JSS MAHAVIDYAPEETHA

SRI JAYACHAMARAJENDRA COLLEGE OF ENGINEERING

JSS TECHNICAL INSTITUTIONS CAMPUS MANASAGANGOTHRI P.O., MYSURU – 570 006, KARNATAKA



TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME (TEQIP) PHASE-II

SUPPLEMENTARY

INSTITUTIONAL DEVELOPMENT PLAN

SUB-COMPONENT 1.2 SCALING-UP POST GRADUATE EDUCATION AND DEMAND-DRIVEN R&D AND INNOVATION

Through
State Project Facilitating Unit
Government of Karnataka
Bengaluru

NATIONAL PROJECT IMPLEMENTATION UNIT

EDCIL HOUSE, PLOT NO. 18 A, SECTOR 16 A, GAUTAM BUDH NAGAR, NOIDA – 201 301 (UTTAR PRADESH)

SEPTEMBER 2015

TABLE OF CONTENTS

Section	Contents
No.	
1	INSTITUTIONAL BASIC INFORMATION
2	INSTITUTIONAL IDENTITY
3	ACADEMIC INFORMATION
4	EXECUTIVE SUMMARY
5	ACHIEVEMENTS AT A GLANCE
6	JUSTIFICATION FOR UTILIZING REMAINING FUNDS
7	ACTION PLAN FOR PROCUREMENT
8	ACTION PLAN FOR TEACHING ASSISTANTSHIP
9	ACTION PLAN FOR R & D
10	ACTION PLAN FOR INDUSTRY INSTITUTE INTERACTION
11	ACTION PLAN FOR FACULTY & STAFF DEVELOPMENT
12	ACTION PLAN FOR MANAGEMENT CAPACITY BUILDING
13	ACTION PLAN FOR ACADEMIC REFORMS
14	ACTION PLAN FOR WEAK STUDENTS
15	INSTITUTIONAL PROJECT BUDGET



1. INSTITUTIONAL BASIC INFORMATION

Sri Jayachamarajendra College of Engineering (SJCE) started in the year 1963 under the aegis of JSS Mahavidyapeetha and founded by Jagadguru Dr. Shivarathri Rajendra Mahaswamigalu, the 23rd pontiff of Sri Suttur Mutt. It is managed by the JSS Mahavidyapeetha headed now by His Holiness Jagadguru Sri Shivarathri Deshikendra Maha Swamiji, the 24th pontiff of this historic tradition. JSS Mahavidyapeetha, Mysore is a registered society running educational institutions in Karnataka, Tamilnadu and Uttar Pradesh with more than 300 institutions including Science, Management, Arts and Commerce Colleges, Medical College, Pharmacy Colleges, Dental College, Nursing Colleges, Law College, Colleges of Education, Engineering Colleges, several Polytechnics, Industrial Training Centres, High Schools, Primary Schools and Teachers Training Institutions, Institutions in its fold go beyond education to span crèches, old-age homes, cooperatives, rural development, orphanages, vocational training, publications and even cultural revival and protection of our heritage.

Sri Jayachamarajendra College of Engineering is situated in the western part of Mysore city in a sprawling campus of 47.3 hectare extensive and elevated stretch of land to the west of University of Mysore campus of Manasagangothri, less than 6 km from the central bus stand and railway station. As the institution plans towards national and international presence, SJCE promises to offer more and more exciting opportunities for students, faculty members and staff. SJCE features nationally recognized faculty who teach 28 academic programs (including MCA and MBA) at undergraduate and post graduate levels in emerging disciplines, participate in vital scientific research, using modern facilities and technologies with a focus and preparing technological leaders for the future. Doctoral programs are offered in all engineering and science disciplines. The institutions reputation for academic excellence in professionally oriented programmes attracts students from across the country and world. The faculty members of SJCE are noted for their distinguished background, research and the personal attention they offer to students.

The reputation of institution for academic excellence in professionally oriented programs attracts students from all over the country and is one of the most sought after institutions by the aspirants of engineering courses.

SJCE is an autonomous institute approved by University Grants Commission, Government of India, affiliated to Visvesvaraya Technological University and accredited by National Board of Accreditation.

