



B.M.S.COLLEGE OF ENGINEERING, BANGALORE-560 019
TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME, PHASE-II

TWENTY FIRST MEETING | 05.04.2017 | SUB-COMMITTEE OF BOG

MINUTES



B.M.S.COLLEGE OF ENGINEERING, BANGALORE-560 019
TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME. PHASE-II
TWENTY FIRST MEETING | 05.04.2017 | SUB-COMMITTEE OF BOG | MINUTES

MEMBERS PRESENT:

1. Prof. D. Thukaram, Chairman
2. Sri. M. Krishnaswamy, Member
3. Dr. K. Mallikharjuna Babu, Principal & Convenor

NODAL OFFICERS/ CO-ORDINATORS PRESENT:

1. Dr. B.V.Ravishankar, TEQIP Co-ordinator-I
2. Dr.L.Ravi Kumar, TEQIP Co-ordinator-II
3. Dr.K.Suresh Ramaswamy Reddy, Nodal Officer – Financial Aspects
4. Dr. S. Gowrishankar, Nodal Officer – Academic Activities
5. Dr. H.S. Guruprasad, Nodal Officer – Academic Activities
6. Dr. M.S. Dharmaprakash, Nodal Officer – Procurement
7. Dr. K. Guruprasad, Nodal Officer – Equity Assurance Plan
8. Dr.C.Lakshiminarayan, Nodal Officer – Equity Assurance Plan
9. Dr.M.Ramachandra, Coordinator - COE
10. Dr. S. Srinivas, Principal Investigator, CoE
11. Dr. Chandashree Das, Principal Investigator, CoE
12. Dr. M.V. Murugendrappa, Principal Investigator, CoE

The TEQIP Co-ordinator-I extended a cordial welcome to the members for the meeting.

1. Minutes of 20TH meeting of BOG sub-committee by the BOG

The minutes of twentieth meeting of the BOG Sub-Committee held on 06.03.17 were read and recorded. [Annexure-1]

2. Final installment of TEQIP II grants :

The committee noted that the final instalment of TEQIP II grants of Rs.250 Lakhs have been received as detailed below:

S.No.	Date of receipt	Amount in Lakhs
1	20.03.2017	18.75
2	23.03.2017	193.75
3	24.03.2017	37.50
Total		250.00



B.M.S.COLLEGE OF ENGINEERING, BANGALORE-560 019
TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME, PHASE-II
TWENTY FIRST MEETING | 05.04.2017 | SUB-COMMITTEE OF BOG | MINUTES

3. Provision to enhancement of procurement limit by 10%

The committee noted that NPIU vide its email dated 24.03.2017 and SPFU vide its email dated 30.03.2017 have communicated that an additional 10% on project life allocation can be enhanced for the head of procurement. Further the committee noted that new procurement could not be initiated as the minimum time line to get quotations cannot be complied with. [Annexure 2]

4. Project closure and timeline of 31st March 2017

The committee noted that NPIU has mandated vide their emails dated 22.03.2017 that TEQIP-II is being closed with timeline of 31st March 2017 and all the activities shall be completed on/before 31.03.2017. Also the committee noted that no new activities are permitted after 31.03.2017 under the project but payments could be made during the grace period from 1st April 2017 to 31st July 2017 for the activities completed on/before 31.03.2017. The TEQIP Coordinator-I informed the members that all the activities have been completed before 31.03.2017 as stipulated by NPIU/SPFU. [Annexure 3]

5. Ratification of Re-appropriation of funds

The sub-committee of BOG noted the following developments:

- a. 10% additional procurement on life allocation permitted vide NPIU email dated 24.03.2017 and SPFU email dated 30.03.2017. [Annexure 2]
- b. Confirmation to book the Staff maintenance in TEQIP-II/COE Cell for the grace period of April 2017 to July 2017 (four months) vide SPFU email dated 22.03.2017. [Annexure 3]
- c. Procurement completion to the tune of Rs.786.12 lakhs against the permitted allocation of Rs.883.28 lakhs under TEQIP II 1.2 and Rs.310.21 Lakhs against the permitted allocation of Rs.302.50 lakhs under COE 1.2.1.
- d. TEQIP-II 1.2 funds including the interest accrued as on 31.03.2017 being around Rs. 1773.06 Lakhs [interest earned Rs.23.06 Lakhs] and COE funds including the interest accrued as on 31.03.2017 being around Rs.528.93 Lakhs [interest earned Rs.28.93 Lakhs]

- e. The committee also accorded approval for the transfer of a portion of interest earned in COE 1.2.1 grants to TEQIP 1.2 account to meet the proposed expenditure under TEQIP 1.2 as per NPIU guidelines.



B.M.S.COLLEGE OF ENGINEERING, BANGALORE-560 019
TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME. PHASE-II
TWENTY FIRST MEETING | 05.04.2017 | SUB-COMMITTEE OF BOG | MINUTES

Further the Committee approved and ratified that the re-appropriation plan of project fund allocation approved during discussion on 28.03.2017 to book the unspent funds available as below:

TEQIP-II 1.2

Sl. No.	Head of expenditure	Initial Project allocation (as per PIP)	Activity-wise Re-appropriation approved	Re-appropriation approved (subtotal)
1	Procurement	562.50	786.12	786.12
2	Assistantship	250.00	445.79	891.87
3	Research Development	62.50	96.06	
4	FSD	125.00	174.76	
5	III Cell	62.50	82.34	
6	Capacity Development	25.00	24.60	
7	Reforms	12.50	42.89	
8	Student Support	25.00	25.89	
9	IOC	125.00	11.79	110.79
Total		1250.00	1788.78	1788.78

COE 1.2.1

Sl. No.	Head of expenditure	Allocation	Activity-wise Re-appropriation approved	Re-appropriation approved (subtotal)
1	Procurement	275.00	310.21	310.21
2	Assistantships	50.00	66.26	154.32
3	R&D	50.00	49.07	
4	Faculty & Staff Development	50.00	37.44	
5	III Cells	25.00	1.55	
6	IOC	50.00	48.64	48.64
TOTAL		500.00	513.17	513.17

6. Seeking ratification for approval for Award of research assistantships to Research Scholars and honorarium to Research Advisor under TEQIP –II

The committee ratified the approval accorded on 28.03.2017 during the discussion to release the research assistantships to 15 Research scholars for the month of March 2017 and honorarium/remuneration to Dr V. Arun Kumar for the month March 2017 towards the expert guidance rendered to various research projects of department of Mechanical Engineering.



B.M.S.COLLEGE OF ENGINEERING, BANGALORE-560 019
TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME. PHASE-II
TWENTY FIRST MEETING | 05.04.2017 | SUB-COMMITTEE OF BOG | MINUTES

7. Status of TEQIP-II 1.2 funds and expenditure statement

The committee noted the status of TEQIP-II funds and expenditure status as below:

Sl. No.	Head of expenditure	Initial Project allocation (as per PIP)	Re-appropriation approved on 10.01.2017	Maximum allocation permitted	Expenditure incurred up-to 31.03.2017 (Activity-wise)	Expenditure incurred up-to 31.03.2017 (Sub-total)
1	Procurement	562.50	788.69	883.28	786.12	786.12
2	Assistantship	250.00	869.11	725.81	445.79	891.87
3	Research Development	62.50			96.06	
4	FSD	125.00			174.76	
5	III Cell	62.50			82.34	
6	Capacity Development	25.00			24.60	
7	Reforms	12.50			42.89	
8	Student Support	25.00			25.43	
9	IOC	125.00	114.00	178.75	110.79	110.79
Total		1250.00	1771.80	1787.84	1788.78	1788.78

Further the committee noted that the college has spent all the funds received under TEQIP-II 1.2 including the interest accrued and there is no balance funds are left.

8. Status of COE 1.2.1 funds and expenditure statement

Sl. No.	Head of expenditure	Allocation	Maximum mandated allocation	Expenditure incurred up-to 31.03.2017 (Activity-wise)	Expenditure incurred up-to 31.03.2017 (Sub-total)
1	Procurement	275.00	302.50	310.21	310.21
2	Assistantships	50.00	160.67	66.26	154.32
3	R&D	50.00		49.07	
4	Faculty & Staff Development	50.00		37.44	
5	III Cells	25.00		1.55	
6	IOC	50.00	50.00	42.64	42.64
	IOC – committed salary of TEQIP & COE Staff from 4 months - April 17 to July 17			6.00	6.00
TOTAL		500.00	513.17	513.17	513.17

Further the committee noted that the college has spent all the funds received under COE 1.2.1 including the interest accrued and there is no balance funds are left.



B.M.S.COLLEGE OF ENGINEERING, BANGALORE-560 019
TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME. PHASE-II
TWENTY FIRST MEETING | 05.04.2017 | SUB-COMMITTEE OF BOG | MINUTES

9. Online web based satisfaction survey for Students, Faculty & Staff:

The committee noted that NPIU through its communication 01.03.2017 informed that online web based satisfaction survey for Students, Faculty & Staff is a mandatory activity under TEQIP-II for assessing the performance of the institutions and conducted the 3rd round of web based Student, Faculty and Staff Satisfaction Survey from 01.03.2017 to 31.03.2017 and the survey outcomes are awaited.

10. Participation in TEQIP III :

- i. The committee noted that NPIU vide its email dated 03.04.2017 has requested to submit fresh bid for mentee institutions for twinning under TEQIP III and response of the college of order of preference of mentee institutions for twinning under TEQIP III as below:

Order of Preference	Name of the state	Name of the mentee institutes
1	Assam	Gauhati University Institute of Science & Technology, Guwahati
2	Madhya Pradesh	Rajiv Gandhi Proudlyogiki Vishwavidyalaya, Bhopal
3	Jammu & Kashmir	Govt.College of Engineering & Technology, Jammu
4	Andaman & Nicobar Islands	Dr.B.R.Ambedkar Institute of Technology, Pahargaon, Port Blair, Andaman & Nicobar Islands
5	Uttarakhand	College of Technology Pantnagar

- ii. Sustainability funds of the TEQIP-III Project institutions

The committee noted that TEQIP III institutes are required to deposit at least 8% of their revenue every year into a Sustainability Fund as per the TEQIP-III guidelines.

3



B.M.S.COLLEGE OF ENGINEERING, BANGALORE-560 019

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME, PHASE-II

TWENTY FIRST MEETING | 05.04.2017 | SUB-COMMITTEE OF BOG | MINUTES

The committee further discussed about the TEQIP-III project objectives and noted the further course of actions could be taken up after the receipt of official confirmation of our participation. [Annexure 4]

11. Other items.

- A. With regard to the depositing of the utilisation charges/fees generated by the COE 1.2.1 facilities into the Maintenance Funds Account created under TEQIP-II and clarification sought by Dr.M.Ramachandra, COE Coordinator whether the practice be continued, committee noted that the project mandated practice of depositing of the utilisation charges/fess generated by the TEQIP-II 1.2 / COE 1.2.1 facilities into the Maintenance Funds Account be continued till the end of April 2017 and further orders of the committee.
- B. The committee considered the requests of Dr.S.Srinivas and Dr.Chandrasree Das regarding the revision of consultation fees and utilisation charges for their TEQIP-II 1.2 /COE 1.2.1 facilities for other academic institutions and industry, opined that the charges on par with IISc charges may be considered. However the committee advised that matter shall be submitted to the consideration and advice of the BOG. [Annexure 5]
- C. Further the committee deliberated on the utilisation charges on BMSCE Students for utilising TEQIP-II 1.2 / COE 1.2.1 facilities other than XRD Equipment, Scanning Electron Microscope (SEM) and Water Jet Cutting Machine, noted that BMSCE students need not be charged on such utilisation considering the fact that the facilities are created for benefit of BMSCE students and faculty members.

The meeting concluded with thanks to the Chair.


