TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME

(TEQIP)

PHASE II

INSTITUTIONAL DEVELOPMENT PROPOSAL

for

Sub-Component 1.1:   **Strengthening Institutions to improve learning outcomes and employability of graduates**

Government Engineering College Trichur

Thrissur 680009

Kerala State

www.gectcr.ac.in

April 2015

CERTIFICATE

Certified that all the information provided is factually correct

Thrissur   **Principal**

06/05/2015

Table A

Fund allocated for remaining Project Period (Rs. in Lakhs)

Balance Amount 200 lakhs	Time period	April 2015-September 2015	October 2015-March 2016	April 2016-October 2016
	Amount in lakhs	158	40	35

Current Data

Govt. Engineering College, Thrissur

1	**Total strength of students in all programs and all years of study**	2478
2	Total women students in all programs and all years of study	899
3	Total SC students in all programs and all years of study	209
4	Total ST students in all programs and all years of study in the year	36
5	Total OBC students in all programs and all years of study	1107
6	Number of fully functional P-4 and above level computers available for students	579
7	Total number of Text books and Reference books available in library for UG & PG students	65482
8	% of UG students placed through campus interviews	39 %
9	% of PG students placed through campus interviews	4 %
10	% of High quality under graduates (>75% marks) passed out	21.77 %

11	% of High quality post graduates (>75% marks) passed out	69.7 %
12	Number of research publications in Indian refereed Journals	7
13	Number of research publications in International refereed Journals	166
14	Number of Patents filed	1
15	Number of sponsored research projects completed	5

16	a. The pass rate of students in percentage from 1st year to 2nd year
	    (i) All students
	    (ii) SC
	    (iii) ST
	    (iv) OBC
	    (v) Women
		
		87.6 %
		70 %
		11.11 %
		87.21 %
		94.5 %

17	IRG from students' fee and other charges (Rupees)	2,17,45,369
18	IRG from consultancy & other sources (Rupees)	25,41,054
19	Total IRG in the year (Rupees)	2,50,68,785
20	Total recurring expenditure in the year (Rupees)	29,45,55,508
21	% IRG of the recurring expenditure	8.51 %

Revised Targets

No	Deliverables	Base line 2009-10	Targets to be achieved as per IDP	Targets achieved As on date	Target to be achieved at the end of the Project Period
1	Number of students registered for (a) Masters in Engineering programme (b) Doctoral programme in Engineering	159 0	267 13	180 18(2014-15) Total - 53	180 13 Total -66
2	% of the Revenue from externally funded R&D projects and consultancies in total revenue (Rs. in lakh)	0.8	7.4	10.14%	12
3	Number of publications in refereed journals (a) National (b) International	0 17	6 25	7 166	10 200
4	IRG as % of total annual recurring expenditure	-	-	8.51%	9 %
5	Number of co-authored publications in refereed journals (a) National (b) International	1 7	6 25	2 85	4 100
6	Student credentials (a) campus placement rate of • UG students • PG students (b) average salary package of placements (Rs.in lakh) • UG students • PG students	30% 3% 3 3.2	70% 15% 4.2 4.5	39% 4% 3.6 3.5	50% 15% 4.2 4.5
7	Number of collaborative programmes with Industry	2	18	1	7
8	Accreditation status (obtained and applied for)	UG – Applied-100% PG- 0%	100% of eligible UG + PG	23.53% (Out of 7 UG and 10 eligible PG)	100%
9	Vacancy position for faculty and staff	10%	0	Faculty:13.7 % Staff :	0% 0%

				11.26%	
10	Percentage of regular faculty having a Masters Degree or a Doctorate Degree in Engineering disciplines	71% 11%	80% 20%	73.1% M.Tech) 23.45% (Ph.D)	70% 30%
11	Transit rate from 1st to 2nd year • All Students • SC and ST Students •OBC Students • Women Students	75% 35% 74% 81%	85 50 85 88	87.6% 59.18% 87.21% 94.5%	90% 80% 90% 95%
12	Autonomy status	-	-	-	-
13	Enrolment of faculty with only Bachelor Degree for qualification upgradation		14	8	5

SPECIFIC OBJECTIVES AND EXPECTED RESULTS

Based on the SWOT analysis and Strategic Plan for Institutional Development, the specific objectives and the expected results of the project have been prepared in accordance with the Vision, Mission and Values stated below.