2. INSTITUTIONAL IDENTITY

Name of the Institution	Sri Jayachamarajendra College of Engineering Mysore - 570 006, Karnataka
Is the institution AICTE approved?	Yes
Furnish AICTE Approval No.	F No. 770-53-247(E)/RD/94, Dt: 02.05.2008
Type of Institution	Government AidedAutonomous
Status of Institution	Autonomous Institute as declared by UGC and Visvesvaraya Technological University



Names of Head of Institution and Project Nodal Officers:

Head and Nodal officers	Name	Phone Numbers	Mobile Numbers	Fax Numbers	E-Mail Address
Principal	Dr. Syed Shakeeb Ur Rahman	0821- 2548285 – 89	+919448071986	0821- 2548290	ssr_sjce@yahoo.co.in
TEQIP Coordinator	Dr. S.K.Prasad	0821- 2548250	+919449621994	0821- 2548250	prasad_s_k@hotmail.com
Project Nodal Officers:					
Academic Activities	Dr. B.M. Sadashiva Murthy	0821- 2548285 – 89	+919900504023	0821-	bmsada@yahoo.com
	Dr. B. S. Mahananda	0821- 2548285 – 89	+919448335403	2548290	bsmahanand@sjce.ac.in
Procurement	Dr. B. Manoj Kumar	0821- 2548285 – 89	+919886544263	0821- 2548290	manoj_kumar_b@hotmail.com
Financial Aspects	Sri K.M Anilkumar	0821-2548293	+919945633380	0821- 2548290	Anilkm07@gmail.com
Equity Assurance Plan	Dr. N. Haraprasad	0821-	+919845486700	0821-	hara.aspirer70@gmail.com
Implementation	Dr. B. S. Harish	2548285 – 89	+919886779078	2548290	harish.somashekar@gmail.com

3. ACADEMIC INFORMATION

SJCE offers 12 under graduate programmes, 14 M.Tech programmes, an MBA programme and an MCA programme in addition to research leading to M.Sc (Engg.) and Ph.D in all basic branches of engineering. The list of these programs is presented in the following tables along with the details of year of starting and sanctioned annual intake. SJCE is a pioneer in starting new, demand driven, industry oriented programmes since its inception. Bachelor degrees in Electronics and Communication Engineering started in 1967, Instrumentation and Technology started in 1977, Polymer Science and Technology started in 1988 and Construction Technology and Management started in 2004.



Under Graduate Engineering Programs offered during Academic year 2014-15

Sl. No	Title of the Programme	Level	Duration (Years)	Year of Starting	AICTE Sanctioned Annual Intake
1.	Biotechnology			2002-03	30
2.	Civil Engineering			1963-64	60
3.	Computer Science & Engineering			1982-83	120
4.	Construction Technology & Management			2004-05	60
5.	Electrical & Electronics Engineering				1963-64
6.	Electronics & Communication Engineering	Under Graduate	4 Years	1971-72	120
7.	Environmental Engineering	B.E	(8 Sem.)	1987-88	60
8.	Industrial & Production Engineering			1980-81	60
9.	Information Science & Engineering			2000-01	60
10.	Instrumentation Technology			1978-79	60
11.	Mechanical Engineering			1963-64	60
12.	Polymer Science & Technology			1987-88	40



Post Graduate Engineering programs offered in Academic year 2014-15

Sl. No	Title of the Programme	Level	Duration (Years)	Year of Starting	AICTE Sanctioned Annual Intake
1.	M. Tech. in Industrial Electronics			1983-84	18
2.	M. Tech. in Industrial Structures			1984-85	18
3.	M. Tech. in Environmental Engineering			1985-86	18
4.	M. Tech. in Maintenance Engineering			1987-88	18
5.	M. Tech. in Computer Engineering			1989-90	18
6.	M. Tech. in Bio Medical Instrumentation			1992-93	18
7.	M. Tech. in Software Engineering	Post	2 Years	1995-96	18
8.	M. Tech. in Master of Engineering Management	Graduate (4 Sem.)		1986-87	18
9.	M. Tech. in Networking & Internet Engineering			2002-03	25
10.	M. Tech. in Energy Systems and Management			2002-03	18
11.	M. Tech. in Polymer Science & Technology			2005-06	18
12.	M. Tech. in Health Science & Water Engineering			2005-06	18
13.	M. Tech. in Biotechnology			2011-12	18
14.	M. Tech. in Automotive Electronics			2013-14	24
15.	Research Programme leading to Ph. D.	Research Program 3 Years		1980-81	-
16.	Research Programme leading to MSc. (Engg.)	(Ph.D / M.Sc Engg)	2 Years	1980-81	-

Note: MCA and MBA details are not provided.



