

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME

INSTITUTIONAL DEVELOPMENT PROPOSAL

(Version 2.0 For Soft Components only)

TEQIP-Phase-II sub component 1.2

[Revised for Rs. 8.0 crores]

MOU on 09.01.2012 at Srikshetra Dharmasthala

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1 INSTITUTIONAL DEVELOPMENT PROPOSAL (IDP)

1.1 Executive summary of the IDP

Sri Dharmasthala Manjunatheshwara College of Engineering and Technology, Dharwad, an institution of good standing, capability and commitment for making noteworthy contribution to quality technical education, an institution steadily rising in its all-round performance due to a spirited set of people and supportive set up, an institution engaged in undergraduate and postgraduate quality engineering education and research, an institution adding dimensions continuously for quality student grooming and welfare and an institution rejuvenated & revitalized through performance and impressions created in **TEQIP Phase- I** has now demonstrated its zeal, preparedness and keenness to increase both width and depth (quantity & quality) in technical education through R&D activities and Post-graduate educational programs.

The institution has earlier submitted proposals worth 17.5 crores of rupees under TEQIP Phase – II and was approved by NPIU/SPFU. However changed scenario of project, reducing its support from 12.5 Cr to 4.0 Cr and further restricting expenditure only on soft components made this institution to revise its IDP (Version 2.0) for only soft components with the following possible planned distribution for the year 2012-13 and 2013-14.

Based on the meeting held at SPFU, Bangalore on 16.03.2015, it was suggested that the TEQIP institutions are likely to get additional funds during the current financial year. The TEQIP institutions were asked to submit the additional requirement of funds for the next two years as an annexure to the earlier revised IDP which now we are naming it as annexure to revised IDP.

ALLOCATION AND YEAR WISE BREAK UP OF PROPOSED ADDITIONAL 8.00 Crore BUDGET UNDER VARIOUS CATEGORY OF EXPENDITURE

(Rs. In Lakhs)

Sl. No.	Category of expenditure (Head of expenditure)	Year-wise split of additional Budget (in lakhs)			
		% of Addl. budget	Total Allocation	Allocation for Year 2015-16	Allocation for Year 2016-17
1	Improvement in teaching, training and learning facilities (Procurement) (Annexure-I)	20	160.0000 (25% for SC/ST &75% for GEN)	80.0000	80.0000
2	Providing Teaching and Research Assistantship for significantly increasing enrolment in existing and new Master's and Doctoral programmes in the Engineering disciplines. (Annexure-II)	20	160.0000 (25% for SC/ST &75% for GEN)	80.0000	80.0000
3	Enhancement of R&D and Institutional consultancy activities. (Annexure-2)	15	120.0000 (25% for SC/ST &75% for GEN)	60.0000	60.0000
4	Faculty and Staff development for improved competence based TNA. (Annexure-III)	15	120.0000 (25% for SC/ST &75% for GEN)	60.0000	60.0000
5	Enhanced interaction with industry. (Annexure-IV)	10	80.0000 (25% for SC/ST &75% for GEN)	40.0000	40.0000
6	Institutional Management Capacity enhancement. (Annexure-V)	5	40.0000 (25% for SC/ST &75% for GEN)	20.0000	20.0000
7	Implementation of institutional academic reforms. (Annexure-VI)	2.5	20.0000 (25% for SC/ST &75% for GEN)	10.0000	10.0000
8	Academic support for weak students. (Annexure-VII)	2.5	20.0000 (25% for SC/ST &75% for GEN)	10.0000	10.0000
9	Incremental Operating Cost. (Annexure-VIII)	10	80.0000 (25% for SC/ST &75% for GEN)	40.0000	40.0000
	TOTAL	100	800.0000 (25% for SC/ST &75% for GEN)	400.0000	400.0000

M.Tech. Programmes are competency building measures to produce value added human resource from the higher education sector. SDMCET in its efforts on intensification of PG educational activity proposed to start and nourish **three M.Tech Programs** during TEQIP Phase- II, subcomponent 1.2 (old version). The institution has invested good measures of time and efforts to evaluate the importance of the choice of the programme from the point of view of **(i) current & futuristic need (ii) Sustainability and (iii) an opportunity to enhance our contribution to well trained and competent human resource for global consumption.** College thus given its commitment and launched M.Tech. in **(i) Computer Science & Engineering (dual stream), (ii) Power Systems and (iii) Industrial automation and Robotics** and is confident of operating the programs successfully.