PRINCIPAL & CONVENOR


CHAIRMAN



B.M.S.COLLEGE OF ENGINEERING, BANGALORE-560 019
TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME, PHASE-II
TWENTY FIRST MEETING | 05.04.2017 | SUB-COMMITTEE OF BOG | MINUTES

Annexures

Sl. No	Particulars	Page No.
1	Annexure 1	1 to 6
2	Annexure 2	7 to 8
3	Annexure 3	9
4	Annexure 4	10 to 39
5	Annexure 5	40 to 46



B.M.S.COLLEGE OF ENGINEERING, BENGALURU-560 019
TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME, PHASE-II
TWENTIETH MEETING | 06.03.2017 | SUB-COMMITTEE OF BOG | MINUTES

MEMBERS PRESENT:

1. Prof. D. Thukaram, Chairman
2. Sri. M. Krishnaswamy, Member
3. Dr.K.Mallikharjuna Babu, Principal & Convenor

NODAL OFFICERS/CO-ORDINATORS PRESENT:

1. Dr.B.V. Ravishankar , TEQIP Co-ordinator-I
2. Dr. L. Ravi Kumar, TEQIP Co-ordinator-II
3. Dr. Suresh Ramaswamyreddy, Nodal Officer – Finance Aspects
4. Dr.M.S.Dharmaprasadh, Nodal Officer- Procurement
5. Dr. Gowrishankar, Nodal Officer - Academic Activities
6. Dr. H.S.Guruprasad, Nodal Officer- Academic Activities
7. Dr. K. Guruprasad, Nodal Officer - Equity Assurance Plan Implementation
8. Dr.M.C.Sampath Kumar, Nodal Officer- CV & EM
9. Dr.C.T.Puttaswamy , Nodal Officer – CV & EM
10. Dr. M. Ramachandra, Principal Investigator & Co-ordinator, CoE
11. Dr.S.Srinivas, Principal Investigator, CoE
12. Dr.M.V.Murugendrappa, Principal Investigator, CoE

1. Ratification of Minutes of 19th meeting of BOG sub-committee by the BOG

The committee noted that BOG has approved and ratified the minutes of the nineteenth meeting of Sub-committee of BOG in the 64th Meeting of BOG held on 11.1.17 [Annexure-1].

2. Final installment of TEQIP II grants :

The committee noted that the final instalment of TEQIP II grants of Rs.250 lakhs are yet to be released to the college by SPFU-Karnataka. The committee informed the TEQIP Coordinators to seek advance of Rs.250 lakhs from the management to continue the planned activities till the release of the balance grants from SPFU.



B.M.S.COLLEGE OF ENGINEERING, BENGALURU-560 019
TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME, PHASE-II
TWENTIETH MEETING | 06.03.2017 | SUB-COMMITTEE OF BOG | MINUTES

3. Transfer of funds between TEQIP-II (1.2) and COE 1.2.1.

The committee noted that consequent to the NPIU/SPFU mail dated 22.9.15, an amount of Rs.320 lakhs was apportioned for procurement under COE and subsequent to observation/guidance from SPFU & NPIU officials in the review meeting held on 29.12.16 and the directions of BOG sub-committee, procurement was stopped at Rs.310.21 Lakhs itself under COE. The committee also took a note of the mails sent to NPIU & SPFU requesting them for considering the said expenditure as a special case and also if the approval of the said expenditure was not feasible, at least to accord permission to allocate the entire interest earned on COE grants to the procurement. Further, the committee noted that the TEQIP Coordinators also contacted the NPIU officials in this regard over telephone.

The committee further noted that, in the expenditure review meeting conducted by NPIU and SPFU on 22 February 2017 at Higher Education Council Conference Hall, Bangalore, represented by the TEQIP Coordinators and COE coordinator, the officials of NPIU and SPFU have clarified that portion of interest earned on TEQIP II & COE grants i.e., 55% of interest earned under COE and 45% of interest earned on TEQIP II grants could be allocated towards the procurement made under COE to meet the excess expenditure made so far to some extent. The committee also noted that NPIU officials had informed that TEQIP II & COE projects would come to an end by 31.3.2017 and a portion of the COE grants could be transferred to TEQIP-II or vice-versa or all the pending proposals of academic and R&D activities [all nature irrespective of the subject they pertain to] could be accepted and booked under academic activities or IOC of COE[sub component 1.2.1].

After detailed deliberations, the committee accorded approval to allocate interest portion to the extent of Rs. 15.03 lakhs [55% of 27.32 lakhs] earned on COE grants and to the extent of Rs.10.38 lakhs [45% of Rs.23.06 lakhs] interest earned on TEQIP II grants to procurement head under COE to adjust the expenditure incurred over and above Rs.275 lakhs [allocation limited by NPIU].

Further, the committee recalled that the BOG in its meeting held on 13.1.14 had approved to extend additional financial support from Management funds towards the procurement under COE and informed the Principal to seek necessary management funds to the extent of Rs. 9.8 lakhs i.e., the difference between actual expenses incurred and approved allocation including interest apportioned [Rs.310.21 lakhs - Rs.300.41 lakhs].



B.M.S.COLLEGE OF ENGINEERING, BENGALURU-560 019
TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME, PHASE-II
TWENTIETH MEETING | 06.03.2017 | SUB-COMMITTEE OF BOG | MINUTES

4. Re-appropriation of funds under TEQIP II & COE

The committee took a note of the activities conducted so far under TEQIP II & COE and corresponding financial assistance extended from TEQIP II[sub component 1.2] & COE [sub component 1.2.1] respectively and approved the same.

The committee also noted the activities proposed under TEQIP II [sub component 1.2] & COE [sub component 1.2.1] till 31st March 2017 and after deliberations, the committee accorded approval for the appropriation of funds as mentioned below:

RE-APPROPRIATION OF FUNDS UNDER COE [sub component 1.2.1] : (Rs. in lakhs)

Sl. No.	Head of expenditure	Allocation	Amount spent as on 28.02.2017	Total Allocation as on 31.03.2017 [grants + interest earned]
1	Procurement	275.00	310.21	300.41
2	Assistantships	175.00	57.22	66.20
3	R&D		11.11	57.5
4	Faculty & Staff Development		29.49	41.94
5	III Cells		0.96	3.41
6	IOC	50.00	37.56	45.55
	TOTAL	500.00	446.55	515.01

Further, the committee accorded approval for the transfer of an amount of Rs. 22.69 lakhs from COE [sub component 1.2.1] to TEQIP II [sub component 1.2] .

RE-APPROPRIATION OF FUNDS UNDER TEQIP- II [sub component 1.2] : (Rs. in lakhs)

Sl. No.	Head of expenditure	Total Life Allocation Approved previously	Expenditure incurred up-to 28.02.2017	Total Allocation as on 31.03.2017 [grants + interest]
1	Procurement	788.69	701.39	788.17
2	Assistantship	869.11	359.55	439.55
3	Research Development		86.79	90.62
4	FSD		167.34	173.02
5	III Cell		80.07	82.57
6	Capacity Development		24.60	24.62
7	Reforms		42.73	43.50
8	Student Support		23.09	25.54
9	IOC	114	109.40	117.78
	Total	1771.80	1594.96	1785.37



B.M.S.COLLEGE OF ENGINEERING, BENGALURU-560 019
TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME, PHASE-II
TWENTIETH MEETING | 06.03.2017 | SUB-COMMITTEE OF BOG | MINUTES

Further, the committee authorized the Principal to re-appropriate the funds as and when required based on the activities and to place before the sub-committee for ratification.

5. Award of financial assistance to UG/PG projects under TEQIP –II & COE

The committee took a note that at the department level, committee comprising of the HOD and few faculty members have reviewed the project proposals received from the UG & PG students and have recommended for the award of fiscal incentive to UG students and reimbursement of expenses to be incurred by PG students. In few departments, opinion of external experts have also been sought in this regard. The committee took a note of the list of project proposal recommended by the committee for financial assistance/ fiscal incentive under COE[sub component 1.2.1] and TEQIP II [sub component 1.2].

After detailed deliberations, the committee accorded the approval for the sanction of fiscal incentive/financial assistance to the UG/PG students' projects & research scholars proposals under TEQIP II [sub component 1.2] as per the list at annexure – 2 and further accorded approval for extending financial assistance to faculty guide towards the UG/PG students projects & to research scholars for their proposals under COE [sub component 1.2.1] as per the list at annexure – 3.

6. Award of teaching assistantship to PG students under TEQIP –II

The committee noted that in the 19th meeting of sub-committee of BOG, approval was accorded to sanction teaching assistantship of Rs.5,000/-, per month to 124 students admitted to M.Tech course during 2016-17 for 5 months. After deliberations, the committee noted the availability of funds, and accorded approval for the sanction of teaching assistantship of Rs. 8,000/- per month for 4 months [w.e.f 1st October 2016 to 31st January 2017] to the said 124 students admitted to M.Tech course during 2016-17 under TEQIP II [Annexure-4].

7. Award of Seed money to faculty for research under COE

The committee noted that Research proposals for the award of seed money were called from the faculty members and also took a note of the list recommended by the review committee comprising of TEQIP II & COE Coordinators, concerned HOD, faculty experts and external experts. After detailed deliberations, the committee accorded approval



B.M.S.COLLEGE OF ENGINEERING, BENGALURU-560 019

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME, PHASE-II

TWENTIETH MEETING | 06.03.2017 | SUB-COMMITTEE OF BOG | MINUTES

for the sanction of seed money to the faculty members for research activities under COE as per the list at Annexure- 5.

8. TEQIP II impact evaluation study:

The committee noted that Questionnaire was provided by IIT Delhi through its mail dated 3.2.2017 towards impact evaluation study of TEQIP II Programme and also took a note of the response submitted by the college in this regard.

9. SWOT analysis and case study for TEQIP-III KIC - TEQIP, IIT Guwahati

The committee noted that a key panel of KIC - TEQIP, IIT Guwahati comprising of Dr. Sunil Khijwania, Head, Center of Educational Technology and Dr. Gaurav Trivedi, from the department of Electrical & Electronics Engineering, with Sri. Manohar G Nayak, State Project Coordinator, SPFU visited the college on 16th February 2017 for SWOT analysis and case study for TEQIP-III. The committee further noted that the said team interacted with BMSCE TEQIP team for feedback.

10. TEQIP III Participation:

The committee took a note of NPIU's communication dated 17.2.2017 [Annexure-6] informing that our institute has been shortlisted as Mentor Institute under Sub-Component 1.3 for twining focus state institutions under Sub-Component 1.1 and that selection of shortlisted institutes through Challenge method would begin from 22nd February 2017 onwards. The committee also noted that the mail from NPIU requested to indicate three institutions in the order of preference from the attached list of institutions for Mentoring purpose. The committee noted that the college sent the following names of the institutes as preferred for mentoring and ratified the same:

1. NIT Manipur, Manipur
2. Atal Bihari Vajpai Govt. Institute of Engineering & Technology, Shimla, Himachal Pradesh
3. Jawaharlal Nehru Govt. Engineering College, Sundernagar, Himachal Pradesh

The committee further took a note of the Institutional Development Proposal [IDP] for TEQIP-III submitted by the college to NPIU & SPFU on 18.02.17 and ratified the same [Annexure-7].



B.M.S.COLLEGE OF ENGINEERING, BENGALURU-560 019
TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME, PHASE-II
TWENTIETH MEETING | 06.03.2017 | SUB-COMMITTEE OF BOG | MINUTES

11. Progress Review meeting of TEQIP-II institutions:

The committee noted that Dr.B.V.Ravishankar, TEQIP Coordinator-I & Vice Principal, Dr. L. Ravikumar, TEQIP Coordinator-II and Dr.M.Ramachandra, COE Coordinator attended the 'Expenditure Review Meeting of TEQIP II institutions' held on 22nd February 2017 at Higher Education Council Conference hall, DTE, Karnataka. The committee also noted that TEQIP Coordinators made a presentation on the progress achieved so far under TEQIP-II & COE and status of expenditure incurred before the NPIU & SPFU officials.

12. Online web based satisfaction survey for Students, Faculty & Staff:

The committee took a note of the NPIU's communication dated 01.03.2017 informing that online web based satisfaction survey for Students, Faculty & Staff is a mandatory activity under TEQIP-II for assessing the performance of the institutions and all the students and staff members are expected to participate in the same and complete the 3rd round of web based survey on/before 20.03.2017.


13. Approval to faculty & students for attending programs and conduction of programs:

- a) The committee took a note of the consolidated list of the approvals of the sub-committee received by circulation for deputing faculty members to attend various programs & conducting programs under TEQIP II/COE placed at Annexure-8.
- b) The committee took a note of the consolidated list of the approvals of the sub-committee received by circulation for attending various programs by the students under TEQIP II/COE placed at Annexure 9.

Dr.L.Ravikumar, TEQIP Coordinator-II expressed sincere thanks to the sub-committee of BOG for their able and timely guidance to TEQIP Team of the college throughout the Project. He further thanked the TEQIP team of the college for their cooperation and participation in the TEQIP-II & COE activities leading towards the successful completion of the project by 31st March 2017.

The meeting concluded with a vote of thanks to the Chair.


Dr.K.MALLIKHARJUNA BABU
PRINCIPAL & CONVENOR



Prof.D.THUKARAM
CHAIRMAN

Annexure - 2

From: National Project Implementation Unit <npiuwb@hotmail.com>

Date: Fri, Mar 24, 2017 at 2:52 PM

Subject: TEQIP II – Enhancement of Procurement limit by 10%

To: "drkmbabu@bmsce.ac.in" <drkmbabu@bmsce.ac.in>, "drkmbabu@gmail.com" <drkmbabu@gmail.com>, "viceprincipal@bmsce.ac.in" <viceprincipal@bmsce.ac.in>, "ravibmsce@yahoo.com" <ravibmsce@yahoo.com>, "ravi.mech@bmsce.ac.in" <ravi.mech@bmsce.ac.in>, Cc: Rupali Jha <rupali.jha.teqip@gmail.com>, Rajiv K Mishra <rajiv.mishra.teqip@gmail.com>

No.P/TQ/II/SPFU/2017/

24th March, 2017

To,
All Project Institutions & SPFUs

Sub: TEQIP II – Enhancement of Procurement limit by 10%

Sir,

It is to inform you that MHRD has enhanced the limit of procurement by 10% of the project life allocation as a special case to expedite remaining expenditure considering the closure of the Project and unspent balance lying with the institutions.