4. EXECUTIVE SUMMARY

- a) SJCE has successfully implemented TEQIP II till date and expenditures are incurred under all heads.
- b) Almost all the project targets have been achieved till date.

SJCE has progressed in improving the quality and quantity of Masters & Doctoral students in Engineering, Improving collaboration with industry, Quantitative increase & qualitative improvement in research by faculty individually, jointly & collaboratively, Developing research interest among undergraduate students, Improving the academic performance of weak students, enhancing transition rate, improving employability of students through Finishing Schools and Improving institutional governance.

- c) The project targets have increased so far by,
 - 2 new M.Tech programs initiated in project period
 - 30 % increase in M. Tech enrolment and output
 - 250 % increase in PhD enrolment & 50% increase in output
 - 100 % increase in the number of research publications by Faculty
 - 100% increase in MoUs with industry; 200% increase in MoUs with other institutions
 - 2% increase in IRG
 - Excellent Transition rate at all levels both in UG and PG courses
 - Training for Faculty and staff in domain area, pedagogy, research area and soft skills
 - Undergraduate placement rate increased from 80% to 86%
 - Climate for innovation & research created in the institute
 - Established Automotive Electronics Laboratory and Center for Vehicle Safety, Urban Eco System and Transportation Engineering
 - Upgraded PG laboratories of all departments
- d) Though the institution has performed exceptionally well in utilizing TEQIP II funding so far, there is a great demand from the faculty members and students for more funds to reach their goals. Most departments are focusing on establishing and developing PG laboratories involving the state of the art equipment and learning resources. R&D activities in the institution have taken considerable upsurge and requirement for fund has increased. Further, most of the faculty members are involved in online and innovative teaching methods (NPTEL, EDUSAT etc). Hence focus will be on establishing lecture capturing facility. Institution has vision towards green campus and a sophisticated sewage treatment plant is proposed by the faculty members of environmental engineering. Considering the above requirements, and with focus on overall development to carry out all activities under TEQIP II, proposal for additional fund request under TEQIP II is prepared.



5. ACHIEVEMENTS AT A GLANCE

The following are the achievements of SJCE so far under TEQIP – II.

- Assistantship to 203 M.Tech students
- Assistantship to 10 Full time Ph.D students
- 92 faculty members participated in conferences in India
- 9 faculty members have utilized funds for travel abroad from March 2013 to January 2014
- 164 faculty members have undergone training outside the campus
- 180 faculty members have undergone training in-house so far, training for remaining planned
- Additional training provided in areas like
 - Quality in Research
 - Innovative methods in Teaching techniques
 - Financial management
 - Human relations at work
- 3 workshops organized exclusively for Non-teaching technical staff
 - Servicing and maintenance of UPSs and air conditioners
 - Servicing & calibration of advanced electronic instruments
 - Testing and servicing of Electronics lab equipments
 - 21 staff underwent training (outside the campus) on various aspects
- 75 non-teaching staff are trained in the topics such as:
 - Functional English
 - Soft skills
 - Personality Development
 - Technical skills
- 25 senior faculty members underwent MDP training at IIMs.
- MoUs with premier institutes during project period like
 - IIT, Hyderabad 2014
 - Arizona State University, Tempe, USA 2013
 - North Carolina A&T State University, USA 2011
- 459 Journal publications in the project period
- 618 publications in proceedings of conferences
- 45 Ph.Ds awarded during project period
- 265 scholars pursuing Ph.D
- 10 UG and 8 PG projects across the college funded under Innovative Research Project scheme.
- Students trained in personality development, soft skills and aptitude during Campus recruitment training (Both UG & PG students are benefitted)
- Students are funded for Industry visits (e.g. Metro construction site, visit to water / waste treatment plant, industry fare etc.)
- Workshops in association with personnel from industry & research organizations for curricula development funded
- Research labs set up by industries BOSCH, Phillips, Schneider, PACE etc.
- 12 Adjunct faculty from industry funded
- 12 MoUs with industries
- 9 Finishing Schools conducted
- Participation in PACE and honoured with international prizes every year
- Placement records are excellent with more than 750 students placed and 66 companies participated.



