National Project Implementation Unit (NPIU)

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME (TEQIP) PHASE-II

Guidelines for filling the Institutional Development Proposal (IDP) Format for Sub-Component 1.1

INSTITUTES BASIC INFORMATION

1. Each proposal is to be approved by the BoG and each page of the proposal is to be signed by the Head of the Institution.
2. Head of the institution needs to certify that all the information provided in the proposal is factually correct. Falsification of any data provided by the institution will lead to its disqualification at any time during the Project life.
3. The private unaided institutions found to be charging capitation fee or indulging in any other malpractice will face punitive action amounting to either their exclusion from the Project and recovery of Central and State funds provided to them till the date of their exclusion or curtailment of Project funding.
4. SPFU needs to certify that all information given by the institutions from the respective States in the proposal is factually correct. In addition SPFU needs to certify the capability of the Institutions in carrying out various reforms.
5. In the IDP format, give the name of the Affiliating University also as applicable

INSTITUTIONAL DEVELOPMENT PROPOSAL (IDP)

6. Item no. 2.1 of IDP (Executive Summary)
   - Please describe in the executive summary the salient features of the Project proposal to achieve the target deliverables with respect to the project activities and also reflect the fund requirement in the four years project period.
7. In respect of item no. 2.2 and 2.3 of IDP:
   - Please refer the guidelines on SWOT analysis as given in Annex-V of PIP for carrying out the detailed SWOT analysis and justify your Institutional Development Proposal (IDP) for participation in the Project.
   - Please provide the strategic plan for Institutional development during the project period, identify the target groups and also list the main challenges that can be confronted.
   - Establish statements of mission, vision and values
   - Establish goals to accomplish over the next four years
   - Identify how those goals will be reached (strategies, objectives, responsibilities and timelines)
   - Please specify 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.

- Please show how the results of SWOT analysis are linked to the key activities proposed in the proposal.

8. In respect of item no. 2.4, of IDP:

Please provide an action plan for (max 1 page each) and also append the same in the tabular format suggested below:

S. No	Activity	Project Months															
		1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	31-33	34-36	37-39	40-42	43-45	46-48

(a) Improving employability of graduates

- In your action plan, please identify the actions to improve employability.
- The employability can be based on comprehensive interactions with the employer/ industries/companies.
- It should also take into consideration the placement rate and the placement package of the graduates.

(b) Increased learning outcomes of the students

The proposal should contain a realistic and quality action plan to achieve the increased learning outcomes through student centric approach to learning well supported with well equipped laboratories and experienced and well qualified faculty for:

- Increase in transition rate of weak students
- Increase in pass percentage
- Increase in the performance appraisal of individual students
- Increase in the satisfaction index of the students

For achieving the above please refer Table-26 of PIP for detailed actions.

(c) Obtaining autonomous institution status within 2 years

- How much time the affiliating University will take in granting the Autonomous institution status
- If there is no provision in the University Act, please indicate the State/University plan to amend the Act.

(d) Achieving the targets of 60% of the eligible UG programmes accredited by the end of two years and 100% accreditation obtained and applied for by the end of the Project of the eligible UG & PG programmes

The institutions should make a Time Frame Action Plan to overcome the hurdles that can be faced in the process of accreditation like:

- Availability of qualified teaching faculty,
- Infrastructure facility, Laboratory facilities,
- Teacher student ratio as per AICTE norms,
- R&D and Consultancy projects etc.

(e) Implementation of academic and non academic reforms

Academic reforms:

- Curricular reforms
- Improved students performance evaluation
- Performance appraisal of faculty by students
- Faculty incentives for continuing education
- Accreditation of UG&PG programmes

Non- Academic reforms:

- Exercise of autonomy
- Establishment of Four Funds
- Generation, retention and utilization of revenue generated through a variety of activities
- Filling up all teaching and Staff vacancies
- Delegation of decision making powers to all senior institutional functionaries with accountability
- Academic support for weak students

Curricular revision:

- All institutions are expected to carry out academic reforms. These may among others include:

- Review of curricula and development of new ones: Here the institutions should describe the mechanisms to be established for revision and development of curricula, and how it will be ensured that the curricula meet the requirements of the national and international employment markets (output characteristics).

- Curriculum implementation: Describe innovative practices that would be built into implementation of curricula.

  The action plan for the new and revised curricula needs to imbibe the following:

  - Innovations in teaching and students evaluation methodologies
  - Design skills, communication skills, entrepreneurial skills, information processing, creative and innovative thinking and leadership skills
  - Problem solving projects from industry
  - Elective courses
  - Extensive use of media
  - Invited expert lectures from industry and field
  - Visit to training in industry and
  - Multi-level and multi-background background entry credit exemptions

Improved students performance evaluation

The action plan for the Improving student's performance should involve both formative and summative evaluation for marked improvement- focused approach.

