

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME

Phase II Sub Component 1.1



9th MEETING OF THE BOARD OF GOVERNORS

DETAILED AGENDA NOTES

Date: 17-11-2016

Time: 09.30 am

Venue: College of Engineering Karunagappally

COLLEGE OF ENGINEERING KARUNAGAPPALLY

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Background:

The meeting of Board of Governors is convened regularly to monitor the progress of TEQIP-II activities at CE Karunagappally, under Sub component 1.1, with emphasis to procurement and academic activities, and to accord necessary approvals and clearances for the ongoing activities. The 9th meeting of the BoG is being convened on 17th of November, 2016.

The agenda items are given below.

Agenda Items

Silent Prayer

Part 1-Procedural

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2.7	Ratification of the remuneration paid to foreign delegates for Key note address	28
2.8	Approval of Reimbursement of fee for PhD/MTech and Journal Publication..	29
2.9	International Conference attended by Sri. Anilkumar C V –Ratification of the amount paid.	29
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2.11	Ratification/Approval of IIC Activities	39
2.12	Report of Progress of R & D Activities	43
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Part 1

Procedural Items

1.1 Confirmation of the Minutes of the 8th Meeting of the Board of Governors held on 12-04-2016 at CE Karunagappally

The Minutes of the 8th Meeting of Board of Governors of TEQIP Phase II of CE Karunagappally held on 12-04-16 was sent to the Chairman for his approval and upon his approval copies were circulated among the other members of the BoG. A copy of the Minutes is appended as **Annexure 1** for confirmation.

Action sought: BoG may consider the Minutes for approval

1.2 Report on the action taken/action pending on the pertinent decisions in the Minutes of the 8th Meeting of the Board of Governors held on 12-04-2016 at CE Karunagappally

The decisions taken by the BOG as recorded in the Minutes of the 8th Meeting of the Board of Governors of the TEQIP Phase II held on 12-04-2016 have been noted and actions have been initiated. A report on the action taken and actions pending is presented in the Table 1.1 given below

Table 1.1

Item No in Minutes of the BOG 8th	Decision Taken	Action Taken
2	The BoG confirmed the approved minutes of the 8 th Meeting	For Information
3	Took note of the action take report and approved	For Information
4.1	The BoG took note of the procurement completed after the 8 th BOG meeting and ratified the expenditure of Rs.20,46,617 for 12 packages made in this regard.	No action needed
4.2	The BoG approved one package with price revisions and decided to cancel High Performance Cloud Computing package	The purchase the package with number 195 is effected and the other package is cancelled.
4.3	The BoG approved to cancel one package worth Rs.60,000.	No action needed
5.1	The BoG took note of the in house faculty development programmes conducted and ratified the expenditure made in this regard.	No action needed
5.2	The BoG asked to settle the bills of an in house programme post the 7 th BoG Meeting whose bill settlement is pending	Bill settlement is done.
5.3	The BoG took note of the outstation faculty and staff programmes attended and ratified the expenditure of Rs.7,82, 943.	No action needed
5.4	The BoG took note of the outstation faculty and staff programmes attended and the bill settlement in pending	The bills are settled.
5.5	The BoG took note of the conferences attended by 3 faculty and approved the expenditure.	The bill settlement is done.
5.6	The BoG took note of the Management Capacity Enhancement Programme attended by 6 faculty worth Rs. 2,29,449 and	No action needed