- More UG and PG students participate in internships
- Management capacity building workshop on 'Understanding Self & Interpersonnel relationship' for 3 days in Sept 2014involved all HoDs& policy makers
- Participation in MDPs organised by IIMs by HoDs& policy makers
- Societal Needs Ten day Alcohol De-addiction camps 2 no. at Suttur in the divine presence of H HSwamiji, JSSMVP, Mysore
- Counseling weak students: Professional counselors support from JSS Hospital introduced
- Counseling workshops exclusively for Women faculty to facilitate girl students
- Stress Management & Wellness for Women workshop for lady employees
- Counseling workshops for all faculty and students
- A student counseling center is proposed with dedicated professional counsellors
- Student mentoring
- Workshop on 'Identifying Weak Students' conducted
- Weak students are identified through diagnostic tests at the start of 1st
 Semester & Motivational course is offered
- Weak students are also identified based on results of examination
- Supplementary semester is offered
- Centralized sewage treatment plant approved for the campus at an estimated cost of Rs. 60 lakhs
- Energy Efficient Campus
 - Solar LED street lights
 - Solar water heaters
 - M. Tech in Energy System & Management focuses on energy efficiency and alternate energy sources
 - Green Buildings (proposed)
- Excellent transition rate at 98% in First Year
- Good Practices
 - Research funding to faculty by management as seed money for conducting research in new areas
 - 6th Pay commission has been implemented
 - Qualification up-gradation facility through QIP as well as management initiatives
 - Sabbatical facility
 - Training any-where in India
 - 100% assistance for paper presentation abroad
 - Assistance to establish collaboration with researchers in India & abroad
 - Continuous evaluation in laboratory courses
 - Typical credit pattern 4:0:1, 4:1:0, 3:0:1, 3:1:0
 - 5 events for Continuous Internal Evaluation
 - Inter-disciplinary electives
 - Add on courses offered during supplementary semesterEx: Robotics, Industrial automation, Image processing, IPR etc.
 - Inter-disciplinary projects from 4th semester onwards
 - Staff appraisal by students at the middle of every semester
 - Industry designed electives



- Value added soft skills courses
- Innovation course for the first year students, which is to be extended to higher semesters
- Industry based projects- GM, HP, IBM, Bosch-Rexroth, Phillips etc.
- English language course in association with Cambridge University AKASH for Education in collaboration with IIT Bombay through satellite communication
- Active participation in Industry initiatives such as Infosys Campus Connect programme, TCS Faculty development programme&Wipro Mission 10X programme
- Industry labs set-up

Table 1 provides the summary of TEQIP II activities at SJCE. It is interesting to note that over 5000 people including faculty members, staff and students of SJCE and many from outside are benefitted from the program.

Table 1: Summary of TEQIP Activities since 2012

SI	Description	2012 (Jan to Dec)		2013 (Jan to Dec)		2014 (Jan to Dec)		2015 (Jan to Dec)		Total			
No	Description	Event	Partici	Eve	Partici	Eve	Partici	Event	Partici	Event	Particip		
		S	pants	nts	pants	nts	pants	S	pants	S	ants		
1	International Conferences	1	-	3	240	1	120	-	-	4	360		
2	National Conferences	-	-	01	60	02	62	-	-	03	122		
3	Workshops / Symposia	01	85	09	480	24	2300	03	250	33	3115		
4	Finishing Schools	-	-	02	90	07	360	-	-	09	450		
5	Research Talks / Special Lectures	-	-	06	400	16	950	01	60	23	1410		
6	Management Capacity	-	-	-	-	1	40	-	-	01	40		
7	Training Staff (outside)	-			17		03	0	1	21	21		
8	Training Faculty (Outside)	-		66		93		05		164	164		
9	Conferences attended	07		07 49		33		03		03		92	92
10	Travel abroad	-	-	06 03		-		09	09				
			-	Γotal						359	5783		

Table 2 provides the summary of proposed expenditure from the additional funds requested. It is proposed to utilize the funds under different heads as identified in PIP. The focus will be on establishing/developing state of the art PG laboratories, increasing the assistantships to M.Tech and Ph.D. students, developing R&D activities further, enhancing the industry institute interactions, organizing more number of workshops and national/international conferences, encouraging faculty to participate in conference in India and abroad, conducting finishing schools to students for improving their employability and learning and encouraging weak students to excel.