- Formative evaluation: mock tests, mock assignments, quizzes, presentations orals, individual and group assignments.
- Organizing regular workshops for the faculty to sensitize them towards total quality management
- Set new goals for a fair, consistent, transparent and accountable evaluation
- Evaluation of students performance to be disclosed to the students
- Three summative evaluations in a semester –in identifying clearly where the students/faculty need more improvements in teaching-learning process
- Facilitate faculty efforts to help students to improve their performance through improved knowledge and better presentation
- Identify mistakes and achievements of desired levels of performance
- Develop a detailed Academic Plan-could be made mandatory in case of weak students-their performance improvement must be closely monitored
- Encourage self assessment by the faculty
- Encourage counseling sessions with academically weak students

Performance appraisal of faculty by students

The action plan for the Improving performance appraisal of faculty by student's should involve

- Motivate the faculty for regular self assessment –to provide a clear perspective to the faculty of what is expected from him/her for providing quality education

- The institutions may develop formats for student's feedback regarding self assessment of a faculty on a course.
- faculty assessment formats with important teaching parameters viz use of teaching aids, development of course file, accessibility of faculty, summary of formative work done, syllabus covered, beyond syllabus efforts , types of tests given, mandays devoted to formative efforts, etc.
- Use motivational and constructive approach to promote faculty self assessment and facilitate faculty self improvement.
- Plan to collect comprehensive students' feedback for faculty evaluation (min 3 times)
    - Early (by 1 month)—macro level feedback on the basis of knowledge, skills and attitude
    - Mid-course (by 2-3 month)—detailed feedback on the basis of total effectiveness of the course contents, delivery and teaching-learning process.
    - Students' suggestions may help in mid-semester corrections
    - Finally (by end of course)— detailed feedback regarding achievements of the objectives, knowledge skills and improvements needed further
- Share the students feedback and self assessment with HOD only
- Counseling recommendations on the basis of class performance of students and their feedback-HoD may appoint a suitable counselor to help the faculty
- Improvements in teaching to be monitored and results shared with the faculty

Faculty Incentives for Continuing Education, Consultancy, Research and Development, etc.:

- Identify academic and career progression needs of the faculty.
- Management should become a facilitator to the faculty's career growth and in supporting various CE, consultancy, R&D activities, etc.
- Motivate faculty for CE, for attending conferences, workshops, seminars, etc. outside India.
- Faculty motivation for consultancy (industry problem solving) must be encouraged.
- Motivate faculty for R&D by providing books and journal allowance. Encourage and support faculty for obtaining higher qualifications such as PhD Faculty may be rewarded for publishing quality papers in journals of high repute.
- Facilitate an increased research interaction in the network for acquiring wider benefits.
- Systematic assessment of faculty teaching commitments and his/her expected involvement in administration, Continuing Education, network activities, etc., to be carried out.
- Each faculty should be required to submit a self assessment chart every semester. A plan for various activities, goals, objectives during each year may also be encouraged.
- Motivate the development of quality improvement. Promote innovation and industry relevant enrichments in the academic programmes. Also, facilitate the professional career growth of faculty.
- Bestow awards and merit to the deserving faculty for excellent overall performance.

Exercise of Autonomy:

- Affiliated Institutions have to be given Autonomous Institution status for the purposes of this Project. Autonomous Institutions under a University will thus be able to exercise full academic autonomy except for the award of degrees, which will continue to be conferred by the University.
- All institutions are required to have a Board of Governors.

- All powers for institutional management through exercise of the 4 autonomies is to be vested in the BoG and will be exercised as per the MoA/Government Orders/Government Regulations.
- The BoG will in turn suitably delegate functional powers to various institutional functionaries and committees.

The details about the four types of autonomies are given in Annex-I to PIP.

(i) Managerial Autonomy:

a. The BoG will delegate suitable Academic, Financial and Administrative powers to various institutional functionaries to streamline the running of the institution and frame rules and procedures for accountability at each level. For details pleases refer Annex-I.

b. All academic, administrative, financial procedures and decisions should be transparent and care should be taken to involve maximum participation of stakeholders (faculty, staff, students, parents of students, industry, etc.) in the decision making process.

(ii) Administrative Autonomy:

a) All actions of the Director in connection with continuing education programmes, faculty consultancy, faculty development programmes, Industrial consultancy, organisation of seminars and conferences should be reported to the BoG.

b) On the recommendation of the HoD, the Director will approve the deputation of faculty to attend seminars, conferences, and training programmes. BoG will need to evolve the norms for the same.

c) It is suggested that Directors may delegate some of his/her administrative powers to the Deans, Heads of Department and Professors.