	conducted at Barton Hill Engineering College and ratified	
5.7-5.9	The BoG took note of the EAP activities conducted and ratified the expenditure.	No action needed
5.10	The BoG decided to ratify the payments given towards the Refund of Fees towards Membership in Professional Societies	No action needed
5.11	The BoG decided to sanction the amount incurred for journal publication to Prof.Binu V P	The amount is paid.
5.12	The BoG took note of the draft minutes of fourth RGC meeting and approved.	For Information
5.13	The BoG decided to enhance the PG Scholarship in line with the direction from SPFU to Rs.8000/- per month.	PG scholarship is given @ Rs.8000/- per month per student.
5.14	The BoG took note of the tuition fee paid towards Qualification Upgradation and ratified the expenditure of two faculty and approved the payment for three faculty members.	The payments are made.
5.15	The BoG decided to send a letter by the Hon'ble Chairman to NPIU for reimbursing the expenditure incurred in presenting a paper in the International Conference TENCON at Macau, China by Prof.AnilKumar C V	The NPIU has given the sanction and the amount was paid to Prof.Anilkumar C V
5.16	The BoG ratified the expenditure incurred for Industrial Visit of Faculty	For Information
5.17	The BoG ratified the expenditure incurred for Industrial tutoring for students	For Information
5.18	The BoG decided to give the minimal and admissible TA to students who have undergone Industrial visit	No request was received with proper bills/vouchers.
5.19	The BoG has decided to reimburse the expenditure incurred for industry internship to students @ Rs.250/- per day limiting Rs.5000/- per student for meeting boarding, lodging and travel expenses.	No request was received
5.20	The BoG approved the revision of budget of International Conference, ICCSP 2016	For Information
5.21	The BoG approved the list of planned in house academic activities for the next three months.	Out of the 15 programmes planned, only 6 programmes are conducted
5.22	The BoG approved the list of planned outstation academic activities for the next three months	Most of the faculty and staff attended out station programmes after the last BoG and the total expenditure incurred is Rs.40,64,398/-

5.23	The BoG took note of the action plan for the IIC activities and approved	23 programmes were conducted
5.24	The BoG took note of the action plan for the EAP activities and approved	For Information

Part 2

Discussion, Ratification and Approval

2.1 Expenditure incurred for procurement of goods/civil works and price revisions of various completed packages

The packages completed post the eighth BOG meeting are detailed below

Table 2.1. Details of Completed Packages Post the 8th BOG meeting

Sl. No.	Package No.	Package Name	Mode of purchase	Firm	Estimated Amount	Actual Amount	% Variation
1	TEQIP-II/KL/KL1G 18/183	PLC Trainer Kit	Shopping	M/s Vi Microsystem Pvt LTD	1,60,000	1,63,632	-2.27
2	TEQIP-II/KL/KL1G 18/203	Electrical Meters	DC	M/s Scientific Enterprices	50,000	43,577	+12.85
3	TEQIP-II/KL/KL1G 18/192	Chemistry lab Equipment	Shopping	M/s Scientific Enterprices	3,00,000	2,00,504	+33.17
4	TEQIP-II/KL/KL1G 18/185	Furniture Chair Table Almirah	Shopping	M/s KM Nadha Steel Industries	8,51,200	7,74,364	+9.03
5	TEQIP-II/KL/KL1G 18/204	Machine Lab Equipment	Shopping	M/s Scientific Enterprices	3,25,000	2,91,070	+10.44
6	TEQIP-II/KL/KL1G 18/190	Keil Development Tools	Shopping	M/s Embedded System Solution Pvt ltd	1,40,000	1,36,802	+2.28
7	TEQIP-II/KL/KL1G 18/194	Physics Lab Equipment	Shopping	M/s Holmarc Optom Mechatronics Pvt ltd	2,00,000	2,08,483	-4.24
8	TEQIP-II/KL/KL1G 18/178	Analog meter	Shopping	M/s Kelvin Labs	25,000	23,759	+4.96
9	TEQIP-II/KL/KL1G 18/197	smithy and Foundry tools	Shopping	M/s Universal Machine tools	1,00,000	1,11,618	-11.62
10	TEQIP-II/KL/KL1G 18/137	Furniture Desk Bench Tool	Shopping	M/s K M Nadha Steel Industries, Knpy	5,62,000	5,29,532	+5.78
11	TEQIP-II/KL/KL1G 18/113	Library Books EC2	Shopping	M/s cosmo books India. Pvt Ltd	1,73,000	1,62,154	+6.27
12	TEQIP-II/KL/KL1G 18/207	Embedded Development Board	Shopping	M/s Netwatch Systems	1,00,000	1,13,497	-13.50
13	TEQIP-II/KL/KL1G 18/196	High performance computing station	Shopping	M/s Smart soft	8,00,000	7,64,166	+4.48