In this connection, Project institutions can make additional procurement by 10% of the project life allocation with the approval of their BOG's subject to the availability of funds. However, there should not be any increase in Project life Allocation.

All procurement activities should be completed by 31st March, 2017. No new procurement activities can be started and paid for after 31st March 2017. During the four-month grace period from 1st April 2017 to 31st July 2017, only payments can be made for goods delivered, works completed and services rendered till 31st March 2017".

SPFUs are requested to kindly monitor the above work at their level and ensure the adherence of the given guidelines.

With regards,

Yours faithfully,
(Rupali Jha)

Associate Consultant

National Project Implementation Unit (NPIU)
EDCIL House, 4th Floor, Plot No. 18-A, Sector 16-A
NOIDA-201 301, Uttar Pradesh
Phone: 0120-2513928,
EPABX No. 0120-2513921, 2513946
Fax Nos. 0120-2513926, 2512485
Email : npiuwb@hotmail.com
Web : www.npiu.nic.in

From: **spfu karnataka** <spfukarnataka@gmail.com>
Date: Thu, Mar 30, 2017 at 3:23 PM
Subject: Fwd: TEQIP II – Enhancement of Procurement limit by 10%
To: Mallikharjuna Babu Kayala <drkmbabu@gmail.com>, BMS Bangalore
<viceprincipal@bmsce.ac.in>, Ravi Kumar <lrkmech@gmail.com>,

To,
The Principals & Co-ordinators
TEQIP Institutions

Sir,

Sub: TEQIP II – Enhancement of Procurement limit by 10%

With reference to NPIU e-mail No. P/TQ II/SPFU/2017 dated: 24th March 2017 and telephonic conversation with Associate Consultant (procurement), NPIU-MHRD in respect of enhancement of procurement limit by 10% the following few points may be noted by the Institutions.

- 1) The upper cap for procurement has been enhanced by 10% of the project life allocation.
- 2) All the procurements should be completed on or before 31st March 2017 in respect of all stages of procurement including initiation, issue of PO, delivery of items except the payment which can be done after 1st April 2017.
- 3) No procurement should be initiated afresh now as they cannot be completed within 31st March 2017. If any procurements are initiated then the institutions have to bear the expenditure from their own funds and not from TEQIP-II funds.
- 4) If the institutions have crossed their respective upper ceiling of procurement allocation they can be regularized to maximum 10%.
- 5) For any clarifications, Project Officer (Procurement), SPFU-Karnataka may be contacted.

With regards,

Manohar G Nayak
State Project Coordinator,
SPFU Karnataka,

Swatch Bharath | Print only if necessary | Save Trees

Annexure - 3

From: **spfu karnataka** <spfukarnataka@gmail.com>

Date: Sat, Mar 25, 2017 at 11:15 AM

Subject: Fwd: TEQIP-II---Project Closure -- Staff Maintenance in TEQIP Cell in SPFU & institutions for the period from 1st April to 31st July, 2017

To: Mallikharjuna Babu Kayala <drkmbabu@gmail.com>, BMS Bangalore <viceprincipal@bmsce.ac.in>, Ravi Kumar <lrkmech@gmail.com>

To,

The Principals, TEQIP institutions

Sir,

Please find herewith NPIU E-mail and attachment regarding TEQIP-II---Project Closure -- Staff Maintenance in TEQIP Cell in SPFU & institutions for the period from 1st April to 31st July, 2017 for your kind information and needful action.

With regards

Manohar G Nayak

State Project Coordinator, SPFU Karnataka,

Swatch Bharath | Print only if necessary | Save Trees

----- Forwarded message -----

From: **National Project Implementation Unit** <npiuwb@hotmail.com>

Date: Wed, Mar 22, 2017 at 2:53 PM

Subject: TEQIP-II---Project Closure -- Staff Maintenance in TEQIP Cell in SPFU & institutions for the period from 1st April to 31st July, 2017

To: KARNATAKA SPFU <hutalawar@yahoo.co.in>, KARNATAKA DTE <hutalawar@yahoo.com>, KARNATAKA SPFU COORDINATOR <mgn_204@yahoo.co.in>, KARNATAKA S P F U <spfukarnataka@gmail.com>

Cc: N S Agnihotri <nand.agnihotri.teqip@gmail.com>, Rajkumar Arya <raj.arya.teqip@gmail.com>

(By E-mail)

22nd March, 2017

To: Directors -- SPFU Karnataka

Sub.: TEQIP-II---Project Closure -- Staff Maintenance in TEQIP Cell in SPFU & institutions for the period from 1st April to 31st July, 2017

Sir,

The TEQIP-II project is upto 31st March, 2017. As per the World Bank instructions :

"All activities should be completed by 31st March, 2017. No new activities can be started and paid for after 31st March, 2017. During the four month grace period from 1st April 2017 to 31st July, 2017, payments can be made for goods delivered, works completed and services rendered till 31st March, 2017."

In this connection, the TEQIP staff shall be required to be maintained for the above work and other closure related work. Therefore, the expenditure details on maintenance of the staff at SPFU/institutions were called.

MHRD have approved the Staff maintenance in TEQIP Cell in SPFUs, institutions/CFIs for the period from 1st April 2017 to 31st July, 2017 as per the expenditure details submitted by you. Accordingly, your state has submitted the expenditure plan amounting to Rs. 25,05,032/- as per the list enclosed.

The necessary compliance may be made accordingly.

Thanking you

Yours faithfully
(N.S.Agnihotri)
Consultant (Finance)

CC to: TEQIP Coordinators -- SPFU Karnataka

Annexure - 4

From: **NPIU** <teqip.npiu@gmail.com>

Date: 3 April 2017 at 16:08

Subject: MOST URGENT - TEQIP-III : FRESH BID for Twinning under Sub-component 1.3.reg

To: drkmbabu@gmail.com, principal@bmsce.ac.in, viceprincipal@bmsce.ac.in, ravibmsce@yahoo.com, ravi.mech@bmsce.ac.in,

Cc: npiuwb@hotmail.com, Dr Rita Goyal <rita.goyal.teqip@gmail.com>, Dr Prakash Chandra Kuniyal <prakash.kuniyal.teqip@gmail.com>

MOST URGENT

Dear Sir

As you are aware, the selection of institutions for twinning between institutes (from Focus States) under Sub-Component 1.1 and 1.3 (from non-Focus States) is under way. As of now, twinning of some institutes has been identified by the selection Committee for final approval by MHRD. For the remaining 1.1 institutions, the fresh bids are being invited from 1.3 institutions as listed in **Annex-1**.

In this regard, the institutes under Sub-component 1.3 are requested to bid three institutes of Sub-Component 1.1 of the Focus states (attached as **Annex-II**). The requisite information should be submitted to NPIU latest by **5th April 2017**. SPFU is requested to undertake a follow up action.

With regards

(Dr. Rita Goyal)

Sr. Consultant (Academic)

National Project Implementation Unit (NPIU)

EDCIL House, 4th Floor, Plot No. 18-A, Sector 16-A

NOIDA-201 301, Uttar Pradesh

Phone: 0120-2513928,

EPABX No. 0120-2513921, 2513946

Fax Nos. 0120-2513926, 2512485

Email : npiuwb@hotmail.com

Web : www.npiu.nic.in

**TEQIP-III_LIST OF INSTITUTIONS TO BE CALLED FOR FRESH BID FOR
PARTICIPATION IN SUB-COMPONENT 1.3 (TWINING PARTNER)**

SL. NO.	NAME OF STATE	INSTITUTIONS TO BE CALLED FOR FRESH BID
1	ANDHRA PRADESH	JNTU College of Engineering, Anantpur
2	ANDHRA PRADESH	Andhra University College of Engineering, Vishakhapatnam
3	ANDHRA PRADESH	SVU College of Engineering, Tirupati
4	CFTI	VNIT, Nagpur
5	CFTI	NIT, Warangal
6	CFTI	ZHCET-AMU, Aligarh
7	CFTI	NIT, Silchar
8	CFTI	MNIT, Bhopal
9	CFTI	NIT, Trichy
10	CFTI	NIT, Durgapur
11	CFTI	MNIT, Jaipur
12	CFTI	IIST, Shibpur
13	KARNATAKA	Dr. Ambedkar Institute of Technology, Bangalore
14	KARNATAKA	BVB College of Engineering & Technology, Hubli
15	KARNATAKA	The National Institute of Engineering, Mysore
16	KARNATAKA	Basaveshwar Engineering College, Bagalkot
17	KARNATAKA	PES College of Engineering, Mandya
18	KARNATAKA	H.K.E.S's PDA College of Engineering, Gulbarga
19	KARNATAKA	BMS College of Engineering, Bangalore
20	KERALA	School of Engineering, Cochin University of Science & Technology, Cochin
21	MAHARASHTRA	Shri Guru Gobind Singhji Institute of Engineering & Technology, Nanded
22	MAHARASHTRA	BVB's Sardar Patel College of Engineering, Mumbai
23	MAHARASHTRA	Government College of Engineering, Karad
24	MAHARASHTRA	Department of Technology, Shivaji University, Kolhapur
25	MAHARASHTRA	University Department of Chemical Technology, North Maharashtra University, Jalgaon
26	PUNJAB	SBS College of Engineering & Technology, Ferozepur
27	PUNJAB	Beant College of Engineering & Technology, Gurdaspur
28	PUNJAB	GZS College of Engineering & Technology, Bhatinda
29	TAMIL NADU	Govt. College of Technology, Coimbatore
30	TAMIL NADU	Alagappa Chettiar College of Engineering and Technology, Karaikudi
31	TAMIL NADU	Government College of Engineering, Salem
32	TELANGANA	JNTU College of Engineering, Hyderabad
33	UT-CHANDIGARH	University Institute of Engineering & Technology, Chandigarh
34	UT-CHANDIGARH	University Institute of Chemical Engineering and Technology, PU, Chandigarh
35	WEST BENGAL	University Institute of Technology, Burdwan University
36	WEST BENGAL	West Bengal University of Technology, Kolkata
37	WEST BENGAL	University College of Technology-Calcutta University
38	WEST BENGAL	Faculty of Engineering and Technology - Jadavpur University, Jadavpur

Annex-2 (Sub-component 1.1 (Focus States)

**TEQIP_III: LIST OF MENTEE INSTITUTIONS FOR WHICH TWINNING TO BE
DONE**

No.	NAME OF STATES	NAME OF INSTITUTES
1	Andaman & Nicobar Islands	Dr. B.R.Ambedkar Institute of Technology, Pahargaon, Port Blair, Andaman & Nicobar Islands
2	Assam	Dibrugarh University Institute of Engineering & Technology, Dibrugarh
3	Assam	Gauhati University Institute of Science & Technology, Guwahati
4	Assam	Jorhat Engineering College, Jorhat
5	Assam	Jorhat Institute of Science & Technology, Jorhat
6	Bihar	Bhagalpur College of Engineering, Bhagalpur
7	Himachal Pradesh	Rajiv Gandhi Govt. Institute of Engineering & Technology, Nagrota, Kangra
8	Jharkhand	University College of Engineering and Technology (UCET), Vinoba Bhave University, Hazaribag
9	Jammu & Kashmir	Baba Ghulam Shah Badshah University, Rajouri
10	Jammu & Kashmir	Govt. College of Engineering & Technology, Jammu
11	Jammu & Kashmir	Shri Mata Vaishno Devi University, Katra
12	Jammu & Kashmir	Islamic University of Science & Technology, Pulwana
13	CFTI	NIT Srinagar
14	Jharkhand	Techno India Ramgarh
15	Jharkhand	Techno India Chaibasa
16	Jharkhand	Techno India Dumka
17	Madhya Pradesh	Rajiv Gandhi Proudhyogiki Vishwavidyalaya, Bhopal
18	Madhya Pradesh	Rewa Engineering College, Rewa
19	Madhya Pradesh	Samrat Ashok Technological Institute, Engg. College, Vidisha(M.P.)
20	Madhya Pradesh	Indira Gandhi Engineering College, Sagar
21	Odisha	IGIT Sarang
22	Rajasthan	Govt. College of Engineering & Technology Bikaner
23	Rajasthan	University College of Engineering, RTU Kota
24	Rajasthan	MLV Textile & Engg College, Bhilwara
25	Uttar Pradesh	FET MJP Rohilkhand University, Bareilly (UP)
26	Uttar Pradesh	Bundelkhand Institute of Engineering & Technology, Jhansi
27	Uttar Pradesh	Dr. Ambedkar Institute of Technology for Handicapped UP, Awadhpur, Kanpur (U.P.) 208024
28	Uttar Pradesh	Uttar Pradesh Textile Technology Institue, Kanpur
29	Uttar Pradesh	Feroze Gandhi Institute of Engineering & Technology, Raebareli
30	Uttar Pradesh	Rajkiya Engineering College Bijnor Jalilpur Block Road, Near Eidgah, Chandpur, District Bijnor (UP) Pin 246725
31	Uttar Pradesh	Rajkiya Engineering College, Banda-210201 UP India
32	Uttar Pradesh	Institute of Engineering & Technology, Dr. RML Awadh University, Faizabad, UP
33	Uttar Pradesh	Uma Nath Singh Institute of Engineering & Technology, VBS Purvanchal University, Jaunpur, UP
34	Uttarakhand	College of Technology Pantnagar
35	Uttarakhand	GBPEC Pauri Garhwal
36	Uttarakhand	BKIT Dwarhat, Almora
37	Uttarakhand	THDC Institute of Hydropower Engineering & Technology, Tehri Grahwal