(iii) Financial Autonomy:

a) For day-to-day functioning adequate financial powers to the Director and other functionaries are to be delegated by the BoG.

The suggested minimum financial powers to be delegated are as under:

- Director or Principal of an institution or Dean of a University institutions/ Head of University Faculty/ Department--- Rs. 50.00 lakh for single purchase order
- Head of the Department or equivalent--- Rs.1.00 lakh for single purchase order
- All single item expenditure above Rs. 50.00 lakh will need to be approved by the BoG. Similarly, all single item expenditure above Rs.1.00 lakh by a Head of the Department will need approval from the Director/Principal/Dean

b) Re-appropriation up to 10% of the project fund allocation for an activity may be done by the Director/Principal/Dean with concurrence of the BoG.

c) Re-appropriation above the 10% limit will need prior approval from the NPIU.

(iv) Academic Autonomy:

The project institutions are required to possess/obtain academic autonomy and carry out all the functions listed below:

Academic Functions to be carried out as an Autonomous Institution

S. No.	Parameters / Functions
1	Admission of students based on merit as per State/GoI Admission Policy (as applicable) on common entrance examination, counselling, and reservation
2	Determine own curricula, course content, curricula implementation and methods of training
3	Develop credit based curriculum
4	Permit credit exemption for previous attainments
5	Introduce flexibility in the curriculum with choice of electives
6	Evolve new methods of summative evaluation and their frequency, conducting examinations and declaring results
7	Develop new methods of formative and internal evaluation as per advice from Experts
8	Add value addition courses as per market demand
9	Develop an effective system for faculty evaluation by students.
10	Start new courses, new programmes and re-orient and restructure or delete existing programmes (these actions, if undertaken under the Project, will need to observe project directives as given in the main text of PIP)
11	Introduce innovations in teaching/learning processes through controlled experimentation
12	Conduct Continuing Education, Distance Learning and e-Learning and skill enhancement programmes as per market needs
13	Enter into collaborative arrangements with outside bodies /experts for curricula development, employment oriented value addition to courses, new teaching learning methodologies and innovations
14	Depute faculty for academic advancement
15	Develop faculty training needs assessment scheme in line with academic requirements and institutional objectives
16	Inviting experts including Industry experts for special lectures

Establishment of four Funds:

Each institution is required to establish 4 distinct funds— Corpus Fund, Faculty Development Fund, Equipment Replacement Fund and Maintenance Fund.

In your action plan for each Fund, describe the sources of funds for each, the activity(ies) for which each fund would be used, mechanism for ensuring that each fund is used for the purpose for which established,

how expenditure of each fund would be governed and managed, and the institution's accountability to the sponsoring government in respect of proper maintenance and utilization of each fund. ; Expenditure is generally made with the approval of the Board of Governors or equivalent body.

a) Separate Bank Account has to be opened for each of the Four Funds namely;
b) These Funds should not be used during the Project period as funds for various activities are available under the Project.
c) The authority for opening these Accounts will be with the BoG of the institution. Each project institution is to build these Funds with annual contribution into each Fund equal to at least 0.5% (total 2%) of annual total recurring expenditure of the institution.

   Sources: definite percentage of fee collection from students, savings from Block Grant, 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.
d) Each institution may additionally contribute from annual savings to the Corpus Fund.

Revenue Generation:

a) Revenue generation activities could include:
   - Incentives to faculty involved in revenue raising activities over and above their routine academic duties
   - Recognizing performance of faculty and staff through awards, rewards or promotions
   - Developing office and lab facilities
   - Improving facilities for academic research
   - Supporting travel for attending conferences
   - Revenue generation activities would, among others, include: 100% of tuition fee and charges from students
   - Consultancy projects sponsored by private or public sector
   - 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
   - Interest generated from any investment
   - Use of facilities, earning from Incubation Centres and Scientific and Technology Entrepreneurship development Programmes (STEP)
   - Testing and Certification
   - Self financing, training and teaching programmes
   - Patents and copyrights

- Commercialization of Research and Development outputs
- Usage of high Tech equipment by industries and others
- Commercial usage of Institutional infrastructure
- Commercial activities [commercial use of facilities, earning from Incubation Centres and Scientific and Technology Entrepreneurship Programme (STEP)].

b. 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.

Filling-up Faculty and Staff Vacancies:

Please provide an action plan for filling up faculty and staff vacancies as per AICTE norms.