14	TEQIP-II/KL/KL1G 18/206	Solar Driven Invertor	Shopping	M/s IGA Tech	4,00,000	4,50,000	-12.50
15	TEQIP-II/KL/KL1G 18/195	Teaching Aids in Classrooms	Shopping	M/s Avalon System and services	5,16,000	4,71,000	+8.72
16	TEQIP-II/KL/KL1G 18/202	Extension of Campus Networking	Shopping	M/s. Techser Power solutions pvt Ltd.	3,75,000	3,14,561	+16.12
16	TEQIP-II/KL/KL1G 18/194	Teachers PA Systems	Shopping	M/s.Avalon Systems	40,000	32,400	+19.00
17	TEQIP-II/KL/KL1G 18/192	Automatic power factor correction unit	Shopping	M/S.V S Associates	3,00,000	3,26,373	-8.79
18	TEQIP-II/KL/KL1G 18/184	Moderna Chair	Shopping	M/s K M Nadha Steel Industries, Knpy	1,22,000	1,22,229	-0.19
19	TEQIP-II/KL/KL1G 18/192	IEEE Journal	DC	M/s Global information system Technologies	6,19,225	6,27,281	-1.30
20	TEQIP-II/KL/KL1G 18/201	Minor Civil Works	Shopping	Cotractor Goplakrishna Pillai, Labour Contract Coopratve Society	9,00,000	688,592	+23.49
Total						65,55,594	

Action sought: The BoG may kindly ratify the completed procurements and approve the price revisions.

2.2 Packages to be cancelled

The details of packages to be cancelled and the reasons for cancellation are given below

Table 2.2 Packages to be cancelled

Sl no.	Package no	Package Name	Mode	Reason for cancellation	Estimated cost (Rs)
1	TEQIP/KL1G18/182	Satellite Receiver set	Direct Contract	It was intended for the QEEE programme. Later it was done through the NKN internet connection	6,000
2	TEQIP/KL1G18/189	Corridor surveillance system	Shopping	Since it is identified that students have no direct benefits, it is dropped.	1,00,000
3	TEQIP/KL1G18/175	Furniture Library	Shopping	Supplier not willing to supply the items	62,000

Action sought: It is requested that the cancellation of the packages may kindly be approved by the BOG.

2.3 Ratification of procurement of a new package High Performance Computing Station

A package named High Performance Cloud Computing (HPCC) was added in the previous procurement plan for an estimated cost of Rs.6,00,000. Later it was found that the actual cost of the item was very high, and the BoG was requested for price revision of the package to Rs. 800000. The BoG rejected the request for price revision and asked to modify the package. Accordingly the package has been modified in July 2016 to High Performance Computing Station with an estimated cost of Rs.8,00,000. At that time a circular from NPIU was received directing that the procurement had to be completed within 31st July 2016. In order to effect the procurement within the allotted period the procurement procedure was started after getting the sanction from the Hon'ble Chairman and other BoG members by circulating an agenda note for necessary approval.

Action Sought: The BoG may kindly take note of this and ratify the approval given.

2.4 Approval of the new packages

As per the direction from NPIU, the interest amount accrued from the fund available in the TEQIP account should also be utilized. The Table 2.3 shows the consolidated expenditure details and the balance amount available for procurement activities

Table 2.3 Consolidated expenditure details and the balance amount available for procurement activities

Total Amount allocated for Procurement (Rs in lakhs)	Number of Packages Completed	Total amount spent as on 15 th Oct 2016 (Rs) for Procurement	Interest amount accrued so far (Rs)	More interest amount expected till March 2017 (Rs)	Total amount of interest expected till March 2017 (R)	Amount of interest available for procurement-55% of interest (Rs)
550	118	5,54,37,628	14,91,636	50,000	15,41,636	8,47,900

A total amount of Rs.14,91,636 has been credited to the TEQIP account so far as the interest and it is expected that a further amount of Rs.50,000 will be credited to the account before the closure of the project. Since the project period has been extended up to March 2017 and the period for the procurement activities has also been extended up to January 2017, in order to utilise the interest amount, it is desired to add the new packages as per the Table 2.4. The new items were prepared according to the requirements of various departments based on the balance amount available.

Table 2.4 List of new items to be added

Sl No.	Item	Quantity	Mode	Estimate (Rs)
1	Digital Multimeter	20	Direct Contract	50,000
2	Ultraviolet exposing unit for PCB	1	Direct Contract	25,000
3	Digital clamp power meter with storage	1	Direct Contract	25,000
4	Renovation of Hardware and Networking lab	1	Shopping	1,00,000
5	Distilled Water Plant	1	Shopping	60,000
6	Dumpy level	1	Direct Contract	25,000
Total				2,85,000

Action Sought: The BOG may kindly approve the list of items to be added in the revised procurement plan.