From: **Viceprincipal** - <viceprincipal@bmsce.ac.in>

Date: Tue, Apr 4, 2017 at 2:45 PM

Subject: Re: MOST URGENT - TEQIP-III : FRESH BID for Twinning under Sub-component 1.3.reg

To: N P I U <teqip.npiu@gmail.com>, spfu karnataka <spfukarnataka@gmail.com>

Cc: Principal - <principal@bmsce.ac.in>, Ps2principal - <ps2principal@bmsce.ac.in>, Ravi Kumar <lrkmech@gmail.com>

Dear Sir/Madam

Greetings from BMS College of Engineering, Bengaluru

In response to your mail, our order of preference of mentee institutions for twinning under TEQIP III would be as mentioned below:

Order of Preference	Name of the state	Name of the mentee institutes
1	Assam	Gauhati University Institute of Science & Technology, Guwahati
2	Madhya Pradesh	Rajiv Gandhi Proudhyogiki Vishwavidyalaya, Bhopal
3	Jammu & Kashmir	Govt.College of Engineering & Technology, Jammu
4	Andaman & Nicobar Islands	Dr.B.R.Ambedkar Institute of Technology, Pahargaon, Port Blair, Andaman & Nicobar Islands
5	Uttarakhand	College of Technology Pantnagar

With best wishes

Dr. B.V. Ravishankar

Vice Principal & TEQIP Coordinator-I
BMS College of Engineering,
Bangalore - 560 019.

Phone/Fax: +91 080 26603963

Mobile: +91 9945517699

THE PROJECT (TEQIP-III)

1 Introduction

The Project, Third phase of Technical Education Quality Improvement Programme (referred to as TEQIP-III) is fully integrated with the Twelfth Five-year Plan objectives for Technical Education as a key component for improving the quality of Engineering Education in existing institutions with a special consideration for Low Income States and Special Category States and support to strengthen few affiliated technical universities to improve their policy, academic and management practices.

2 Project Objectives:

The Project will focus on the following objectives:

- (a) Improving quality and equity in engineering institutions in focus states viz. 7 Low Income States (LIS¹), eight states in the North-East of India, three Hill states viz. Himachal Pradesh, Jammu & Kashmir, Uttarakhand and Andaman and Nicobar Islands (a union territory (UT)),
- (b) System-level initiatives to strengthen sector governance and performance which include widening the scope of Affiliating Technical Universities (ATUs) to improve their policy, academic and management practices towards affiliated institutions, and
- (c) Twinning Arrangements to Build Capacity and Improve Performance of institutions and ATUs participating in focus states.

3 Project Scope:

Only the Government and Government aided AICTE approved Engineering institutions/Engineering faculty/Engineering Teaching Department/Constituent Institutions of Universities/Deemed to be Universities and new centrally funded institutions in SCS will be the part of the project.

An estimated 180 Government and Government funded Engineering institutions and 10 Affiliating Technical Universities (ATUs) will be selected under different sub-components in one or two cycles.

4. Project Strategy:

The project will be implemented in alignment with the 12th Five Year Plan (2012-17), based on faster, sustainable, and inclusive growth. It emphasizes increasing the supply of highly-skilled workers to drive the economy, as well as helping low-income states catch up with their more advanced neighbours.

The Project will be implemented through the Ministry of Human Resource Development (MHRD) of the Government of India as a **Central Sector Scheme (CSS)**, wherein 100% funds will be provided as grants to the States, Institutions & ATUs.

¹ The LIS States are Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Odisha, Rajasthan & Uttar Pradesh.

A set of Government orders for States and UTs is to be issued to achieve a high and sustained impact of the Project. These orders are to give the project institutions adequate decision making powers that will enable and encourage them to deliver quality education and undertake research in an efficient manner. The primary focus is to increase empowerment of institutions for self-governance and create incentives for achieving excellence in engineering education.

The project institutions will be required to implement academic and non-academic reforms within their self-conceived development programmes that focus on quality and relevance, excellence, resource mobilization, greater institutional autonomy with accountability, research and equity.

Professional development programmes for engineering-education policy planners, administrators and implementers at the Central, State and University levels will be organized. The Project will also support development of more efficient governance activities.

The Project will lay major emphasis on monitoring and evaluation. The prime responsibility of monitoring will lie with the institutions themselves. The management structure at the Institutional level i.e. the Board of Governors (BoG) along with Head of the institution will monitor the progress of Institutional projects on a regular basis and provide guidance for improving the performance of institution in project implementation. The information from project institutions will be collected through a scalable web-based Management Information System (MIS). State Governments will also regularly monitor and evaluate the progress of institutions. The Government of India and the World Bank will conduct bi-annual Joint Reviews of the Project with assistance from the National Project Implementation Unit (NPIU). The monitoring will be based on Institutional Development Plans (IDPs) and Action Plans for ATUs prepared by each project institution and achievements will be measured through a set of performance indicators. The monitoring will focus on implementation of reforms by institutions, achievements in project activities under different sub-components, procurement of resources and services, utilization of financial allocations and achievements in faculty and staff development and management development activities.

In the project, the technical assistance to AICTE is planned which will include designing an assessment system to track student learning at different points of the undergraduate program. Surveys of students, faculty, non-teaching staff and administrators will deepen insight into how institutes address specific problems related to student learning. Assessments will be designed to provide feedback to institutes on how and where to improve, without putting undue pressure on students.

In this project, the fund will be linked to the Disbursement Linked Indicators (DLIs) and will be disbursed only after achieving and verification of some of the indicators.

5 Project Design:

TEQIP seeks to enhance quality and equity in participating engineering education institutions and improve the efficiency of the engineering education system in focus states.

The Project will support two components:

Component - 1: Improving quality and equity in engineering institutions in focus states

➤ Sub-component 1.1 : Institutional Development for Participating Institutions

An estimated 90 Engineering Education institutions meeting (progressively) the enabling mechanisms and based on quality of Institutional Development Proposals (IDPs), will be selected.

Institutions are required to define the activities in their IDP that they want to carry out in the project. These activities should be under the scope of the project and are those that fulfil the objectives of the project. However, some of the suggested activities under the scope of the project are given below:

- Procurement of Goods (equipment, furniture, books LRs, software and minor items) and Minor civil works.
- Improvement in Teaching, Learning and Research competence.
 - Improve student learning,
 - Student employability,
 - Increasing faculty productivity and motivation,
 - Establishing a twinning system,
 - Twinning arrangements with high performing institutions under Sub-component 1.3 to build capacity and improved performance
 - Recruitment and retention of high quality faculty (through better faculty appraisal systems and the faculty recruitment plan).(Consultant services if required, can also be procured for the above said activities.)

➤ Sub-component 1.2 : Widening Impact through ATUs in focus states

An estimated 8 ATUs meeting the enabling mechanisms will be selected with matching contribution equal to project allocation.

The various activities are to be supported by the Action Plans from the ATUs. Some of the suggested activities are:

- Procurement of Goods (equipment, furniture, books LRs, software and minor items)
 - Establishing/improving ERP/management information system for student, staff and faculty data
 - Improving financial management and procurement
 - A modern HR system for efficient personnel management
- Improvement in Teaching, Learning and Research Competence of affiliated institutions

- Mentoring of affiliated institutions and promoting of applications to UGC/NBA
- Increasing faculty productivity and motivation
- Twinning arrangements with ATUs under Sub-component 1.3 to build capacity and improved performance
- Preparation of massive open online courses (also referred to as MOOCs), facilitating access of institutions to MOOCs
- Filling up of faculty vacancies
- Developing credit-based systems such that students in institutions could use select e-learning courses as part of their degree programs
- Greater access to digital resources
- Integration with Swayam platform etc.
- Improving institutional governance
- Improve student learning
- Student employability
- Centralized Research hubs opened to all faculty

(Consultant services if required, can also be procured for the above said activities.)

➤ **Sub-component 1.3 : Twinning Arrangements to Build Capacity and Improve Performance of Participating Institutions and ATUs**

Institutions (already participated in TEQIP-I and/or II)/ATUs will be selected on a competitive basis based on pre-defined eligibility criteria. The evaluation will be based on quality of IDPs. The proposal should include establishing a mentoring system for twinning arrangements to build the capacity and improvement in performance of institution/ATUs participating under sub-component 1.1/1.2 respectively.

Institutions are required to define the activities in their IDP that they want to carry out in the project. These activities should be under the scope of the project and are those that fulfil the objectives of the project. However, some of the suggested activities under the scope of the project are given below:

- Procurement of Goods (equipment, furniture, books LRs, software and minor items) and Minor civil works
- Improvement in Teaching, Learning and Research competence
 - Improve student learning
 - Student employability
 - Increasing faculty productivity and motivation
 - Establishing a twinning system
 - Twinning arrangements with institutions under Sub-component 1.1 to build capacity and improved performance
 - Individual Institutional mentors

(Consultant services if required, can also be procured for the above said activities.)

Component-2: System Level initiatives to strengthen sector governance and performance

This component will support MHRD and key apex bodies in engineering education, including AICTE and NBA, to strengthen the overall system of engineering education. The activities are:

- Provide technical assistance to AICTE and NBA,
- Professional development of Technical Education and TEQIP administrators in the project States and project institutions,
- Initiatives for Effective Governance System of institutions at the level of Board of Governors,
- Implementing Direct Benefit Transfer System to ensure fund transfer electronically to SPIUs and institutions, and
- Project monitoring & evaluation.
- All institutes and ATUs in the Project, as well as those government and government-aided institutes who participated in TEQIP I and II but are not participating in TEQIP III and ATUs not in focus states, will be linked to the National Knowledge Network. Last mile connectivity will be provided by the Project.
- 24/7 broadband connectivity and Wi-Fi access in all academic and administrative buildings and hostels.
- Developing or establishing technology learning centers at all universities which affiliate engineering colleges

6 Sustainability of the Project institutions:

The overall project focus on institutional development has sustainability built in the design of the project. The project's emphasis on well-functioning government bodies, more delegated authority to manage their affairs, and capacity to generate own revenues, involve changing behaviour of key players at a fundamental level. TEQIP I and II required institutes to put aside specific funds for the ongoing maintenance and development of the institute once the project period ended; this will continue in TEQIP III.

- TEQIP III institutes will be required to deposit at least 8% of their revenue every year into a Sustainability Fund. In TEQIP II, this amount has been growing every year – we expect the same trend in TEQIP III.
- A key aspect of the Twinning Arrangements proposed in the project is to develop long-term relationships between colleges. This will help sustain reforms in teaching, learning, research and institutional governance envisaged under the project. Similarly, the IITs and IIMs have been working on strengthening internal systems for sustaining reforms.
- The Faculty Recruitment envisaged for each focus state will build a system for recruiting and retaining adequate numbers of high-quality faculty. This Plan will be expected to provide a long-term solution to the problem of faculty recruitment and retention (not just during the project period).
- The governance-related reforms under the Project, such as UGC autonomy, high-quality BoG and accreditation are expected to put colleges on a long-term path of excellence, which will include innovations in areas relating to internal revenue generation

DETAILED PROJECT DESCRIPTION

COMPONENT 1 : IMPROVE QUALITY AND EQUITY IN ENGINEERING INSTITUTIONS IN FOCUS STATES

Sub-component 1.3 : Twinning Arrangements to Build Capacity and Improve Performance of Participating Institutions and ATUs

1. Objective

To support the priorities identified by Sub-component 1.1 and 1.2 institutions in their IDPs and Action Plans through twinning arrangements to build capacity and improve performance.