Table 2: Summary of proposal for additional fund

Sl. No	Name of Head	Additional funds requested (in Rs. Lakh)
1	Procurement	225.00
2	Teaching Assistantship	100.00
3	R & D	25.00
4	FSDP	50.00
5	I-I-I	25.00
6	Institutional Management	10.00
7	Institutional Academic Reforms	5.00
8	Weak students	10.00
9	IOC	50.00
	Total	500.00

Further, Table 3 provides baseline in 2009 -10, targets achieved at present and the proposed targets with additional funds. It is interesting to note that most of the proposed targets are surpassed as on today. The only deficiencies at present are; Accreditation, for which application has been submitted, but, the evaluation team has not yet visited; and Filling up the vacancies, for which Government of Karnataka has not yet filled backlog vacancies.

Table 3: Targets against deliverables

Sl.		Baseline	Achievement of Targets				
No	Deliverables	(2009-10)	Present 2014-15	Proposed Targets			
1	Transition Rate of Students from I year to II year in UGPrograms	95%	96%	97%			
2	Number of students registered for Masters Program in Engineering	190	254	265			
3	Number of students registered for Doctoral Program in Engineering	95	265	280			
4	Revenue from externally funded R&D projects and consultancies in total revenue (Rs. in lakhs)	123	158	170			
5	No. of Research Publications in refereed National Journals/year	07	30	30			
6	No. of Research Publications in refereed International Journals/year	76	164	175			
7	No. of citations	1500	2100	2500			
8	No. of patents obtained/filed	0	01	04			



CI		Baseline	Achievement	of Targets
Sl. No	Deliverables	(2009-10)	Present 2014-15	Proposed Targets
9	No. of books	10	16	20
10	No. of R&D Projects commercialized	0	01	02
11	No. of co-authored publications in national journals	05	30	30
12	No. of co-authored publications in International journals	70	160	170
13	Campus Placement Rate of UG students	79.6	85.6	90
14	Campus Placement Rate of PG students	12	35.3	40
15	Average Salary of Placement Package – UG	4.12	6.00	7.00
16	Average Salary of Placement Package – PG	3.25	5.25	7.00
17	No. of collaborative programs with industry	8	14	16
18	Accreditation Status – UGPs	91.6	83%	100%
19	Accreditation Status – PGPs	66.7	33%	100%
20	Vacancy Position of Faculty & Staff	32 %	10%	00%
21	Number of regular faculty with PhD in engineering disciplines	20.9 %	36%	45%

6. JUSTIFICATION FOR ADDITIONAL FUNDS

The institution has successfully implemented TEQIP II so far and has shown all round progress in academic activities, good governance, interaction with industry and R & D.

SJCE has been a very popular college both in terms of ranking of students admitted and placement achieved at the end of their studies. It has excelled both at UG and PG levels. Almost no seats are vacant in the institution and the seats are filled rapidly in the beginning. Excellent rapport has been established with industry and many industries have established their research labs (E.g. The BOSCH Industrial Automation Laboratory, The PHILIPS Electronics Laboratory, and GENERAL MOTORS PACE Program).

SJCE's faculty composition with 110 Ph.Ds (43% of total faculty) in total of which 92 Ph.Ds in engineering (36% of faculty) and 129 Masters Degree Holders (57% of total faculty) in Engineering/Basic Sciences and Technology has enhanced the scope of scaling up PG education, Innovation and research.

SJCE has formulated its development plan and vision for 2020 through rigorous SWOT analysis. The college has implemented Student centric Outcome based



teaching and learning process, R&D culture, interaction with industry, FSDP, Management capacity building, institutional reforms and handling weak students and equity assurance plan in addition to catering to societal needs.

The management of SJCE, JSS Mahavidyapeetha which was supportive to TEQIP I, is fully supportive of the institute's TEQIP II activities.

All these have motivated the faculty and management to take the institution to greater heights through TEQIP II and TEQIP III later.

