievements as given in Eligibility Proposal of the institution.

¹ These pertain to the entity participating in the Project which may either be the whole stand alone institution or the Faculty / Department / constituent institution of a University or Faculty / Department of a Technical Deemed University.

Table-36
18-month Procurement Plan for Works and Goods* for Sub-Component 1.2

Name of the institution with location: _____

Package No.	SI No.	Activities	Description of Works/ Goods	Estimated Cost (Rs)	Method of Procurement	Design/ Investigation/ Completion/ Specification Finalization (Date)	Estimate Sanctioned (Date and Value)	Preparation of Bid Document (Date)	Receipt of Bank's No Objection to Bidding Document (Date)**	Bids		Contract Award (Date/ Value)	Date of Completion of Contract
										Invitation (Date)	Opening (Date)		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1													
2													
3													

* Goods cover Equipment, Furniture and Books and Learning Resources

** Applicable in case of 'Prior Review' by the World Bank.

Note: For Column 6, state ICB/NCB/Direct Contracting/Shopping method as appropriate

Table-37
18-month Procurement Plan for Consultant Services for Sub-Component 1.2

Name of the institution with location: _____

Sl. No.	Activities	Description of Services	Estimated Cost (Rs)	Methods of Selection @	TOR Finalization (Date)	Advertisement (Date)	◆ RFP Final Draft to be Forwarded to the Bank (Date)**	No Objection from the Bank for RFP (Date)**	RFP Issued (Date)	Proposals Received (Date)	Evaluation (Date)	No Objection by the Bank (Date)**	Contract Value and Date of Award	Contract Completion (Date)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

◆ RFP (Request for Proposal): Same as 'Bid Document' #Technical and Financial

** Applicable in case of 'Prior Review' by the World Bank

@ State whether (i) Single firm or individual; or (ii) Competitive procedure. If Competitive, then state whether Quality & Cost Based Selection (QCBS) or Quality Based Selection (QBS) procedure.

**TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME (TEQIP)
(PHASE-II)**

**FORMAT FOR
DEVELOPMENT PROPOSAL FOR
Sub-Sub-Component 1.2.1 : Establishing Centers of Excellence (CoE)
(Applicable for Institutions selected under sub-component 1.2)**

Name of the Institution : _____

Name of the Center of Excellence to be established : _____

Specific Area(s) of excellence : _____

Note: Institutions desirous for establishing more than one Center of Excellence should submit the separate proposals accordingly.

PROPOSAL FOR ESTABLISHING A CENTER OF EXCELLENCE

1. Institutional Identity

- 1.1 Name of the Institution : _____
- 1.2 Type of Institution : Govt. funded/Govt. aided/Private unaided/Other
- 1.3 Status of Institution : Autonomous Institute as declared by University/
Non-autonomous/Deemed University/
Constituent College
- 1.4 Does the Institution have any CoE? : Yes/No
If Yes, write the name of the
Department and specific areas
of excellence _____

- 1.5 Name of the CoE to be established : _____
- 1.6 Specific Area of excellence : _____
- 1.7 Names of Heads of Institutions and CoE Coordinators

Head and Coordinator	Name	Phone Number	Mobile Number	Fax Number	Email Address
Head of the Institution (Full time appointee)					
CoE Coordinator					

2. Eligibility Criteria

Institutions to be eligible under the Sub-sub-component 1.2.1 must fulfill the following benchmarks:

Table-38
Benchmarks for Institutions to Qualify for Sub-component-1.2.1

S. No.	Attainment Parameters	Benchmark values	Institutional Response (Yes / No)
1	Availability of Academic Autonomy	Yes	
2	Percentage of eligible UG programmes accredited or applied for	75%	
3	Percentage of eligible PG programmes accredited or applied for	60%	
4	Cumulative number of PhDs produced in the last three academic years (2007-08, 2008-09, 2009-10) in the departments participating for establishing CoEs	12	
5	Faculty positions filled on regular full time basis as percentage of total faculty positions sanctioned in accordance with the AICTE prescribed student-to-faculty ratio in the departments participating for establishing CoEs	70%	
6	Percentage of regular faculty with PhD in Engineering as percentage of total faculty in engineering	20	
7	Number of sponsored research projects in engineering completed in the last three academic years (2007-08, 2008-09, 2009-10)	07	