2.5 Approval of the various Academic programs conducted/attended by faculty and staff.

The tables below summarize the in-house and out-station training programmes, as well as conferences within the country attended by the faculty and staff of the institute, post the last BOG meeting.

2.5.1 Faculty Development Programme – In-house

Sl. No.	Title of the Programme	Dept	Duration & date	Co-ordinator	Expenditure (Rs.)	IRG (Rs)
1	Workshop On Computer Vision And Techniques Application	CS	17-19 March 2016	Geetha S	1,07,428	6,000
2	Workshop On Fuzzy Logic And Ann Applications In Engineering	EE	18-23 April 2016	Raju M	1,60,241	5,000
3	Pre Conference Workshop On Recent	EC	20-23 June 2016	Dr. Gopakumar C	1,10,445	1,000

	Trends In Computing, Communication And Signal Processing					
4	Big Data Networking And Platforms Design And Application	EC	07 July 2016	Dr. Gopakumar C	8,620	Nil
5	Biomedical Image And Signal Processing	CS	3-5 Aug 16	Remya R S	69,096	1,500
6	How To Do A Good Ph. D And How To Write Papers/ Thesis Using Latex	EE	2- 6 May 2016	Libi A	1,86,022	6,000
Total					6,41,842	

Action sought: BOG may kindly take note and ratify expenditure.

2.5.2 Faculty Development Programme/Workshop/Seminar attended outstation by faculty

Sl. No	Name Of Faculty	Title Of The Programme	Dates Attended	Institution	Advance Amount (Rs)	Expenditure (Rs)
1	Aswathy S S	FDP On Estimation And Detection Theory	10-12 Feb 2016	CE Cherthala	Nil	2308
2	C V Anilkumar	Pedagogical Training Programme	7- 9 April 2016	Teaching Learning Centre, IIT Madras	5000	8047
3	Premakumary K R	Pedagogical Training Programme	7- 9 April 2016	Teaching Learning Centre, IIT Madras	5000	8047
4	Bajju V	Pedagogical Training Programme	7-9 April 2016	Teaching Learning Centre, IIT Madras	5000	8486
5	Binu V P	Pedagogical Training Programme	5-7 May 2016	Teaching Learning Centre, IIT Madras	7000	9487
6	Geetha S	Pedagogical Training Programme	5-7 May 2016	Teaching Learning Centre, IIT Madras	7000	8195
7	Dr. C. Gopakumar	Pedagogical Training Programme	5-7 May 2016	Teaching Learning Centre, IIT Madras	7000	9150
8	Remya R S	Pedagogical Training Programme	5-7 May 2016	Teaching Learning Centre, IIT Madras	7000	9135
9	Shani Raj	Pedagogical Training Programme	5-7 May 2016	Teaching Learning Centre, IIT Madras	7000	8195
10	Shiny C	Pedagogical Training	5-7 May 2016	Teaching Learning Centre,	7000	9135

		Programme		IIT Madras		
11	Smitha P	Pedagogical Training Programme	5-7 May 2016	Teaching Learning Centre, IIT Madras	7000	8541
12	Binu Vp	Cyber Defense And Forensic Investigation	25-29 July 2016	ESCI Hyderabad	30000	38603
13	Libi A	Power Industry Familiarization For Engg. Faculty	25 Aug 2016 - 27 Aug 2016	PETARC, Moolamattom	13800	15828
14	Haseena P Y	Power Industry Familiarization For Engg. Faculty	25 Aug 2016 - 27 Aug 2016	PETARC, Moolamattom	13800	15828
15	Deepa A K	Power Industry Familiarization For Engg. Faculty	25 Aug 2016 - 27 Aug 2016	PETARC, Moolamattom	13800	15878
16	Sylish S V	Power Industry Familiarization For Engg. Faculty	25 Aug 2016 - 27 Aug 2016	PETARC, Moolamattom	13800	15878
17	Raju M	Application Of Custom Power Devices For Power Quality Improvement	06 Oct 2016 08 Oct 2016	MNIT, Jaipur	20000	23152
18	Binu V P	Recent Advances In Computing	18 April 2016 - 22 April 2016	IHRD Model Engineering College, Thrikkakkara	35000	37240
19	Geetha S	Recent Advances In Computing	18 April 2016 - 22 April 2016	IHRD Model Engineering College, Thrikkakkara	35000	36968
20	Jisy Raju	Recent Advances In Computing	18 April 2016 - 22 April 2016	IHRD Model Engineering College, Thrikkakkara	35000	36558
21	Jyothi R L	Recent Advances In Computing	18 April 2016 - 22 April 2016	IHRD Model Engineering College, Thrikkakkara	35000	36968
22	Manoj Ray D	Recent Advances In Computing	18 April 2016 - 22 April 2016	IHRD Model Engineering College, Thrikkakkara	35000	35000
23	Shani Raj	Recent Advances In Computing	18 April 2016 - 22 April 2016	IHRD Model Engineering College, Thrikkakkara	35000	36968
24	Smitha P	Recent Advances In	18 April 2016 -	IHRD Model Engineering College,	35000	37158