SJCE is committed to properly utilize the additional funds under TEQIP II.

7. ACTION PLAN FOR PROCUREMENT

Procurement activity has been completed at SJCE with the present funding. New proposals from different departments for enhancing equipment and learning resource are invited and Table 4 provides the summary of additional procurement. Table 5 gives the cost estimate.

Table 4: Action Plan for Procurement

Sl.	Description of Action Plan		Time Frame for Implementation (Months)							
No	Description of Action I lan	0-2	2 - 4	4 - 6	8 - 9	8 - 10	10 - 12			
1.	Library i.e. books, e-books, journals, e-journals course specific software's									
2.	Modernizing Classrooms									
3.	Procurement of equipment for upgrading existing PG Labs									
4.	Procurement of learning resource for upgrading existing PG Labs									
5.	Procurement of equipment for new PG Labs									
6.	Procurement of learning resource for new PG Labs									



Table 5: Cost estimate for procurement

Sl. No	Equipment/Learning Resource (Department Wise)	Total Cost lakh Rs.
1.	Biotechnology	20.00
2.	Civil Engineering	21.00
3.	Computer Science & Engineering	5.00
4.	Electrical & Electronics Engineering	20.00
5.	Electronics & Communication Engineering	13.00
6.	Environmental Engineering	17.00
7.	Information Science & Engineering	15.00
8.	Instrumentation Technology	13.00
9.	Mechanical Engineering	15.00
10.	Polymer Science & Technology	15.00
11.	Library	30.00
12.	Institution	41.00
	Total	225.00



8. ACTION PLAN FOR TEACHING ASSISTANTSHIP

So far 203 M.Tech students and 10 Ph.D students are benefitted from Teaching Assistantship. The output has increased in terms of publications by more students. The quality of students entering the course has definitely improved. There is a need for providing assistantship to the master students and atleast 10 more Ph.D. students. Table 6 provides the action plan for Teaching Assistantship and Table 7 gives the cost estimate for the same.

Table 6: Action Plan for Teaching Assistantship

Sl. No	Description of Action Plan		Time Frame for Implementation (Months)						
		0-2	2 - 4	9-4	8 - 9	8 - 10	10 - 12		
1.	Masters students enrolled with TEQIP teaching assistantship								
2.	PhD Students enrolled with TEQIP research assistantship								

Table 7: Cost estimate for Teaching Assistantship

Sl. No	Description	Quantity	Unit Cost Rs.	Total Cost lakh Rs.
1.	Expenditure on Masters students enrolled with TEQIP teaching assistantship	12 months for 100 students	8000 / month	80.00
2.	Expenditure on PhD Students enrolled with TEQIP research assistantship	12 months for 10 students	16000 / month	19.20
	Total in Lakh Rs.			100.00



9. ACTION PLAN FOR R & D

Research and Development is given considerable importance at SJCE. The quality and quantity of publications has enormously increased. The registrations to Ph.D and number of doctoral outputs and full time research scholars have also increased. Table 8 provides the action plan for Research & Development and Table 9 gives the cost requirements for the same.

Table 8: Action Plan for R & D

Sl.	Sl. No Description of Action Plan		Imp		enta	e for ation s)	
No		0-2	2 - 4	4 - 6	8 - 9	8 - 10	10 - 12
1.	Research publications in engineering in referred journals						
2.	Organizing Workshop						
3.	Innovative Research Project UG/PG						
4.	Encouragement for external research funding						
5.	Patenting & IPR						
6.	Research collaboration with premier institutes in India & abroad						

Table 9: Cost estimate for R & D

Sl. No	Description	Quantity	Unit Cost lakh Rs.	Total Cost lakh Rs.
1.	Expenditure on research publications in engineering in referred journals	10	0.10	1.0
2.	Expenditure on organizing Workshop	04	1.50	6.0
3.	Expenditure on Innovative Research Project UG/PG	10	0.2	2.0
4.	Seed money and Expenditure on Encouragement for external research funding	04	1.0	4.0
5.	Expenditure on Patenting & IPR	04	2.0	8.0
6.	Expenditure on Research collaboration with premier institutes in India & abroad	04	1.0	4.0
	Total in Lakh Rs.			25.00



10. ACTION PLAN FOR INDUSTRY INSTITUTE INTERACTION

The institution has established excellent interaction with industry. Many top industries such as Schneider Electric Co., Analog Devices, Bosch – Rexroth, Nokia, Philips, consortium of PACE have all come forward to associate with SJCE and establish laboratories, provide internship and technical training. Table 10 provides the action plan for interaction with industry and Table 11 gives the cost estimate for the same.