3. Institutional plan for establishing CoE

- 3.1 Give the Executive Summary of the proposal for establishing CoE (maximum ½ page)
- 3.2
 - Provide the details of SWOT analysis carried out.
 - Based on SWOT analysis, provide the strategic plan for establishment of CoE.
 - Describe academic and research achievements / credentials of faculty to be involved in CoE activities.
 - Give a brief review of literature on the specific areas of CoE.
- 3.3 State the specific objectives and expected results of your proposal in terms of, “Establishing Center of Excellence”. These objectives and results should be linked to the SWOT analysis.
- 3.4 Give the generic and specific areas selected for CoE.
- 3.5 Give an action plan for the proposed research areas and the results to be achieved, indicate the collaborative arrangements made / under discussion with industries and research institutions / organizations within India and abroad. **Attach MoU, already signed.**
- 3.6 Give an action plan on how the institution will ensure that the CoE research and/or activities would be sustained after the end of the Project.
- 3.7 Give an action plan how you intend to communicate the research findings, R&D outcome, and the use of CoE facilities to a wider audience.
- 3.8 Describe the benefits likely to accrue to the institution and the society out of CoE.
- 3.9 Provide budget for establishing Center of Excellence in Table-39.

Table-39

Project Budget for Sub-Component 1.2.1

Note: For details of permissible and non-permissible expenditures, please see Table-18 (for Government funded and aided institutions) and Table-19 (for private unaided institutions)

S. No	Activities	Project Life Allocation	Financial year(Rs.In Crore)				
			2010-11	2011-12	2012-13	2013-14	2014-15
1	Infrastructure Improvement for applicable thematic research and development						
	(i) Establishment of new laboratories for thematic research						
	(ii) Establishment of knowledge resource center (Library) in the thematic area						
	(iii) Procurement of furniture						
	(iv) Refurbishment (Minor Civil Works)						
2	Providing additional Teaching and Research Assistantships for enrolment in Masters and Doctoral programmes in topics linked to economic or societal needs in the thematic areas						
3	National/International collaboration for Research and Development activities with academic institutions and R&D organizations						
4	Faculty training for enhancing research competence in thematic areas, both within India and abroad						
5	Collaboration with Industry for applicable research and product development						
6	Incremental Operating Cost						
TOTAL							

- 3.10 Give an action plan for valorization and commercialization of research results that may lead to innovation.
- 3.11 Give a procurement plan for Goods and Consultant Services as per Tables-36 and 37.
- 3.12 Provide the incremental institutional project targets against the deliverables indicated in Table-40 in addition to the targets under Sub-component 1.2 with plan for achieving the same.

Table-40
Incremental Project Targets for COE

Note: These targets are specific to COE and are thus over and above those for Sub-component 1.2 of the Project.

S. No.	Deliverables	Baseline	Targets to be achieved	
			At the end of 2 years	By Project closing
1	Number of International Exchange programmes			
2	Number of individual publications in peer-reviewed journals: (a) National (b) International			
3	Number of co-authored publications in peer-reviewed journals with names of authors: (a) National (b) International			
4	Number of exchange of research students with collaborating institutions: (a) National (b) International			
5	Number of exchange of research faculty with collaborating institutions: (a) National (b) International			
6	Number of patents obtained			
7	Number of patents filed			
8	Number of external R&D projects			
9	Number of Industry Chairs secured			
10	Number of MoUs with academia: (a) National (b) International			
11	Number of MoUs with industry: (a) National (b) International			
12	Number of products, research and services commercialized			
13	Any other (maximum three)			
(i)				
(ii)				
(iii)				