		Computing	22 April 2016	Thrikkakkara		
25	Subeena H	Recent Advances In Computing	18 April 2016 - 22 April 2016	IHRD Model Engineering College, Thrikkakkara	35000	36558
26	Anu Mohan	Advanced Linux Administration	18 April 2016 - 22 April 2016	IHRD Model Finishing School, Thiruvananthapuram	35000	36469
27	Arya Ap	Advanced Linux Administration	18 April 2016 - 22 April 2016	IHRD Model Finishing School, Thiruvananthapuram	35000	36469
28	Aryachandran S	Advanced Linux Administration	18 April 2016 - 22 April 2016	IHRD Model Finishing School, Thiruvananthapuram	35000	36469
29	Nimmi V	Advanced Linux Administration	18 April 2016 - 22 April 2016	IHRD Model Finishing School, Thiruvananthapuram	35000	36469
30	Remya R S	Advanced Linux Administration	18 April 2016 - 22 April 2016	IHRD Model Finishing School, Thiruvananthapuram	35000	36895
31	Prasanthi R S	Advanced Linux Administration	18 April 2016 - 22 April 2016	IHRD Model Finishing School, Thiruvananthapuram	35000	36469
32	Sheela R	Advanced Linux Administration	18 April 2016 - 22 April 2016	IHRD Model Finishing School, Thiruvananthapuram	35000	37001
33	Sree S Bhagya	Advanced Linux Administration	18 April 2016 - 22 April 2016	IHRD Model Finishing School, Thiruvananthapuram	35000	36469
34	Vidya S	Advanced Linux Administration	18 April 2016 - 22 April 2016	IHRD Model Finishing School, Thiruvananthapuram	35000	36469
35	Ajmal K	Control And Optimization Techniques : An Engineering Approach	25 April 2016 - 29 April 2016	IHRD Model Engineering College, Thrikkakkara	35000	36558
36	C V Anilkumar	Control And Optimization Techniques : An Engineering Approach	25 April 2016 - 29 April 2016	IHRD Model Engineering College, Thrikkakkara	35000	37208
37	Haseena P Y	Control And Optimization Techniques : An	25 April 2016 - 29 April	IHRD Model Engineering College, Thrikkakkara	35000	37080