(a) Vision
The Sanskrit motto selected from 'The Gita', 'Yoga Karmasu Kousalam' translated as 'unite skill with effort in pursuit of excellence', is the vision of the Institution.

(b) Mission
'To provide quality education in engineering and technology to transform the youth into committed technical personnel for the social and economic well being of the Nation'

(c) Values
The Institute has identified honesty, perseverance, social commitment and equity as its core values.

The following have been identified as the objectives to be achieved by the implementation of the present scheme of TEQIP. The identified objectives and the expected results are explained in the subsequent paragraphs.

1. TO ENHANCE THE EMPLOYABILITY OF GRADUATES		
Specific objective	**Expected Results**	**Current Status**
• **Ensure Academic enrichment** • **Improve teaching effectiveness** • **Introduce periodic changes in curriculum to meet the changing needs of the industry** • **Introduce remedial teaching for weak students** • **Promote extra-curricular and co-curricular activities** • **Strengthen Placement & Training Cell and Counseling & Guidance Cell** • **Ensure enhancement of Industry Institute Interaction** • **Update employer assessment of passed out students placed in various organisations.** • **Update the college library with latest text books and periodicals** • **Introduce personality development and soft skill improvement programmes for students**	• Increase in campus placement record from the present 32% to 70% • Better employer comments on performance of passed out students. • Increased demand for the programmes of the Institute from prospective students	• Campus placement has been improved to 39 % • Great demand for all the UG & PG programmes & all the seats are filled
2. TO IMPROVE TEACHING-LEARNING PROCESS		

• **Improve class room ambience for effective teaching learning process**
• **Acquire state-of-the-art software packages**
• **Ensure periodic training to faculty and support staff in emerging areas of science & technology**
• **Modernize laboratories and workshops by procuring latest equipments and machinery**
• **Strengthen department libraries**
• **Establish collaboration with National and International Organisations for exchange of ideas**
• **Sign MOUs with reputed academic institutions for mutual faculty and student empowerment**
• **Develop a formal mechanism for imparting industrial exposure to students**
	• Increase in the pass percentage from the current status of 74% to 80%
	• Exposure of faculty and students to the latest technologies and practices
		• Improved the pass percentage to 82 %
		• 95 % of the faculty and staff has undergone training programmes in subject domain, pedagogical, & management capacity development
		• 4 faculty members presented papers in international conferences abroad and another 5 faculty members got BoG approval for international travel.
		• Modernized 34 labs
		• Strengthened the library with Books-65482
		        E-Books -1721
		        Journals- 36

		E –Journals – 48
3. TO STRENGTHEN THE INSTITUTION		
• **Introduce academic and administrative autonomy** • **Implement academic reforms** • **Start new PG and Research programmes in emerging fields** • **Enhance consultancy, industry specific projects and R&D activities** • **Develop remedial mechanism for improved performance** • **Develop and implement methods for improvement in teacher-student relationship** • **Undertake socially relevant projects**	•Improved reputation for the institute among the stakeholders. • Empowerment for institute level decision making in administrative and academic matters • Enhanced research output.	• Great demand for all the UG & PG programmes. • Our institute stands in the first position in the B. tech results of Calicut university from 2013 • Faculty publications in refereed journals has been increased from 17 to 173 • Organized 4 national conferences and 2 international conferences • Significant improvements in research projects