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 till regular appointments are made.

a) Re-assess and rationalize the requirement of the total faculty (including Physics, Chemistry and Mathematics) by following the norms of AICTE.

b) As per AICTE norms, the faculty to student ratio for UG programme is 1:15 and for the PG programmes 1:12.
Preferred ratio is 1:10.

For details refer P.No.149 of PIP.

f. Improving interaction with industry

The proposal should present the concrete information on the past industry – Institute interaction. What are the outcomes of the previous interaction? A well designed innovative, realistic and potentially effective plan between both the parties should be presented. This plan should present the details of the benefits that the industry is going to accrue from the institute and vice-versa.

Each institution is required to form an Industry-Institute-Interaction Cell (IIC) to benefit students, faculty and for promoting and nurturing interaction and to promote collaborative interdisciplinary research (for details refer Annex-IX).

Services offered by institutions to industry would include:

- Using the expertise of the Project institutions for technology Assessment, up-gradation and absorption.
- Deputation of faculty to industries
- conducting continuing education programs;
- undertaking problem solving projects and consultancies on industrial products,
- services and processes;
- testing and calibration; serving as training centers for industry, etc.

Contributions from industries to institutions could include:

- participation in Governing and other bodies of the institutions; participation in curriculum improvement and development;
- Joint M.Tech and PhD programmes and joint R&D activities
- training of students in traditional and new technologies, soft skills etc
- providing expert lectures and industry senior persons acting as adjunct faculty
- assisting institutions to establish new laboratories and providing literature on new technologies
- helping students undertake problem-solving projects;
- training teachers and staff in new technologies and processes,
- and collaborating in sandwich program offerings.
- Assistance for improving employability etc.

For details please refer page 24 of PIP

g. Enhancement of research and consultancy activities

- The proposal must contain the action plan for increasing R &D activities amongst the faculty and the students. R&D should focus on improving present technologies, developing indigenous ones and enhancing production and productivity.
- With a view to improving the quality of research in the country, use of international benchmarks such as citation indices, patents, should be encouraged and a national repository of doctoral theses created.
- Provision of incentives to students and faculty

9. In respect of item no. 2.5, of IDP:

- Please provide an action plan in the format with budget for organizing a finishing school in accordance with the pattern of permissible and non- permissible expenditure as given in Table 18 and 18-A. Please refer page-29 of PIP for details. The key activities of the finishing schools are:

  a) Conducting remedial teaching throughout academic sessions for improving transition rate and pass rate of students,
  b) Conducting specialized soft skills and professional skills development training during semester-breaks and vacations (preferably starting from 5th Semester onwards) for increasing employability,
  c) Conducting high intensity training (of at least 4-weeks duration) for development of soft and professional skills in the students that graduate but fail to secure any employment, and
  d) Organizing campus interviews and making other efforts to secure employment for graduate engineers that complete the training under activity (c) above.

  The activities of the Finishing School will be regularly supervised and monitored by the respective SPFUs and the NPIU, especially in respect of the number of graduates participating in the 4-week training and the percentage of these participants securing employment within 3-months of completion of training.

- The action plan should be aimed to improve the academic performance of SC/ST/OBC/academically weak students through innovative methods w.r.t the following:

  - Transition rate from 1st –2nd year
  - Pass rate
  - Improved performance of individual students
  - Increased satisfaction index of the students

Methodology:

- Identify weak students and improving students basic competences at the entrance level
- Design remedial measures for the disadvantaged sections of the society in the form of coaching classes and problem solving sessions for successful learning.
- Improve the communication skills of the students that may or may not be academically weak. Special Group discussions, personal interview techniques can be organized to bring them at par with the industry needs.
- Special coaching/training through subject expert can be organized.

10. In respect of item no. 2.6, of IDP:

- In the action plan, please provide the necessity for Strengthening PG programmes and starting new PG programmes and the actions to be taken accordingly in the format suggested.
- Strengthening should be aimed at removing deficiencies in training facilities to meet the requirements for expanded intakes, if any. Each of these should be described with justification.

- New programs may be started at PG level in emerging areas as justified by labor market data latest by August 2011. The Programs would support additional staff, new laboratories and workshops, civil works, books and learning resources, etc.
- The institutions must ensure that whether availability of requisite qualified and experienced faculty. The students' capacity of the institution should also be taken into consideration.
- If already the vacancies in various UG&PG programmes are existing, the institutions are discouraged to open new PG programmes rather the institutions can increase enrollment in PG education through provision of Teaching and Research Assistantship to non-GATE students and Converting reserved seats to non-reserved seats.
- In the action plan, the institutions are required to provide an approval from the respective State Government that the institution would continue to sustain the gains in the form of provision of Teaching and Research Assistantship to non-GATE students even after the closure of the Project.