		Engineering Approach	2016			
38	Libi A	Control And Optimization Techniques : An Engineering Approach	25 April 2016 - 29 April 2016	IHRD Model Engineering College, Thrikkakkara	35000	37208
39	Reshma Itiachan	Control And Optimization Techniques : An Engineering Approach	25 April 2016 - 29 April 2016	IHRD Model Engineering College, Thrikkakkara	35000	36558
40	Revikumar Thampi V R	Control And Optimization Techniques : An Engineering Approach	25 April 2016 - 29 April 2016	IHRD Model Engineering College, Thrikkakkara	35000	37208
41	Alkha Mohan	Advances In Automation And Computing	25 April 2016 - 29 April 2016	IHRD Model Finishing School, Thiruvananthapuram	35000	36510
42	Arya Chandran	Advances In Automation And Computing	25 April 2016 - 29 April 2016	IHRD Model Finishing School, Thiruvananthapuram	35000	36510
43	Deepa T R	Advances In Automation And Computing	25 April 2016 - 29 April 2016	IHRD Model Finishing School, Thiruvananthapuram	35000	36920
44	Ganesh R	Advances In Automation And Computing	25 April 2016 - 29 April 2016	IHRD Model Finishing School, Thiruvananthapuram	35000	36920
45	Jayakrishnan	Advances In Automation And Computing	25 April 2016 - 29 April 2016	IHRD Model Finishing School, Thiruvananthapuram	35000	36510
46	Nimmi V	Advances In Automation And Computing	25 April 2016 - 29 April 2016	IHRD Model Finishing School, Thiruvananthapuram	35000	36510
47	Remya R S	Advances In Automation And Computing	25 April 2016 - 29 April 2016	IHRD Model Finishing School, Thiruvananthapuram	35000	36920
48	Sabeena	Advances In Automation And Computing	25 April 2016 - 29 April 2016	IHRD Model Finishing School, Thiruvananthapuram	35000	36920
49	Sree S Bhagya	Advances In Automation And Computing	25 April 2016 - 29 April 2016	IHRD Model Finishing School, Thiruvananthapuram	35000	36510
50	Sylsh S V	Advances In Automation And	25 April 2016 -	IHRD Model Finishing School,	35000	37033

		Computing	29 April 2016	Thiruvananthapuram		
51	Vidya	Advances In Automation And Computing	25 April 2016 - 29 April 2016	IHRD Model Finishing School, Thiruvananthapuram	35000	36510
52	Binu V P	Recent Trends In Data Mining Techniques	23 May 2016 - 27 May 2016	IHRD College Of Engineering, Kallooppara	35000	37193
53	Shani Raj	Recent Trends In Data Mining Techniques	23 May 2016 - 27 May 2016	IHRD College Of Engineering, Kallooppara	35000	36968
54	Remya R S	Recent Trends In Data Mining Techniques	23 May 2016 - 27 May 2016	IHRD College Of Engineering, Kallooppara	35000	36968
55	Sylish S V	Recent Trends In Data Mining Techniques	23 May 2016 - 27 May 2016	IHRD College Of Engineering, Kallooppara	35000	36968
56	Reji Thankachan	Recent Trends In Data Mining Techniques	23 May 2016 - 27 May 2016	IHRD College Of Engineering, Kallooppara	35000	36968
57	Retheekumary S	FDP On Semi Conductor Devices, Circuits And Systems - With A Research Perspective	4 July 2016 - 9 July 2016	IHRD, Model Finishing School, Thiruvananthapuram	35000	37033
58	Santhi Vijai	FDP On Semi Conductor Devices, Circuits And Systems - With A Research Perspective	4 July 2016 - 9 July 2016	IHRD, Model Finishing School, Thiruvananthapuram	35000	36526
59	Shamna S S	FDP On Semi Conductor Devices, Circuits And Systems - With A Research Perspective	4 July 2016 - 9 July 2016	IHRD, Model Finishing School, Thiruvananthapuram	35000	36526
60	Subeena H	FDP On Semi Conductor Devices, Circuits And Systems - With A Research Perspective	4 July 2016 - 9 July 2016	IHRD, Model Finishing School, Thiruvananthapuram	35000	36526