In line with the equity action plan, all the faculty and staff have been a part of project planning and the activity was spread over several weeks.

Various KPI's and their planned attainments for this project at SDMCET is indicated below.

Sl. No.	Deliverables	Baseline 2011-12	Targets to be achieved
			By project closing
01	Number of students registered for (a) Masters in Engineering Program (b) Doctoral Program in Engineering	66 02	141 (200) 14
02	Revenue from externally funded R&D projects and consultancies in total revenue (Rs. In lacs)	45 L	150 L
03	Number of (a) Research publications in refereed • National journals • International journals (b) Citations (c) Patents obtained / filed (d) Books (e) No. of R&D projects commercialized	07 22 00 00 04 00	50 40 10 04 06 02
04	IRG as % of total recurring expenditure	1.21 %	2.0 %
05	Number of co-authored publication in refereed journals (a) National (b) International	04 18	16 52

06	Student credentials (a) Campus placement rate of <ul style="list-style-type: none"> • UG students • PG students (b) Average salary of placement package for (Rs. In lacs) <ul style="list-style-type: none"> • UG students • PG students 	270 offers out of 294 2 out of 16 3.0 lakhs 3.10 lakhs	75% 75% Market Dependent
07	Number of collaborative programs with industry	04	09
08	Accreditation status	ALL UG programs are Accredited 1 Eligible PG program is accredited.	100% accreditation for UG & PG programs
09	Vacancy position for faculty and staff	6%	Zero vacancy
10	% of regular faculty with Ph.D in engineering disciplines	7 %	25%

1.2 Institutional project implementation arrangements

SDMCET has made all the arrangements to ensure the true implementation of all the activities planned in this IDP to achieve all the measurable objectives set by the TEQIP as per the Project Implementation Plan (PIP). The implementation arrangement includes the various roles in terms of Nodal officers headed by Project Authority i.e. Head of the Institution. It also has established BOG as per UGC norms stated in PIP to give directions to all the activities planned in the IDP. One additional roles titled internal auditor was created for effective project implementation and tracking.

IMPLEMENTATION ARRANGEMENT

Head & Nodal Officer	Name	Phone Number	Mobile Number	Fax Number	Email Address
Head of the institution	Prof. Dr. S.B.Vanakudre	0836-2447465	9480504837	0836-2464638	principal@sdmcet.ac.in
Project Nodal Officers for:					
Coordinator	Dr. Prakash Munnoli	--	9449074231	0836-2447465	prakashsunanda@rediffmail.com
Academic activities	Prof. Clement M. Chelli	0836-225835	9242809240	0836-2447465	cmc12@rediffmail.com
Financial aspects	Prof. Udayshankar D. Hakari	0836-2771084	9481930359	0836-2447465	uday.hakari@gmail.com
Equity Assurance Plan	Prof. G.L. Rajbanshi Nodal Officer – Equity Assurance Plan	0836-2745251	9448275251	0836-2447465	glrajabanshi@gmail.com
Procurement	Prof. Rajshekarappa	--	9972051418	0836-2447465	rajashekarmb@gmail.com
Civil works & Environment Management	Dr. Prakash Munnoli	--	9449074231	0836-2447465	prakashsunanda@rediffmail.com
Internal Auditor : Prof. U.P Kulkarni Contact: 09448915301					