11. In respect of item no. 2.7 of IDP:

- Please attach the summary of Training Needs Analysis (TNA) carried out. Please refer Annex—VI to PIP for details.

  Institutions need to carry it out every year and the training/development plan resulting from it is to be implemented in the following year. TNA gives performance improvement, introduction of new system, task or technology and organizational benefits.

  Following information may be used by the individuals for exercising TNA:

  - Institution's Strategic Development Plan
  - Institution's (recent) SWOT analysis
  - Previous years' Development/Training plans
  - Seniors' and/or Peers' feedback
  - Students' feedback
  - Feedback on previously attended training programmes
  - Any other relevant feedback

- Please provide Faculty Development plan for the first 18 months for improving their teaching, subject area and research competence based on TNA in the following areas. Please refer page 22-24 of PIP.

  - Basic and advanced pedagogy: please refer Sectio-3, sub section 3.1.3 (pages 43-44) of PIP for details
  - Subject / domain knowledge enhancement to make the faculty aware of the latest technology and research methodologies to impart better training to students.
  - Attendance in activities such as workshops, seminars : the institutions can allow participation of faculty to attend short-term/long-term courses, national and international seminars, conferences, workshops etc
  - Improvement in faculty qualifications through qualification upgradation of the faculty by deputing faculty to pursue higher studies with in same or different organization
  - Improving research capabilities via Collaboration with R&D organizations, academic institutions in India and abroad

12. In respect of item no. 2.8, of IDP: please provide an action plan for training technical and other staff in their respective functional areas.

    The proposal should provide an action plan for imparting Special training for technical laboratory staff as part of the new teaching-learning strategy (for integration of updated laboratory instruments and equipments, new skills and competencies are required) and administrative staff in the respective functional areas. For details, please refer page 22-23 of PIP.

13. In respect of item no. 2.9, of IDP Describe the relevance and coherence of Institutional Development Proposal with State's/National (in case of CFIs) Industrial /Economic Development Plan.

    - The proposal in some measure should conform to the Governments objective of technical education and align with the States and Regional economic development plan.
    - The action plan should ensure a pattern of economic and industrial development that would lead to economic growth and social cohesion.
    - The objective of the proposals should cater to the requirement of the region so that the technology inputs of the institution could benefit the region.

14. In respect of item no. 2.10, of IDP Describe briefly the participation of departments/faculty in the proposal preparation and implementation.

    - The action plan requires the proper coordination with faculties of various departments. A proper integrated and coordination mechanism for specialized committees should be in place. For details of the implementation arrangements please refer Section-5 of PIP

15. In respect of item no. 2.11, under IDP please describe the Institutional project implementation arrangements.
    - Please refer Table-26 of PIP describing the functions to be carried out by an autonomous institution.
    - For details of the implementation arrangements please refer Section-5 of PIP and the details of the committees for performing various functions are given at page—151 of PIP.

16. In respect of item no. 2.12, please provide an Institutional budget in Table-1, taking into account Table-16, 16-A and Table-18, 18-A of the permissible and non-permissible expenditure.

    - Please note that the budget is to be provided from the start of the payment under an activity and not from the start of planning.
    - In some activities the upper and lower budgetary limits are prescribed. If the money is not spent accordingly, the funding will be stopped or curtailed depending upon the merits of the case.

17. In respect of item no. 2.13, please provide the targets against the deliverables listed below:
    Table—30 of PIP.

18. In respect of item no. 2.14, please provide the action plan for sustaining the gains of the project after the closure of project.

- The institutions have to ensure that the gains made under the Program (higher standards/levels reached in core activities of the institution) would be sustained after the institutional project ends and how these would be sustained.

  Some examples of the gains that institutions are expected to make are:

  - excellence in academic activities in such areas as postgraduate education, doctoral programs, faculty research, R&D and consultancy services, improved curricular practices, interaction with industry etc.
  - improved institutional management practices including administrative and financial management practices, higher internal efficiencies, etc.
  - exercise of autonomies, etc.
  - faculty recruited under the project
  - Four funds, Block Grant Pattern
  - Teaching and Research Assistantship

- Funded institutions may describe the support expected/ promised by their sponsoring governments. Aided and unaided institutions may similarly describe the support expected/ promised by their sponsoring Society/Trust.

19. In respect of item no. 2.14, please provide the Procurement Plan for the first 18 months for Goods and Civil Works and consultant services in Tabular form with budget and time frame.

20. In respect of item no. 2.14, please provide the information related to special academic achievements as given in Eligibility Proposal of the institution.