2. Scope

Following types of educational institutions will be eligible for submission of IDPs and if selected, for funding under this Sub-component:

- Autonomous Government and Government aided affiliated institutions from States other than specified in Sub-component 1.1,
- Non affiliating Technical Universities/Deemed to be Universities or their single (Engineering Faculty/ Departments/non-autonomous Constituent Institutions), and if multiple (autonomous Constituent Institutions) from States other than specified in Sub-component 1.1, and
- Affiliating Technical Universities (ATUs) for twinning with ATUs under Sub-component 1.2

The institutions and ATUs (approximately 2-3) totalling the same number of institutions and ATUs selected under Sub-component 1.1 will be short listed based on quality of their IDPs if

- Agreed for twinning arrangements with institutions or ATUs under sub-component 1.1 or 1.2
- fulfil the pre-defined eligibility criteria

The twinning between the institutions will be based on decision of a Committee constituted by MHRD considering the geographical location of the institutions, area of interest and expertise, merit of their proposals, their category etc. Although the institutions / ATUs under Sub-component 1.3 may continue to do their own development activities till the institution under Sub-component 1.1 or ATUs under Sub-component 1.2 meet the enabling mechanism pre-defined in the project.

The selection of the institutions will be opened till October 2018.

Following types of educational institutions/departments **will not be** eligible for being funded directly under this Sub-component:

- Institutions or ATUs eligible for participation under Sub-component 1.1 and 1.2

- Non autonomous institutions
- Polytechnic institutions,
- Architecture, Management and Pharmacy institutions or departments,
- Master of Computer Application Departments/institutions, and
- Private unaided institutions.

3. Strategy:

Sub-component 1.3 institutes – all of whom will have obtained academic autonomy from UGC – will receive an initial allocation of INR 2 Cr. so that they have the incentive to participate effectively in twinning activities as well as continue their own institutional development, upon which such twinning depends. These institutes will be eligible for additional resources (totalling around INR 7 Cr.) depending upon how effectively they meet obligations identified in their Twinning Agreements.

Institutions participating in this Sub-component cannot apply for Sub-component 1.1 & 1.2.

4. Deliverables:

The institutions participating under this Sub-component will be responsible for the following set of deliverables:

- Increase in the average score of students participating in tests designed to measure technical and critical thinking skills
- Increase in percentage points of NBA accredited Undergraduate programs and Post-graduate programs
- Increase in Transition rate of undergraduate engineering students from the first year to second year
- Percentage of students from traditionally disadvantaged groups in total enrolment in participating institutions
 - SC/ST
 - Women
- Direct project beneficiaries
 - Total number
 - Female beneficiaries
- Increase in percentage of PhD students in total enrolment in engineering disciplines
- Percentage of sanctioned faculty positions in participating institutions filled by regular or contract faculty, contracted as per AICTE norms
- Number of Faculty Trained in either their subject domain, pedagogy or management
- Percentage of externally funded research and development projects and consultancies in total revenue
- Student, Staff and Faculty Satisfaction Survey
- Improved employer satisfaction with engineers recruited in the past year
- Board of Governors or Institution/ Department Management Committee meets at least 3 times every calendar and publicly discloses the minutes of all meetings

5. Evaluation and Selection:

Institutions (already participated in TEQIP-I and/or II)/ATUs will be selected on a competitive basis based on pre-defined eligibility criteria. The evaluation will be based on quality of IDPs prepared using the prescribed formats. The proposal should include establishing a mentoring system for twinning arrangements to build the capacity and improvement in performance of institution/ATUs participating under sub-component 1.1/1.2 respectively. Information given in the formats should be **verifiable**, concise and supported by documents.

6. Funding pattern:

The Institutions and ATUs under this Sub-component will receive an initial allocation of INR 2 Cr. that can be increased to INR 7 Cr based on their performance.

For planning of fund requirements under various groups of activities for the institutions, refer Annex-A.

Further allocations may be made based on institutional performance against certain benchmarks, on a basis to be determined by MHRD in agreement with the World Bank from time to time. Allocation may also be reduced for non-fulfilment of benchmarks.

7. Possible activities under this Sub-component:

Institutions are required to define the activities in their IDP that they want to carry out in the project. These activities should be under the scope of the project and are those that fulfil the objectives of the project. However, some of the suggested activities under the scope of the project are given below:

- Procurement of Goods (equipment, furniture, books LRs, software and minor items) and civil works
- Improvement in Teaching, Learning and Research competence
 - Improve student learning
 - Student employability
 - Increasing faculty productivity and motivation
 - Establishing a twinning system
 - Twinning arrangements with institutions under Sub-component 1.1 to build capacity and improved performance
 - Individual Institutional mentors

(Consultant services if required, can also be procured for the above said activities.)

The details of possible activities under the Sub-component 1.3 are :

(I) Improvement in Teaching, Training and Learning facilities

Procurement of Goods [equipment; furniture; books & LRs, softwares; and minor items] and minor civil works that may be required under the Project for improvement in teaching, training and learning facilities. A maximum of 60% (Sub-component 1.1) & 50% (Sub-component 1.3) of total project allocation can be made for procurement by each project institution for this activity.

The various possible sub-activities may be as follows:

(a) ***Modernization and strengthening of laboratories, establishment of new laboratories and R&D activities :***

- modernization and strengthening of laboratories for existing UG and PG programmes
- establishment of new laboratories for new and existing UG and PG programmes
- Equipment needed for research and consultancy projects

(b) ***Modernization of Classrooms:*** Classrooms could be modernized with Smart Boards and Computer linked LCD Projectors with screen, which would capture better attention of the students than mere oral lecturing. V-SAT, Video Conferencing and Audio-Conferencing facilities can also be considered for Guest lectures or class lectures depending upon need and feasibility. Classrooms need to be well-lit and ventilated.

(c) ***Updation of Learning Resources:*** Continuous updating of Learning Resources (books, e-books, e-journals, CDs and professional software) and procuring the same is part of the improvement to be brought about in the teaching learning process. Course specific software to improve teaching learning process may be procured, as required. The faculty needs to be encouraged and trained to use these time saving modern facilities.

(d) ***Procurement of Furniture:*** Furniture may be required for modernization of existing laboratories, establishment of new laboratories, libraries, Computer Centres and classrooms. Provision would need to be made for such procurement in the Institutional Development Proposal.

(e) ***Establishment/Up gradation of Central and Departmental Computer Centres:*** Institutions may need to focus on modernize/upgrade Computer Centres to meet curricular and research requirements. It is desirable that Computer Centres be kept open for extended periods beyond working hours and on non-working days. Proper connectivity with Campus-wide Networking is essential. Purchase of the required Computers at one go may be avoided; it may be phased to ensure that the latest systems are procured.

Institutions would need to enter into Annual Maintenance Contracts after the expiry of warranty period for the computers and associated hardware procured under the Project. Wherever possible, replacement of computers/components by the suppliers/manufacturers to ensure upgradation of the computers procured may be considered.

(f) ***Modernization/Improvements of Supporting Departments²:*** Upgradation of teaching and training facilities in the supporting Departments may be considered and included in the IDP so that their contribution is enhanced.

(g) ***Modernization and strengthening of libraries and increasing access to knowledge resources:*** Libraries, which are part of every institution, promote self-learning and also support the teaching learning processes. There is a widespread need to keep the libraries open to the maximum extent. There are institutions where libraries are kept open for 24 hours a day throughout the week.

² Physics, Chemistry, Mathematics and English/other languages

Modernization of libraries could include conversion to Digital Libraries, which would occupy lesser space and make space available for other activities. The institutions can also become member of Indian National Digital Library in Engineering Sciences and Technology Consortium (INDEST-AICTE Consortium). Purchase of books should be through CDs to the extent possible. Even old books, which are available on CDs, should be located and purchased. There needs to be a CD Bank with proper identification and accessibility. The library could be reorganized with adequate computers and connectivity to hostels and Departments through Campus-wide Networking. Subscription to the latest e-Journals could be made. The IDP should clearly indicate the actions that are proposed to be taken for Modernization of Libraries including the cost involved.

(h) **Minor Civil Works:** The minor civil works to be undertaken by the institutions are to be prioritized as suggested below:

- Repair works: The works under this category could be repair of old structures and/or non-functional components of the existing building.
- Refurbishment works: The works under this category could be related to changing the existing functions of a room to a new proposed function. For example: provision of electrical, water supply and/or waste disposal arrangements in an existing room which is proposed to be used as a laboratory.
- Extension to Existing Buildings: Institutions can construct an additional area in continuation to an existing building within the campus. However, institutions will need to provide justification on the extension works proposed.

Note : *The project institution should follow scrupulously the agreed rules and procedures as set out in the Financial Management and Procurement Manual.*

(II) Improvement in Teaching, Learning and Research Competence

The aim of the academic processes should be to improve the learning outcomes and employability of undergraduates and the research pursued under post-graduate programs. The activities will also address fundamental system-level challenges.

The various possible sub-activities are as follows:

(a) *Improve student learning*

• **Faculty and staff training**

This activity should be closely linked to the overall goals of the institution as also to fulfil individuals' justifiable professional aspirations.

1. **Faculty training** (Applicable for faculty of engineering discipline and supporting departments)

The suggested activities to be conducted are:

(i) **Qualification Upgradation :**

Institutions are expected to encourage faculty to upgrade their qualification from Bachelors to Masters and from Masters to Doctoral degree. If the facilities are available within the institution, the same need to be maximally utilized. Alternatively, the faculty could be deputed to other institutions (within India) for

enhancement of qualification. Part-time or sandwich programmes may also be made use of where feasible and necessary.

(ii) *Enhancing knowledge and research competence:*

- **Subject upgradation and research competence :** Subject knowledge upgradation is to make the faculty aware of the advances in knowledge, technologies and research methodologies for improving his/her own performance and for the benefit of students. Short-term and long-term courses are available within India including Summer Schools arranged by Government organizations, institutions and professional Societies. Faculty should be on the lookout for appropriate opportunities.
- **Continuing Education Programmes (CEPs) :** The CEPs at project institutions are to be targeted at the working professionals. The duration of the programmes must be at least one week (5 working days). The participants should preferably be representatives of industries, faculty from other AICTE recognized Engineering institutions and a few faculty of the host institution. The Continuing Education Programmes should be conducted preferably in cutting edge technologies.
- **Participation in Seminars, Conferences, Workshops, etc.:** Faculty is to be encouraged to participate in seminars, conferences and workshops, both National and International. Participation in these would give a good exposure on the developments taking place in different areas. The faculty participating in these should be encouraged to visit close-by institutions and laboratories of his/her interest. Besides, accrual of benefits to students and in their own researches, such participation is expected to bring about collaborations with academic institutions and R&D organizations within and outside the country. The institutions are required to establish such collaborations through MoUs.

(iii) **Pedagogical Training :** The need for Pedagogical Training at institution using the latest teaching methodologies is strongly felt for improving the teaching and training competence of faculty. The target is to cover maximum number of faculty from the project institutions.

2. *Staff training :*

The staff in an Engineering Education institution fall under two categories:

- (i) **Technical Staff:** The Technical Staff in laboratories and workshops need to be trained in their functional areas including operation and routine maintenance of both the existing and new equipment. They also need training on workshop instructions, upkeep of institutional service facilities, etc. The technical staff also need to be motivated and encouraged to participate in training and to use the newly acquired expertise for the benefit of students and the institution. Institutions are expected to encourage staff to upgrade their qualification. If the facilities are available within the institution, the same need to be maximally utilized. Alternatively, the staff could be deputed to other institutions (within India) for enhancement of qualification. Part-time or sandwich programmes may also be made use of where feasible and necessary
- (ii) **Administrative Staff:** The Administrative Staff also need training in respective functional areas, particularly in the use of modern office equipment, software, office automation, maintenance of records, procedures, etc. The training should also cover

motivation for time and material efficiency, and friendliness towards faculty and students.

- **Increasing capacity for postgraduate education and establishing teaching and research**

Increased capacity of PG and PhD programmes is of crucial importance for meeting the large requirements of faculty and for meeting the needs of the Industry. It is also essential to encourage Graduates to join Masters programmes and also pursue Research programmes for being employed as faculty. Institutions receiving funds under the Project are encouraged to seek enhancement of Masters degree seats from AICTE so as to increase the enrolment in Masters programmes. Institutions may also seek permission to convert the unfilled GATE and Industry sponsored seats to non-GATE and non-Industry sponsored seats respectively so that seats do not remain vacant.

GATE qualified students enrolled in Masters courses will receive scholarships as per AICTE norms from the Government sources. The meritorious students admitted by the institutions for Masters Courses that do not receive GATE/other scholarships, may receive Teaching Assistantships from TEQIP funds.

The institutions could also provide Research Assistantships through TEQIP funds to the enrolled Doctoral students that do not get any scholarships through NDF/other schemes.

The Teaching and Research Assistantships are to be provided by institutions on proportionate basis as per the prevalent UGC/AICTE norms or as decided by the BoG of the institution. The students receiving Teaching or Research Assistantships will be required to devote 8-10 hours per week for teaching or research, as the case may be.