Table 10: Action Plan for I - I - I

Sl.	Description of Action Plan		Time Frame for Implementation (Months)						
No	Academic Programs i.e. M Tech/Ph D etc. with industry	0-2	2 – 4	4 - 6	8 - 9	8 - 10	10 - 12		
1.	Academic Programs i.e. M.Tech/Ph.D etc. with industry								
2.	Short term programs with industry								
3.	Academic networking with other institutions								
4.	Activities to enhance Campus placements (UG & PG)								
5.	UG/PG Students attending industrial internship								
6.	Industrial visit by students								
7.	Organizing subject area Workshop								
8.	Organizing Finishing School								
9.	Adjunct Industry Faculty	_							
10.	Establishing industry sponsored laboratory								

Table 11: Cost estimate for I - I - I

Sl. No	Description	Quantity	Unit Cost lakh Rs.	Total Cost lakh Rs.
1.	Expenditure on academic Programs i.e. M.Tech/PhD etc. with industry	5	0.4	2.0
2.	Expenditure on short term programs with industry	2	1.0	2.0
3.	Expenditure on academic networking with other institutions	2	1.0	4.0
4.	Expenditure incurred on Campus placements (UG & PG)	2	2.0	4.0
5.	Expenditure on UG Students attending industrial internship	4	0.25	1.0
6.	Expenditure on Industrial visit by students	4	0.25	1.0
7.	Expenditure on organizing subject area Workshop	2	0.50	1.0
8.	Expenditure on organizing Finishing School	4	1.50	6.00
9.	Expenditure on Adjunct Industry Faculty	2	1.0 / head	2.0
10.	Establishing industry sponsored laboratory	4	0.5	2.0
	Total in Lakh Rs.			25.00



11. ACTION PLAN FOR FACULTY & STAFF DEVELOPMENT

Almost all faculty members and staff members are benefitted from Faculty and Staff Development programs. The focus of the institution is to train all during the project period. It is proposed to organise basic pedagogical training globally to all faculty members at institution level and allow departments to undergo focused advanced pedagogical training at department level. Table 12 provides the action plan for faculty and staff development programs and Table 13 gives the cost requirements for the same.

Table 12: Action Plan for FSDP

Sl. No Descriptio	Description of Action Plan		Time Frame for Implementation (Months)						
	Description of Action 1 lan	0-2	2 - 4	9 - 4	8 - 9	8 - 10	10 - 12		
1.	Faculty members attending training in subject domain								
2.	Faculty members attending basic pedagogical training								
3.	Faculty members attending advanced pedagogical training								
4.	Organizing subject area training Programs/ Workshops/ seminars / conferences / continuing education programs.								
5.	Participation by faculty in Seminar/ Conferences/ workshop etc.								
6.	Organising pedagogical training in-house								
7.	Staff development								
8.	Foreign travel for participation in conference / training								

Table 13: Cost estimate for FSDP

Sl. No	Description	Quantity	Unit Cost lakh Rs.	Total Cost lakh Rs.
1.	Expenditure on faculty members attending training in subject domain	25	0.40	10.00
2.	Expenditure on faculty members attending basic pedagogical training	2 batches	2.0	4.0
3.	Expenditure on faculty members attending advance pedagogical training	6 batches	1.0	6.0
4.	Expenditure on organizing subject area training Programs/ Workshops/ seminars / conferences / continuing education programs.	9	1.0	9.0
5.	Expenditure on participation by faculty in Seminar/ Conferences/ workshop etc.	25	0.4	10.0
6.	Expenditure on staff development	6	0.5	3.0
7.	Enrollment of faculty with MTech for PhD degree	3	1.0	3.0
8.	Expenditure on foreign travel for participation in conference / training	3	1.6	5
	Total in Lakh Rs.			50.00



12. ACTION PLAN FOR MANAGEMENT CAPACITY BUILDING

It is planned to provide training on good governance, management capacity building, stress management etc. to HoDs, senior professors involved in administration and top administrative personnel. Further, it is planned all policy makers and HoDs to the Management development programs organised at IIMs. So far 25 of our senior professors are benefitted from it. Table 14 provides the action plan for Management Capacity Building and Table 15 gives the cost estimates for the same.