Specific objectives and action plan of revised IDP

1. Quality and Employability of the Students	
Specific Objectives	• Improving the pass rate of first year students from 87% to 90% • Improving the pass rate of SC/ST students from 59% to 80% • Improving the placement rate from 39 % to 50% • Improving the number of students admitted to premier higher learning institutions from 10% to 20%
Action Plan	• Conduct classes strictly according to academic schedule • Arrange remedial classes for weak students in the weekends, holidays. • Special remedial classes for SC/ST Students. • Keep track of the performance of SC/St Students from 1st Sem onwards and create a database for SC/ST students to keep records of number of papers failed, pass percentage. • Use of Language lab & providing training programmes for Communication Skill improvement • Planned industrial visits & industrial trainings. • Arrange Peer groups for group study purpose • Arrange skill enhancement training programs for employability and expert talks on career options. • Gate coaching classes for Final year & Passed out BTech students

	• Planned programs under visiting faculty scheme
Expected activities	• GATE coaching classes • 4 Placement oriented training programs for skill enhancement & communication skill development • Expert talks from industry • 334 hrs of remedial classes
Revised IDP Budget	**10 Lakhs**

2. Faculty & Staff Development

Specific Objectives	• Faculty upgradation • Creation of Technical Experts • Enhancing R&D, Publications and Consultancy • Healthy working environment • Improve satisfaction level of Faculty & staff
Action Plan	• Motivating faculty to enroll for PhD programme • Faculty and staff to attend training programs, workshops, seminar, conferences. • Encourage faculty to apply for funded R&D projects. • Organize In house training programs and workshops • Depute faculty members for pedagogical training programmes • Encourage faculty members to attend international conferences abroad • Arrange invited talks • Organize National & International conferences • Best faculty award based on student feedback, R&D activities, publications and consultancy
Expected activities	• 20 Faculty members to attend external training programmes under FSD • Planned 5 In house short term training programmes • Planned 2 In house workshops • Planned 1 International conferences • 16 Technical & Ministerial Staff to attend external training programmes under FSD
Revised IDP Budget	**10 Lakhs**

3. R&D and Consultancy

Specific Objectives	• Faculty development through research competence • Increase research publications • Revenue generation through R&D and Consultancy

Action Plan	• Encourage Faculty members to apply for funded R&D projects. • Encourage faculty members to increase research publications. • Encourage faculty members to attend international conferences abroad • Creation of Centre of Excellence(CoE) in each department • Invited talks by the experts from research organizations • Organize international conferences
Expected activities	• 10 invited talks • 1 international conference • 35 research paper publications
Revised IDP Budget	**51.94 Lakhs**

4. Enhanced interaction to Industry

Specific Objectives	• Enhance Collaborative projects with industries • Identify and solve the industrial problems • Share the knowledge of industrial expert • Improve practical knowledge through industrial training & visits
Action Plan	• Sign MoUs with industries • Organize invited talks by the experts from industries • Arrange Collaborative projects with industries • Arrange industrial Projects, training & visits
Expected activities	2 MoUs with industries 16 Faculty members & 6 Technical staff to visit industry 6 Expert talks from industry 1 collaborative programme with industry
Revised IDP Budget	**2 Lakhs**

5. Management Capacity Enhancement

Specific Objectives	• Enhance management capacity of faculty members • Effective implementation of reforms • Improve planning, development and monitoring
Action Plan	• Depute Faculty members to attend Management Training programmes in reputed training institutions. • Implement Campus Management Software in the institution
Expected activities	• 8 Faculty members to attend Management Training programmes • Purchase of Campus Management Software
Revised IDP Budget	**8 Lakhs**

6. Institutional reforms	
Specific Objectives	• Curriculum reforms • Performance Audit of the institution • Accreditation of eligible programs
Action Plan	• Arrange committee meetings & Cluster level meetings and workshops for curriculum restructuring • Arrange Performance Audit • Arrange workshop for NBA accreditation • Modify ISO Certification
Expected activities	• 10 workshops for curriculum revision • 1 Cluster level meeting for curriculum revision • 1 workshop for NBA accreditation • ISO Certification process
Revised IDP Budget	**44.5 Lakhs**