61	Niyas S K	FDP On Semi Conductor Devices, Circuits And Systems - With A Research Perspective	4 July 2016 - 9 July 2016	IHRD, Model Finishing School, Thiruvananthapuram	35000	36526
62	Sabeena K	Cyber Security: An Investigator's Perspective	18 July 2016 - 22 July 2016	IHRD, Model Finishing School, Thiruvananthapuram	35000	36920
63	Jyothi R L	Cyber Security: An Investigator's Perspective	18 July 2016 - 22 July 2016	IHRD, Model Finishing School, Thiruvananthapuram	35000	36920
64	Retheekumary S	Cyber Security: An Investigator's Perspective	18 July 2016 - 22 July 2016	IHRD, Model Finishing School, Thiruvananthapuram	35000	37033
65	Sheela R	Cyber Security: An Investigator's Perspective	18 July 2016 - 22 July 2016	IHRD, Model Finishing School, Thiruvananthapuram	35000	37033
66	Remya R S	Cyber Security: An Investigator's Perspective	18 July 2016 - 22 July 2016	IHRD, Model Finishing School, Thiruvananthapuram	35000	36920
67	Ganesh B	Cyber Security: An Investigator's Perspective	18 July 2016 - 22 July 2016	IHRD, Model Finishing School, Thiruvananthapuram	35000	36920
68	Shani Raj	Cyber Security: An Investigator's Perspective	18 July 2016 - 22 July 2016	IHRD, Model Finishing School, Thiruvananthapuram	35000	36920
69	Geetha S	Cyber Security: An Investigator's Perspective	18 July 2016 - 22 July 2016	IHRD, Model Finishing School, Thiruvananthapuram	35000	36920
70	Dr. Geetha S	Cyber Security: An Investigator's Perspective	18 July 2016 - 22 July 2016	IHRD, Model Finishing School, Thiruvananthapuram	35000	37033
71	Revikumar Thampi	Cyber Security: An Investigator's Perspective	18 July 2016 - 22 July 2016	IHRD, Model Finishing School, Thiruvananthapuram	35000	36920
72	Binu V P	Computer Simulation And Visualization Tools For Research	11 July 2016 - 15 July 2016	IHRD, Model Engineering College, Thrikakkara	35000	37192
73	Manoj Ray D	Computer Simulation And Visualization Tools For	11 July 2016 - 15 July 2016	IHRD, Model Engineering College, Thrikakkara	35000	35000

		Research				
74	Sheena S Nowshad	Computer Simulation And Visualization Tools For Research	11 July 2016 - 15 July 2016	IHRD, Model Engineering College, Thrikakkara	35000	36648
75	Sethu Lekshmi U S	Computer Simulation And Visualization Tools For Research	11 July 2016 - 15 July 2016	IHRD, Model Engineering College, Thrikakkara	35000	36648
76	Tintumol C R	Computer Simulation And Visualization Tools For Research	11 July 2016 - 15 July 2016	IHRD, Model Engineering College, Thrikakkara	35000	36648
77	Alkha Mohan	Research Trends In Computer Algorithm	25 July 2016 - 29 July 2016	IHRD, Model Engineering College, Thrikakkara	35000	36558
78	Aryachandran S	Research Trends In Computer Algorithm	25 July 2016 - 29 July 2016	IHRD, Model Engineering College, Thrikakkara	35000	36558
79	Hariharan	Research Trends In Computer Algorithm	25 July 2016 - 29 July 2016	IHRD, Model Engineering College, Thrikakkara	35000	36558
80	Manoj Ray D	Research Trends In Computer Algorithm	25 July 2016 - 29 July 2016	IHRD, Model Engineering College, Thrikakkara	35000	35000
81	Swetha Saira Appoose	Research Trends In Computer Algorithm	25 July 2016 - 29 July 2016	IHRD, Model Engineering College, Thrikakkara	35000	36558
82	Baiju V	Current Trends In Non - Conventional Energy Based Systems	29 Aug 2016 - 2 Sept2016	IHRD College Of Engineering, Chengannur	35000	36704
83	Libi A	Current Trends In Non - Conventional Energy Based Systems	29 Aug 2016 - 2 Sept2016	IHRD College Of Engineering, Chengannur	35000	36704
84	Manu Madhavan	Current Trends In Non - Conventional Energy Based Systems	29 Aug 2016 - 2 Sept2016	IHRD College Of Engineering, Chengannur	35000	36294
85	Revikumar Thampi V R	Essentials Of Energy Management	01 Aug 2016 - 05	IHRD Model Engineering College, Ernakulam	35000	36960