Table 14: Action Plan for Management Capacity Building

Sl.	SI. No Description of Action Plan		Imp	e Fi lem (Mo	enta	ation	
No	Description of Action 1 iun	0-2	2 – 4	4 - 6	8 - 9	8 - 10	10 - 12
1.	Sr. Officials & Sr. faculty attending management development training						
2.	HoDs and senior officials attending MDPs at IIMs						
3.	Members of Governing Council, Academic Council, Board of Governance attending leadership and management capacity enhancement programs						

Table 15: Cost estimate for Management Capacity Building

Sl. No	Description	Quantity	Unit Cost lakh Rs.	Total Cost lakh Rs.		
1.	Expenditure on Sr. Officials & Sr. faculty attended management development training	2	2.0	4.0		
2.	Expenditure on HoDs and senior officials attending MDPs at IIMs	10	0.3	3.0		
3.	Members of Governing Council, Academic Council, Board of Governance attending leadership and management capacity enhancement programs	6	0.5	3.0		
	Total in Lakh Rs.					



13. ACTION PLAN FOR ACADEMIC REFORMS

Considerable amount has been utilized for fee towards NBA accreditation of several programs. Hence some amount is reserved for expenditure towards curricula revision and enhancing the autonomous status of the institution. Table 16 provides the action plan for Academic reforms and Table 17 gives the cost requirements for the same.

Table 16: Action Plan for Academic Reforms

SI. Description of Action Plan	Description of Action Plan		Imp	e Fi lem Mo	enta	atio	
No	Description of Action Figure	0-2	4 - 6	6 - 8	8 - 10	10 - 12	
1.	Expenditure incurred on Autonomous Institution status concurred by UGC						
2.	Expenditure on Curricula revision/restructuring						

Table 17: Cost estimate for Academic Reforms

Sl. No	Description	Quantity	Unit Cost lakh Rs.	Total Cost lakh Rs.
1.	Expenditure incurred on Autonomous Institution status concurred by UGC	2	1.50	3.0
2.	Expenditure on Curricula revision/restructuring	5	0.4	2.0
	Total in Lakh Rs.			5.0



14. ACTION PLAN FOR WEAK STUDENTS

Motivating weak students and equity assurance plan have been prioritized in this funding. SJCE always works for the weaker section and has not only motivated but also seen that weaker group have been very successful. In this connection supplementary semester offered during summer term provides sufficient opportunity to slow learners to compete with normal students. Hence transition rate at SJCE is lowest (better than 95%). It is also planned to use the services of JSS hospital and provide counselling to all needy students, faculty and staff. Table 18 provides the action plan for weak students and Table 19 gives the cost estimate for the same.

Table 18: Action Plan for Weak Students

Sl.	D 1 11 0 4 11 DI		Imp	ime Frame for nplementation (Months)					
No	Description of Action Figure	0-2	1	4 - 6	6 - 8	8 - 10	10 - 12		
1.	Diagnostic tests								
2.	Student counseling								
3.	Awareness workshop								
4.	Motivational talks								

Table 19: Cost estimate for Weak Students

Sl. No	Description	Quantity	Unit Cost lakh Rs.	Total Cost lakh Rs.
1.	Expenditure on diagnostic tests	2	0.5	1.0
2.	Expenditure on student counseling	8	0.75	6.0
3.	Expenditure on awareness workshops	3	0.5	1.5
4.	Expenditure on motivational talks	6	0.25	1.5
Total in Lakh Rs.				10.00



15. INSTITUTIONAL PROJECT BUDGET FOR ADDITIONAL FUND

SJCE has been thoroughly benefitted from TEQIP grant in its all-round development. The faculty members are happy that they are able to procure equipment and LR for their research, good PG students join with the desire of getting TEQIP assistantships, many full time doctoral students have registered, interaction with industry has improved, research culture has entered and institution is moving towards good governance, catering societal needs and improving slow learners and has a strong equity assurance process.