Annexure - I

SDM College of Engineering and Technology, Dharwad

Procurement Plan for Academic Year 2015-2016 & 2015-2016

Sl No.	Requirement of E-Journals and Software's	Department	Budget amount (2014-15)	Budget amount (2015-16)	Total Budget (In Lakhs)
1	<p>The online packages are</p> <ol style="list-style-type: none"> 1. Springer Link (E-Books) 2. Springer Link (E-Journals) 3. Taylor & Francis Online 4. EBSCO – Management 5. PROQUEST 6. EMERALD 7. ASCE 8. ASME 9. Access Engineering 10. ScienceDirect Elsevier 11. Wiley Online Library 12. J-gate Management 13. Jgate Engineering & Technology 14. IET - Digital Library 	ALL	20.0000	20.0000	40.0000
2	<ol style="list-style-type: none"> 1. AutoCAD inventor series 7.0 (AutoCAD 2004, Mechanical Desktop 2004, Mechanical Power Pack 2004 etc). 2. CATIA V5 R16 ED2 3. Solid Edge V19 4. Fluent 5. UG NX4 6. FEMAP Nastran 9.2 7. Altair Hyperworks 7.0 8. LS-DYNA 9. Pro-E Wildfire 3.0 10. CAPS Turn & CAPS Mill 7.1 11. AutoCAD inventor series 7.0 (AutoCAD 2004, Mechanical Desktop 2004, Mechanical Power Pack 2004 etc) 12. Ansys 7.0 13. MSC ADAMS Full Simulation Package 2005 	Mechanical Engineering	20.0000		20.0000

3	Net simulator and Net SIM	Computer Science and Engineering	15.0000	-----	15.0000
4	Aneka.Net Cloud Computing Software Version 3.0, Qualnet,Amazon Web Services, Campus License	Information Science and Engineering	41.0000		41.0000
5	1. Renewal of MATLAB Software 2. Intel VTune Performance Analyzer Extreme Edition 2014 Note: List of software Enclosed	Electronics and Communication Engineering	20.0000		20.0000
6	Upgrading MiPower Software	Electrical and Electronics Engineering	8.0000		8.0000
7	chemical fluid dynamics (CFD)	Chemical Engineering	8.0000		8.0000
8	Up-gradation of Windows -98 Software	Civil Engineering	2.0000		2.0000
9	Hardware – 36 computers/ Softwares related to Subject Domain and Research Oriented.	Mechanical Engineering	10.0000		10.0000
Grand Total			144.0000	20.0000	164.0000

Annexure - II

1. PhD Assistantship

2015-16	Phd full time	$0.1800 \times 10 = 1.8000$	$\times 1$ Scholars =	1.8000
2016-17	Phd full time	$0.1800 \times 10 = 1.8000$	$\times 1$ Scholars =	1.8000
	Others		=	10.0000

2. M Tech Student Assistantship

2015-16	90 Students X 10 Months X 0.0800	=	72.0000
2015-16	90 Students X 10 Months X 0.0800	=	72.0000

Total 157.6000
(R.O to 160.0000)

Annexure - III

3. R&D

Recurring Expenditure of 26 Projects	=	13.0000
Non Recurring Expenditure	=	37.0000
Research Publications (App.Rs.5000*500)	=	25.0000
Organising Conference on R&D Topics	=	15.0000
		(App.150000 *10)
Patenting Research Products	=	30.0000
Total		120.0000

Annexure - IV

4. FSD : Budget requirement for Two Years = 120.0000

Sl. No.	Type of training program	Department	Budget amount (2015-16) in lakh	Budget amount (2016-17) in lakh
1	• National Conference/ Seminar,	Civil Engineering	9.00	9.00
2		Mechanical Engineering	9.00	9.00
3	• International Conference/ Seminar,	Computer Science	9.00	9.00
4		Electrical & Electronics Engg	9.00	9.00
5	• Subject domain Workshop	Information science & Engg.	9.00	9.00
6		Chemical Engg.	6.00	6.00
7	• Pedagogy/ Advance Pedagogy/	Electronics and Comm.Engg.	9.00	9.00
		Any other		
Total			60.00	60.00

Annexure – V

5. Enhanced Interaction With Industry = 80.0000

Sl. No.	Description of the activity	Budget amount (2015-16) in lakh	Budget amount (2016-17) in lakh
1	Inviting industry experts for delivering lecturers	40.00	40.00
2	Industrial visits		
3	Industry sponsored projects		
4	Enhanced industry relations		
5	Faculty training in industry		
6	Industrial problem solving		
7	Any other		
Total		40.00	40.00