The assistantships can also be provided to the Master and PhD students in supporting departments viz. Physics, Chemistry, Maths and English / other languages.

- **Improving transition rates of all categories of students and improving non-cognitive skills of students**

Institutions need to identify those students who need extra support and the type of support needed to reduce their risk of dropping out of college. Some of the reasons for these students needing extra support include: low entry level marks (i.e., inadequate preparedness for the rigorous engineering curriculum), irregular attendance of classes, lack of self-confidence, low proficiency in the medium of instruction (English) or even in the main vernacular language.

Some possible interventions to improve the performance of weak students are given below:

- Diagnosing Student Weaknesses and Continuous Tracking of Performance
- Improving Performance in Academic Subjects
- Improving non-cognitive skills of students
- Peer Learning Groups
- Appointing Faculty Advisers for Students
- Timing of Remedial Courses and Repeat Exams.
- Improving teacher effectiveness
- Bridge courses

The activities are detailed out in the Equity Action Plan which should be a mandatory part of the IDP.

- **Instituting academic and non-academic reforms**

The eligibility criteria for selection of institutions envisage willingness for implementation of academic and non-academic reforms. For non-academic reforms, institutions are expected to utilize their own funds.

1. Academic Reforms:

- **Curricular Reforms:** The main purpose of revision of curricula and syllabi for Engineering Education disciplines at UG and PG levels is to effectively prepare students to meet the labour market requirements. Involvement of employers including core Industry in curricular reforms is an essential requirement.

Project institutions, which are affiliated to Universities, will need to get the revisions in the curricula approved by the Competent Authorities till they attain Autonomous Institution status.

Institutions, which are autonomous, can carry out the curricula development and revision themselves by establishing mechanism that would ensure that the curricula meet labour market requirements.

All new and revised curricula, among others, need to imbibe the following:

- Innovations in teaching and student evaluation methodologies;
 - Design skills, communication skills, entrepreneurial skills, information processing, creative and innovative thinking, leadership skills;
 - Problem solving projects from Industry;
 - Elective courses;
 - Extensive use of media;
 - Invited expert lectures from Industry and field;
 - Visits to and training in Industry; and
 - Multi-level and multi-background entry credit exemptions.
- **Improved Student Performance Evaluation:** Evaluation of students has to be done on a continuous basis, in order to provide opportunities for improvement. Students should be encouraged to participate in tests designed by the National Testing Agency as described in Component 2. Publication of results in the shortest period and allowing the students to see the evaluated papers are some of the innovative measures that can be adopted. Students and faculty will benefit largely from this reformation of student evaluation process. The faculty may identify the academic weaknesses and then counsel the students as to how they may improve their performance. A brainstorming by faculty with students can help to identify various options for performance improvement. Transparency, fairness, consistency and accountability in grading must be ensured. The aggrieved student may be allowed to see the evaluation. Weak students should be given every opportunity to improve. This will develop a greater respect for the institution by the students. The details are given in the Equity Action Plan.
 - **Performance appraisal of faculty by students:** Evaluation of faculty performance on a periodic basis should be implemented. The results of this should be used for taking remedial actions for improvement of teaching learning process. The main purpose is to help faculty member to improve his/her teaching/training skills. The assessment by students and the counselling which may follow such assessment needs to be aimed at helping faculty recognize weaknesses and remedy them to improve student learning. An exit assessment taken at the end of the course gives an insight into the total effectiveness of the course, learning achievements and shortcomings and may be useful for future delivery of the course by the faculty. Faculty must be taken into confidence during each

assessment and the benefits to the faculty/student and the improvement in quality of education should be well explained. Faculty should be continuously motivated to improve performance. This will ensure a proper mix of proficiency and efficiency in the quality of instruction offered to students.

- ***Faculty incentive for Continuing Education (CE), Consultancy and R&D:*** The initiatives taken by faculty should be encouraged through proper incentives and clear guidelines. All faculty are to be encouraged to participate in organizing and/or attending CE programmes, to offer consultancy to Industry and to take part in R&D activities in the institution. Institution should prepare at the beginning of every semester, a faculty engagement chart which should indicate not only the faculty teaching commitments, but also his/her expected involvement in administration, Continuing Education, collaborative activities, research and development activities including curriculum and laboratory development, consultancy, etc. Faculty efforts for good achievements in this direction should be suitably recognized by the BoG. Institutional efforts for consulting to Industry and involvement in R&D should also be adequately encouraged.

2. Non Academic Reforms :

- (i) ***Exercise of autonomies-- Academic, Administrative, Managerial and Financial:*** For institutions selected under the Sub-component 1.1, obtaining Autonomous Institution status during the Project is mandatory. Institutions are also expected to obtain and exercise reasonable levels of Administrative, Financial and Managerial autonomies.
- (ii) ***Establishment of Corpus Fund, Faculty Development Fund, Equipment Replacement Fund and Maintenance Fund:*** Establishment of the four Funds is essential to ensure that the developmental activities continue beyond the Project period. It is, therefore, compulsory that all institutions establish the Four Funds and put substantial amount in each Fund, as per the prescribed mechanism from the institutions own funds but not from the project funds
- (iii) ***Generation, retention and utilization of revenue generated through variety of activities:*** In accordance with the eligibility criteria for States and Union Territories, all project institutions are to be permitted to generate, retain and utilize the entire revenue generated by them including income from tuition fee and other fees and charges from students. All project institutions are expected to increase revenue generation from a variety of activities such as conducting self-financing teaching and training programmes, testing services, consultancy and research, innovations, patents, commercialization of R&D outputs, sharing of high-tech equipment with Industries, public usage of infrastructure for academic activities, etc. (see Annex-I for details).
Institutions are to utilize the revenue for building up the four funds, development activities, offering incentives to faculty and staff, instituting awards and rewards for students, faculty and staff, etc. with approval from the BoG in accordance with rules developed in consonance with Government Guidelines, if any. These rules need to be in place in each institution within 2 years of joining the Project. Institutions are to periodically report increases in the IRG generated.
- (iv) ***Filling-up existing teaching and staff vacancies:*** Project institutions are to be authorized by States/UTs to fill-up all faculty vacancies on a regular basis (over and above the benchmark value). Till such time that these vacancies are filled-up on a regular basis, appointments on 11-month or longer contract need to be permitted by the States/UTs.

Where needed, the Board of Governors may recruit the desired faculty with incentives. The institutions should also make utmost efforts to fill staff vacancies.

- (v) ***Delegation of decision-making powers to senior institutional functionaries with accountability:*** Delegation of adequate powers to senior functionaries like Deans and HoDs with accountability is expected to help better implementation of institutional projects. The powers and responsibilities of the Director/Principal, Deans, HoDs, Professors and other senior faculty in the department, laboratory in-charges and other functionaries should be clearly spelt out in a decentralized administrative environment. Even junior faculty and staff should know their authority and responsibility for which they would be held accountable.

As a measure of financial reforms, adequate financial powers to the Director/Principal of the institution and other functionaries are to be delegated by the Board of Governors. All actions of the Director in connection with Continuing Education, consultancy, faculty development, seminars and conferences should be reported to Board of Governors.

(b) Student employability

- **increasing interaction with industry**

Industry-Institute-Interaction Cell (IIIC) can be formed in the institution to promote links to benefit students and faculty and to promote collaborative interdisciplinary research for offering solutions to real life problems.

- (1) The key activity areas in which Industry can participate for the benefit of the institutions are:

- Participating in curriculum design, curriculum implementation, student assessment, training of students, exposing students to new technologies, and providing experts for certain instructional sessions;
- Providing opportunities for student groups to undertake problem-solving projects;
- Providing exposure to faculty on industrial practices and latest technologies;
- Participating in such bodies as the Board of Governors, Academic Council, Boards of Studies, faculty recruitment, etc.;
- Assisting institutions in establishing new laboratories, providing literature on new technologies, and offering their shop floors as substitutes for laboratories;
- Training students, faculty and technical staff in new technologies and processes;
- Collaborating in sandwich programme offerings;
- Participating in joint R&D activities;
- Delivering expert lectures;
- Industry senior personnel serving as adjunct faculty;
- Utilizing institutional resources (manpower and physical) for industrial manpower training;
- Developing Postgraduate Education in areas of current and potential high demand; and
- Providing assistance for improving employability including entrepreneurial training, specialized skill training, and training in softer skills required by Industry.
- Conducting short term training programmes in collaboration with institutions.
- Students' internship in Industry.

(2) The key areas in which academic institutions can benefit Industries:

- The existing expertise available with project institutions can be utilized by the Industries for technology assessment, up-gradation and absorption.
- Laboratories in the institutions, especially in select areas of excellence, can be shared with industries on agreed terms.
- Develop innovations, products and technologies which can be adopted by Industries.
- Faculty can be deputed to Industry for problem solving and for joint projects.

• **Student career counselling and placement**

The Career Counseling Cell of the institution shall provide placement assistance to the students in relevant industries/company and also help the students of the institutions in their career planning, preparation for selection tests, summer placement, internship and final placements.

The Career Counseling Cell shall be working on liaising with the senior executives of reputed industries/company for the development of the effective communication links with many prominent industrial and professional organizations.

The Career Counseling Cell shall be making all-out effort to match student's career aspirations with the requirements of the industries or organizations. Keeping in view the demand and preference of the various industries, the Cell shall also be looking for the development of the students. In this direction, various activities like Aptitude test, Group Discussion, Guest Lectures from corporate personalities shall be organized from time to time by the placement cell for the students.

- Program Implementation
- Consultation
- Classroom Instruction
- Assessment
- Career Information
- Counseling
- Placement
- Referral
- Outreach
- Follow-up
- Work Experience

c. **increasing faculty productivity and motivation**

- Sponsored research, consultancy and other revenue generating activities

The selected institutions are to promote increased participation of faculty in research, R&D projects and consultancy, for example through merit recognition and fiscal and career incentives. Institutions that already have Doctoral programmes should encourage Masters Students to join Doctoral programmes, as explained in the paragraph above. Institutions need to market their services to the industry. The industry should be encouraged to give live problems to the institution for solutions. The faculty who have expertise should be encouraged to take up consultancy assignments, which would directly

and indirectly benefit the institution, faculty and students. Internal Revenue Generation (IRG) should receive a boost, and some of the income should be shared with faculty, staff and students as per the norms approved by the Institute's Board of Governors (BoG). Regular interactions through consultancy are likely to promote a healthy and useful relationship between industries and institutions. Care should be taken that consultancy services offered to Industry do not affect the teaching schedules and processes. Institutions need to develop a strategy for enabling faculty to secure consultancy assignments and to complete them timely and successfully. The strategy in this regard is to be detailed in the IDP.

The institution is also expected to encourage UG and Masters students to get associated with Industry oriented/sponsored research programmes under the guidance of senior faculty. This is expected to increase their interest in higher education and research.

Institutions are also expected to offer "Seed grant" for research to faculty members and / or students to venture into innovative research and to strengthen research culture in institutions.

d. Establishing Twinning System: The twinning system will be based upon

- **Twinning Arrangements to Build Capacity and Improve Performance:**

The institutions under Sub-component 1.1 will make twinning arrangements with high-performing state-government engineering institutions (earlier participated in TEQIP-I & or TEQIP-II) selected under Sub-component 1.3. The primary objective of the twinning arrangements will be to support the priorities identified by Sub-component 1.1 institutes in their IDPs and Action Plans respectively. Sub-component 1.3 institutes will provide training and guidance to build the capacity of participating institutes. Twinning arrangements will be formalized through Twinning Agreements between the two institutes. The focus of these Agreements will be knowledge transfer, exchange of experience, optimizing the use of resources and developing long-term strategic partnerships. The exact nature of twinning activity would be determined mutually between the two institutes, but could include interactions at four levels: board of governors (BoG); institute's management/leadership; faculty and students. For instance, activities could entail faculty and student exchange, joint conferences, and management coaching with close contacts between the members of the two BoGs, the two principals, and the deans.

- **Individual Institutional Mentors for Sub-component 1.3 institutions :**

Mentoring is a strengthening mechanism by the third party at the institutional level. Mentors provide the institutions with clear guidance on reforms, implementations plans, and remedial actions to improve performance of the institutions. Mentors will be assigned to all project institutions to provide continuous guidance for Project implementation 2 to 3 times in a year based on institutional requirements. All expenses for mentoring will be met by the mentored institution. The Mentors will also act as the Performance Auditors at different Institutions and asses the progress made by individual Institutions. Kindly refer "Handbook for Mentors and Performance Auditors".

Note : The approving authority for these activities is BoG / Competent Authority of the institutions except few cases of procurement (including services) where World Bank's No objection is required. In addition, institution may also conduct other activities (not listed here) under the scope of the project and those fulfil the objectives of the project with the approval of BoG/Competent Authority of the institution.

EQUITY ACTION PLAN (INDIGENOUS PEOPLE'S POLICY FRAMEWORK)

1 Objective:

To ensure that all students and faculty in the project institutions have equal opportunity to avail the benefits of the Project with substantial improvement in the performance of students with special attention to the needy and ST and SC categories

2 Scope:

All project assisted institutions will be responsible for preparing and implementing the Equity Action Plan (EAP) as an integral part of project implementation for TEQIP-III.

3 Strategy:

Every institution faces a different challenge to improve academic performance. In addition to the caliber of students in an institution, its facilities, management, quality and efficiency of the teaching faculty, and measures to address students' felt needs including relating non-cognitive skills and behavioral issues have a bearing on student performance. The Project institutions are to make Equity Action Plans (EAP/IIPF) to improve learning outcomes for students and employability of graduates with special attention to the needy ones including those from the SC and ST categories. The project aims to ensure that all participating institutions improve the transition rate of First Year (enrolled) students to the Second Year (a key performance indicator of the project). Institutional targets are set for all students with special attention to socially and economically underprivileged groups including SC, ST, OBC and Women students. Achievement must be maintained during subsequent years so that high graduation rates are achieved by every institution. All Institutions should include Institutional EAP in their Institutional Development Proposals. The EAP should be a part of each Institution's MoU with the concerned project authorities.

The NPIU and the SPIUs will assess the efforts of project institutions in the implementation of the Equity Action Plan to ensure equity at all levels in the project institutions.

Measures for Improving Academic Performance of students: Institutions need to identify and support students who need extra support. Various criteria might be used to identify the students in need, including for example, those who fail more than 40 or 50 percent of their subjects in a given year, lose a year or more during their degree programme, or consistently get low marks. Some students may fail to secure employment at the end of their degree programme because of overall low performance or inadequate skills at the completion of the course. Some of the reasons for these weaknesses are: low entry level marks (i.e., inadequate preparedness for the rigorous engineering curriculum), irregular attendance of classes, low self-confidence, weak language skills in English, which is the medium of instruction or even in the main vernacular language. Generally it

is observed that that weaker students do not communicate their difficulties and do not seek help due to factors including low self-esteem or even self-inflicted stigma. In addition, students may not do well because of a number of institutional factors, including vacancies in faculty and technical staff positions, deficiencies in faculty teaching skills, lack of library facilities or restricted opening times, poor academic support, inadequate student support services, lack of effective monitoring of student performance, or regular feedback to students, inadequate hostel facilities, poor quality placement offices, etc.

Some possible interventions to improve the performance of students with special attention to the needy:

1. The participating institutions should strive to ensure that all students perform well academically and achieve their post-institution goals i.e. securing good jobs or entering post-graduate courses, according to their choice, suited to their capabilities, and in line with the education they have received. Institutions must also ensure that all the faculty be well trained in Pedagogy especially with regard to addressing the needs of weak students. Some possible interventions to improve the performance of weak students include the following.
2. *Diagnosing Student Weaknesses and Continuous Tracking of Performance* through academic screening on entry and steps to bridge the knowledge gaps in specific areas requiring attention. It is essential that such screening tests are professionally planned and executed, which could benefit from a number of commercially available test modules. In addition, institutions should ensure that tests are appropriate (some test assess academic achievement while others test learning skills and others yet test the psychological profile of students). Properly devised tests on entry and at the start of semesters can provide information about specific areas where a student needs help. Such tests can be particularly be helpful before ‘tough’ subjects begin each semester, and efforts can be made to strengthen classroom strategy and additional academic support by a student mentor, or faculty. The institutions will establish procedures and mechanisms to monitor the progress of students at various stages of the academic tenure. Reviewing student attendance in connection with performance and advising students to attend classes and make up missed classes will be emphasized.
3. *Improving Performance in Academic Subjects.* Students can be helped with **remedial classes** during semester hours or during vacations can be helpful. Additional classes can be held during institution hours when no classes are held but **teachers** are available to help students address their weaknesses. Extra inputs could be provided in more innovative ways such as: **tutorial classes** where students interact with each other and also with a faculty / PG student. The institutions will prepare and offer “**Bridge Courses**” for the students in need during the first year which could include extra classes, notes and guidance where teachers are available to students formally and informally. Institutions should also remember that having the same faculty simply re-teaching the same classes to the same students – without variation in approach or teaching methodology – is unlikely to be successful.
4. *Enhancing English and Communication and Presentation Skills.* One key factor affecting academic performance of students and employability of graduates is their inability to effectively communicate in the English language. The EAP/IPPF therefore

emphasizes taking measures to help students improve their proficiency in English. The strategy could include English language labs, tutorials for technical and everyday English, opportunities to make presentations in the classroom, etc. Language and soft-skills development should be provided throughout the degree programme and not only in the final semesters in preparation for job interviews. Interactive and confidence-building programmes should also be implemented.

5. ***Building Students' Non-cognitive Skills.*** Non cognitive attributes refer to academically and occupationally relevant skills and traits which may not be purely intellectual or analytical in nature. Non cognitive skills are personality and motivational habits and attitudes that aid academic and professional performance of students. Non cognitive traits, skills, and characteristics include perseverance, motivation, self-control, and other aspects of conscientiousness. Non cognitive skills deficit may accumulate over time and affect overall success in life. Non cognitive skills development can help in reversing or limiting delays or deficiencies in cognitive development and academic performance. The EAP could include conducting non-cognitive labs to help students understand and deal with their habits and traits accounting for their learning deficiencies and poor academic performance.
6. ***Promoting Peer Learning Groups and Fostering School Spirit.*** Certain institutions have established peer learning groups during TEQIP-II, which has benefitted students. Peer learning groups help students share their experiences and address their academic difficulties. Students often like to study in groups, and forming groups of 10-12 good and weak mixed students can be effective. They can revise lessons and undertake group projects also. Good students can help weak ones – the act of tutoring also helps good students.
7. ***Student Mentors and Faculty Advisers for Students'*** peer-to-peer mentorship and tutoring worked well in some institutions during TEQIP-II, since students feel comfortable with other students. Faculty mentors played an integral role in observing and monitoring student progress and serve as guides throughout students' higher education experience. Therefore, TEQIP-III will emphasize 'vertical' integration with senior students mentoring juniors and facilitating student-faculty interactions with faculty acting as resource person to the student groups. Faculty Advisers (FA) can be appointed to support Student Mentors aiding a group of 6-8 students entering the first year. The process can help establish a close relationship with fresh students, orienting them regarding institution practices and monitoring their progress through semesters. Students in all four years may need this guidance as different problems develop at different times. The relationship can be more informal than formal, allowing students to ask for help when they need it and share their problems without fear. The FA could identify any non-academic reasons for a student's weak or declining performance, and accordingly advise her/him on appropriate remedial measures. The FA can also mediate between a student and other faculty, if necessary, or seek help from an HOD, Dean, Principal, etc., and get in touch with parents when necessary. Faculty may be given some professional training in mentoring and counseling to play this role.

8. ***Better Scheduling Remedial Courses and Repeat Exams.*** An important difference that emerged between institutions in the Equity study that partly explains why some institutions have a large backlog of students in the final year is the timing of the repeat exams that can be taken by students who fail in several subjects. In the better situation, make-up exams are held within a month or so of the original exams, while in the other institutions they are held a semester or a year later. This has two important negative fall-outs – the students have a heavy load as they must take exams simultaneously for both the new semester's subjects as well as for the subjects they fail; and they cannot attend classes in the subjects they have failed as either the syllabi or the institution do not allow this. Thus, they do not get any additional teaching in the subjects in which they are weak unless they resort to coaching classes or other private means. This may in turn result in cumulative failures, leading some students to take six, seven or even more years to complete the four-year engineering course! In the better situation, on the other hand, remedial classes are provided by the institution during the month before the repeat exams, which is usually during vacation, and the combination of the additional teaching and exams immediately thereafter enables the students to go on to the next year without a burdensome backlog. A committee appointed by NPIU could help develop a Guidance Note on how to execute transition support plans.
9. ***Improving teacher effectiveness*** will require several measures including the following:
Updating Domain Knowledge to enable faculty members keep abreast of latest developments in domain knowledge. (ii) Training in Pedagogy will support teachers in select undergraduate institutions to undertake refresher training in pedagogy to enhance their effectiveness. (iii) Fostering Positive Teacher Behaviors will involve behavioral training to the teachers to enhance their self-understanding, improve their sensitivity, leadership and management skills. A third important area for improvement of teacher performance is their behavior toward students (especially weak ones). An important 'first resort' is to counsel teachers who show bad behaviors, help and guide them. Besides having a formal Counselor, Faculty Mentoring program could be introduced to help faculty members that are younger and may seek help. (iv) Faculty Appraisal can be undertaken with using self-assessment forms and under the oversight of the HOD, Deans, Faculty Committee, etc. It can usefully include student evaluations but also monitor content delivery in accordance with the course file (ref. Guidance brief).
10. ***Supporting Innovation and Knowledge Sharing:*** TEQIP-III will support the institutions of excellence to bi-annually organize innovation and knowledge sharing forums for the benefit of students and young researchers from surrounding institutions. These events will promote competition amongst institutions to show case innovations and enable students to share their learning experiences, facilitate interaction with industries and private/public R&D institutions and thus expose them to break through technologies.
11. ***Implementation Arrangements:*** Each participating institution will prepare and include the EAP/IPPF in the Institution Development Plan submitted for funding. There shall be institution level student-faculty committees to approve and monitor the implementation of the EAPs. The Dean, Students' Welfare will be generally the nodal officer responsible for implementing the EAP. The institutional arrangements will integrate professional capacity and expertise to plan and implement actions in fulfilment of the EAP/IPPF. The

NPIU, SPIUs and other project institutions will have a nodal officer responsible for monitoring and supporting the EAP implementation.

12. **Monitoring and Evaluation:** The EAP/IPPF implementation shall be monitored as a part of the overall project monitoring. TEQIP II has built a strong web-based MIS, which has helped in project monitoring and evaluation, specifically in using performance information to provide incentives to institutions. In TEQIP III, a special effort will be made to build on existing MIS systems wherever possible, and ensure the MIS is adapted to each institution's specific needs, allowing it to report on TEQIP III indicators as well as other indicators deemed useful for the institution's own internal decision-making. The MIS system will also be designed to generate the data on the students' performance with special attention to the vulnerable categories. In addition, the project will work with the AICTE, the NBA and ATUs to harmonize their reporting requirements, to further simplify the reporting process for institutions. A core database, linked to existing MIS systems at institutions will be created and maintained, with server access provided by the MHRD. For institutions without an MIS in place, a supplementing database will be created and linked to the core database. This will enable the MIS system to provide policy-makers, at national, state and institutional levels, a summary analysis of the collected data through an interactive, web-based application capable of generating reports for all TEQIP III indicators and providing the unit level data required for the computation of each indicator. The system will incorporate a series of validity checks to avoid spurious data entry. An IT firm will be hired for the development, installation, training, and capacity building for the TEQIP III MIS and databases. The MIS will be funded through Component 2. Training provided to M&E staff at the national, state and institutional levels will strengthen M&E capacity.

The Table below summarizes the EAP/IPPF Actions for the students and faculty.

Details of Equity Action Plan

S. No	Items	Actions	Implementation Agency	Frequency	Monitoring Indicators
(i)	To identify weaknesses in all students and take remedial steps	Institutions to plan and administer diagnostic tests at the beginning of each semester in order to identify the types of assistance required. Accordingly, institutions will execute bridge courses/remedial teaching (e.g. extra classes, tutorials to be conducted by other faculty) and other measures to bring all students to the required level of proficiency to cope with the main subjects	Project institutions	Diagnostic tests and plans completed at the beginning of each semester; remedial measures carried out continuously thereafter	Percent of students transiting from First to Second year with all first year courses passed

S. No	Items	Actions	Implementation Agency	Frequency	Monitoring Indicators
(ii)	To improve language competency, soft skills and confidence levels	The preparation of guidance tools for teachers to transact with students that are culturally or linguistically less exposed to professional technical education / by including English as part of the main syllabus	Project institution	Continuous	Better transition rates for first and second year students
(iii)	Institution to improve non-cognitive and soft skills including communication and presentation skills through their wide use in curricula / project based work, and where needed, to provide special skills training to students with priority to the weak students	To be decided by the institution. This could include special labs or workshops or sessions with external experts/ consultants	Project institutions	Continuous	Improvement in job placement of students, especially among those with disadvantaged backgrounds
(iv)	Give under-qualified teachers priority in opportunities to upgrade their domain knowledge	Institutions to identify needs and indicate in their Faculty Development Plan how they would build equity to upgrade faculty qualifications and skills	Project institutions and SPIUs	Yearly	Increase in the percentage of teachers enrolled in M. Tech. and Ph. D. reported yearly
(v)	Training of teachers in subject matter and pedagogy, particularly to improve the performance of weak students	<p>Training Needs Analysis (TNA) to be carried out for all teachers in all project institutions by appropriately qualified/trained experts, especially to teach weak students</p> <p>All institutions to prepare Faculty Development Plan for the Project period (using identified providers for Pedagogy or National Training Calendar for subject training), giving priority to the teachers with the most significant gaps in knowledge and skills as diagnosed by the TNA</p>	<p>Project institutions and SPIUs</p> <p>Project institutions and SPIUs</p>	TNA to be done before the preparation of Institutional Development Proposals; reporting every six months and remedial actions on a continuous basis	Percent of planned training completed as reported/ aggregated 6 monthly

S. No	Items	Actions	Implementation Agency	Frequency	Monitoring Indicators
		All teachers are to be covered by training in pedagogy including teaching of weak students, helping students with special needs achieve their learning goals, and an understanding of equity and equality, students' rights and entitlements, i.e. non-discriminatory practices	Project institutions and SPIUs		
		Domain training is to be done on the basis of need/ link up with industry to keep abreast of cutting edge technology	Project institutions and SPIUs		
		Institutions to report to the SPIUs on progress in training plan every 6 months (by name, department, individual characteristics (including SC/ST/OBC, M/F, age, years of service, level, degree qualifications), type and duration of training received, etc., and the SPIUs to send aggregated reports to the NPIU	Project institutions		
		Training providers to furnish training evaluation results (which indicate the extent to which the gaps in a trainee's knowledge or skills including teaching of weak students have been addressed) to Institutions and the SPIUs	Project institutions and SPIUs		
		In addition the Project would carry out Satisfaction Surveys to assess training achievements	Project institutions and SPIUs		
(vi)	Make campuses physically and socially gender-friendly; especially provide adequate and suitable facilities to women students and faculty	Institutions to specify in their IDPs what actions they would take to ensure a gender—friendly campus—both 'soft' actions, and minor civil works where necessary	Project institutions	At the time of IDP and actions implemented as proposed	Institutions to provide descriptive reports of actions taken including number of beneficiaries
(viii)	Hold innovation and Knowledge Sharing Workshops yearly to improve knowledge	The SPIUs and key Institutions to organize workshops with thematic focus	NPIU / SPIUs	Yearly	

S. No	Items	Actions	Implementation Agency	Frequency	Monitoring Indicators
	sharing				
(viii)	Sharing information and knowledge about engineering courses and institutions	By organising rural camps at the school level	SPIU / State Govt. Dept. dealing with secondary and technical education	Yearly	
(ix)	Provide appropriate infrastructure for physically challenged students	By providing ramps, lifts, toilets and hostel facilities	Project institutions	As required	
(x)	Special efforts for training/ internship/ placement of weak students	By greater networking with industry	Project institutions	Continuous	
(xi)	A two tier grievance redress mechanism (GRM)	Introduce, and publicise widely, a two tier GRM at the (i) institution; (ii) State level. In addition to a hotline (telephone), an email address would ensure anonymity.	Project Institutions and SPIUs	Continuous	
(xii)	Ensure that institutional mechanisms to protect and address the needs and concerns of women students are established.	Strengthen/ establish Gender Committees in each institution	Project Institutions/SPIUs	Continuous	
(xiii)	Develop a standard model for tracking of student progress *				
(xiv)	Peer Learning Groups of students	Develop Peer Learning Groups of students for joint study and joint projects (Senior student and faculty may be the resource person)	Project Institutions	Continuous	
(xv)	Appointing Student Mentors and Faculty Advisers for Students	Assigning Student mentors for 6-8 junior students and Appointing Faculty Advisers for 10-15 Students/student mentors. Faculty Advisers can guide the students and monitor their progress	Project Institutions	Continuous	

* Shall be developed by the experts (from IITs and NITs)

Indicative Category-wise Funding for Key Activities per Project Institution (Government Funded and Government Aided Institution) selected under Sub-component 1.3

S. No.	Key activities	Category of Expenditure (Head of expenditure)	Percentage (%)	Cost (Rs. in crore)
1	Procurement of Goods (equipment, furniture, books LRs, software and minor items) and civil works for improvement in teaching, training and learning facilities	Procurement	Up to 50%	3.50
2	Improvement in Teaching, Learning and Research competence' <ul style="list-style-type: none"> ▪ Improve student learning ▪ Student employability ▪ Increasing faculty productivity and motivation ▪ Establishing a twinning system <ul style="list-style-type: none"> ○ Twinning arrangements with institutions under Sub-component 1.1 to build capacity and improved performance ○ Individual institutional mentors 	Academic	At least 40%	2.80
3	Incremental Operating Cost	IOC	Up to 10%	0.70
TOTAL			100	7.00

Note:

- The Incremental Operating Cost means the costs of operation and maintenance of equipment, office expenses, hiring of vehicles, consumables, salaries and allowances of regular and contract faculty and staff against posts created under the Project. It will also include travel costs incurred for the Project Management activities i.e. visit to the NPIU, the SPIU, Universities, etc.
- Procurement of consultant services, if required, for the activities bulleted at Sr. No. 2 are permitted. The expenditure on procurement of consultant services is to be booked against the "Academic" head of expenditure. The services of consultant are to be procured by following the World Bank norms and procedures through the PMSS.
- Fund from Procurement and IOC Head of expenditure can also be re-appropriated to Head of expenditure for academic activities but not vice versa.

To,
The Principal,
B.M.S College of Engineering,
Bengaluru - 19.

Date 23/3/2017

From,
Dr. Chandasree Das,
Associate Professor,
Dept of EEE,
BMSCE
Bengaluru- 19.


Sub: Permission for extension of equipment for consultation purpose.
Dear Sir,

It is to bring to your notice that in the Phase Change Memory Materials Lab, an instrument for sealing of quartz ampoule is available. As some colleges are approaching me to avail the facility, I seek your permission to extend the facility for consultation purpose. I have attached the cost estimation for sealing of one ampoule for your perusal.

Kindly do the needful and oblige.

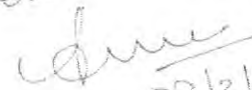
Thanking You.

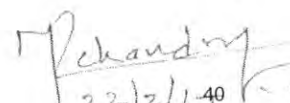
Yours Sincerely


(Dr. Chandasree Das)

concern

As per discussion with Dr. Rameshchandra & Dr. S. Srinivas along with Dr. Chandasree Das, it has been decided to adopt the same procedure as it has followed in CUE of BMSCE till further order.


23/3/17


23/3/17
R R D

Estimation for Sealing of one ampoule

Oxygen Cylinder

One oxygen cylinder = 50 ampoules

Cost of oxygen cylinder = Rs 1616

Cost of oxygen for sealing one ampoule = $1616/50 = \text{Rs } 32$

Power

Required power = 4 KWh

1 KWh = Rs 8.50

Power usage for sealing one ampoule = $4 \times 2 \times 8.50 = \text{Rs } 68$

Equipment

Cost of equipment = Rs 18 lakh

Depreciation @ 7.5% = Rs 1,35,000

Depreciation for 2 hours = $(135000 \times 2)/1536 = \text{Rs } 176$

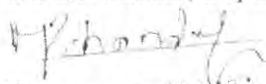

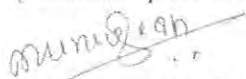
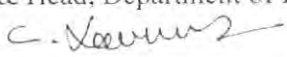
Human Resource

Salary for 26 days = Rs 18,000

Salary for 2 hours = $(18000 \times 2)/208 = \text{Rs } 173$

Total cost for sealing one ampoule = $\text{Rs}(32+68+176+173) = \text{Rs } 449 \approx 450$ / sample

Minutes of meeting held on 24/03/2017

1. An advisory committee has been formed to decide upon the fixing rate for sealing an ampoule under vacuum comprising the following members.
2. The detail estimation of cost on the basis of usage of oxygen cylinder, power, equipment and human resource has been done and the rate is fixed for sealing an ampoule as Rs 450/-. (Four hundred and fifty only). (Details are attached)
3. Approval of the committee members for fixing rate of sealing an ampoule using the facilities in Phase Change Memory Materials Lab has been taken.
4. All committee members have given their consent on this.
 - (i) Dr. M. Ramachandra. (CoE Coordinator & Professor, Department of Mechanical Engineering, BMSCE, Bangalore). 
 - (ii) Dr. S. Srinivas (Associate professor, Department of Mechanical Engineering, BMSCE, Bangalore, PI, CoE) 
 - (iii) Dr. Murugendrappa M V (Associate professor, Department of Physics, BMSCE, Bangalore, PI, CoE) 
 - (iv) Dr. C. Lakshminarayana (Professor & Head, Department of Electrical & Electronics Engineering, BMSCE, Bangalore) 

Submitted by


Dr. Chandasree Das

PI, CoE

Date: 04-04-2017

To,
The Principal
BMS College of Engineering,
Bengaluru

Through:
Professor and Head,
Department of Mechanical Engineering,
BMS College of Engineering,
Bengaluru

Forwarded

PROFESSOR & HEAD
Department of Mechanical Engineering
B.M.S. College of Engineering
BANGALORE - 560 017

Dear Sir,

Sub: Machining charges for Wire Cut EDM – Reg.,

As per Wire Cut EDM industries and the supplier of the Wire Cut EDM machine, the actual machining charges per hour is Rs 150/-. This includes Deionized water, electrical power, labor and wire electrode. Keeping the future maintenance and expenses on spares, the machining charges per hour can be kept at Rs 100/- for BMSCE students, Rs 200/- for outside students and Rs 300/- for industries. The emails received from the industries in this regard are enclosed for your reference. Hence we are requesting you to give permission to charge the above said amount for the usage of Wire cut EDM. Kindly do the needful.

Thanking you.

Yours' sincerely

G. Ugrasen *Dr. S. Srinivas*
Mr. Ugrasen G and Dr. S Srinivas

Principal Investigators
BMSCE

Date: 04-04-2017

Submitted to:

Principal,
BMSCE,
Bengaluru-19

Dear sir,

Sub: Machining charges for wire cut EDM

A meeting was conducted to fix the machining charges for Wire cut EDM today at 10:45am in MESH. The committee agreed to fix the amount as proposed by Mr. Ugrasen G and Dr S Srinivas. The per hour machining charges are Rs 100/- for BMSCE students, Rs 200/- for outside students and Rs 300/- for industries. This amount is fixed after discussing with supplier and other EDM industries.

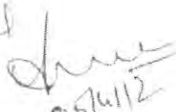
This is for your kind information and approval.

Committee Members

1. Dr. L Ravikaumar, Prof. & Head
2. Dr. M Ramachandra, Coordinator, COE
3. Mr. Ugrasen G, Principal Investigator
4. Dr. S Srinivas, Co-investigator

Signature

The block contains four handwritten signatures corresponding to the committee members listed on the left. The first signature is for Dr. L Ravikaumar, the second for Dr. M Ramachandra, the third for Mr. Ugrasen G, and the fourth for Dr. S Srinivas.

For needful
and approval

05/4/17

PP/L)

AADITYA

P R E C I S I O N

AADITYA PRECISION MOULDINGS PVT. LTD.

No. A-157/1, 3rd Cross, 1st Stage, Peenya Industrial Estate, Bangalore - 560 058.

Telephone : 080-41171317 28376393, E-mail : apml@concordunited.com

Ref: APML-BMS

Date: 04.01.2017

To,
BMS College of Engineering
Basavanagudi
Bangalore

Kind attn: Prof. Ugrasen

Dear Sir,

Sub: Quotation for wire-cut EDM job work

We thank you very much for your enquiry. We would like to inform you that we take up wire cut job work on hourly basis @ Rs.150 ~ Rs.180.00 and on Sq.mm basis @ Rs.0.10 ~ Rs.0.12 (depending on the volume).

Min. Charge is Rs. 250.00

Thanking you.

For Aaditya Precision Moulding Pvt. Ltd.



Authorized Signatory

CONCORD UNITED PRODUCTS PVT. LTD.

No. A-157, 3rd Cross, 1st Stage, Peenya Industrial Estate, Bangalore - 560 058.
Phone : 91-80-41171317, 28376393 Fax : 91-80-41171318
Email : info@concordunited.com Website : www.concordunited.com



Ref: CUPL/BMS/BLR

04.01.2017

To,
BMS College of Engineering
Bangalore

Kind attn: Mr. Ugrasen

Dear Sir,

Sub: Quote for wire cut EDM job work

With reference to our discussion, please note our wire cut job work prices are as below:

1. Hourly basis - Rs.150.00 per hour (Time calculation as per standard practice)
2. Sq.mm basis - Rs.0.10 per Sq. mm

Min. Charge is Rs. 150.00

This is for your kind information.

For Concord United Products Pvt. Ltd.

A handwritten signature in dark ink, appearing to be "J. S.", is written over the printed name of the authorized signatory.

Authorized Signatory