			Aug2016			
86	Dr. Ajilkumar A	Essentials Of Energy Management	01 Aug 2016 - 05 Aug2016	IHRD Model Engineering College, Ernakulam	35000	36960
87	Baiju V	Essentials Of Energy Management	01 Aug 2016 - 05 Aug2016	IHRD Model Engineering College, Ernakulam	35000	37176
88	Radhika R Chandran	Essentials Of Energy Management	01 Aug 2016 - 05 Aug2016	IHRD Model Engineering College, Ernakulam	35000	36558
89	Reshma Ittiachan	Essentials Of Energy Management	01 Aug 2016 - 05 Aug2016	IHRD Model Engineering College, Ernakulam	35000	36558
90	Seena Mathew	Essentials Of Energy Management	01 Aug 2016 - 05 Aug2016	IHRD Model Engineering College, Ernakulam	35000	36558
91	Binu V P	Eda Tools And Advances In Signal Processing	22 Aug 2016 - 26 Aug 2016	IHRD Model Engineering College, Ernakulam	35000	37193
92	Shani Raj	Eda Tools And Advances In Signal Processing	22 Aug 2016 - 26 Aug 2016	IHRD Model Engineering College, Ernakulam	35000	36968
93	Shamna S S	Eda Tools And Advances In Signal Processing	22 Aug 2016 - 26 Aug 2016	IHRD Model Engineering College, Ernakulam	35000	36462
94	Niyas S K	Eda Tools And Advances In Signal Processing	22 Aug 2016 - 26 Aug 2016	IHRD Model Engineering College, Ernakulam	35000	36462
95	Aagi S	Eda Tools And Advances In Signal Processing	22 Aug 2016 - 26 Aug 2016	IHRD Model Engineering College, Ernakulam	35000	36462
96	Dr. Gopakumar C	Knowledge On Virtual Instrumentation For Engineers	05 Sept 2016- 09 Sept 2016	College Of Engineering, Chengannur	35000	36628
97	Deepa T R	Knowledge On Virtual Instrumentation For Engineers	05 Sept 2016- 09 Sept 2016	College Of Engineering, Chengannur	35000	36628
98	Raju M	Knowledge On Virtual Instrumentation For Engineers	05 Sept 2016- 09 Sept 2016	College Of Engineering, Chengannur	35000	36662

99	Ganesh R	Mechatronics Automation And Robotics	19 Sept 2016- 23 Sept 2016	Model Engineering College, Ernakulam	35000	36911
100	Revikumar Thampi V R	Mechatronics Automation And Robotics	19 Sept 2016- 23 Sept 2016	Model Engineering College, Ernakulam	35000	36974
101	Premnath G	Mechatronics Automation And Robotics	19 Sept 2016- 23 Sept 2016	Model Engineering College, Ernakulam	35000	36974
102	Sajan J Mathew	Mechatronics Automation And Robotics	19 Sept 2016- 23 Sept 2016	Model Engineering College, Ernakulam	35000	36558
103	Deepthi P K	Power System Device And Control - Practical Aspects	3 Oct 2016- 7 Oct 2016	Model Engineering College, Thrikkakkara	35000	36458
104	Libi A	Power System Device And Control - Practical Aspects	3 Oct 2016- 7 Oct 2016	Model Engineering College, Thrikkakkara	35000	36968
105	Manu Madhavan	Power System Device And Control - Practical Aspects	3 Oct 2016- 7 Oct 2016	Model Engineering College, Thrikkakkara	35000	36458
106	Seena Mathew	Power System Device And Control - Practical Aspects	3 Oct 2016- 7 Oct 2016	Model Engineering College, Thrikkakkara	35000	36558
107	Subeena H	Power System Device And Control - Practical Aspects	3 Oct 2016- 7 Oct 2016	Model Engineering College, Thrikkakkara	35000	36458
108	Haseena P Y	Research Areas In Biomedical Engineering	26 Oct 2016- 30 Oct 2016	Model Engineering College, Ernakulam	35000	36912
109	Leena B R	Research Areas In Biomedical Engineering	26 Oct 2016- 30 Oct 2016	Model Engineering College, Ernakulam	35000	36533
110	Dr. C. Gopakumar	Recent Trends In Robotics	17 Oct 2016- 21 Oct 2016	College Of Engineering, Chengannur	35000	36966
111	Remya R S	Recent Trends In Robotics	17 Oct 2016- 21 Oct	College Of Engineering, Chengannur	Nil	35000

			2016			
112	Revikumar Thampi V R	Recent Trends In Robotics	17 Oct 2016-21 Oct 2016	College Of Engineering, Chengannur	35000	36966
113	Seena Mathew	Recent Trends In Robotics	17 Oct 2016-21 Oct 2016	College Of Engineering, Chengannur	35000	36440
114	Ganesh R	Recent Trends In Robotics	17 Oct 2016-21 Oct 2016	College Of Engineering, Chengannur	35000	36854
115	Baiju V	Recent Trends In Robotics	17 Oct 2016-21 Oct 2016	College Of Engineering, Chengannur	35000	36966
116	Aryachandran S	Recent Trends In Robotics	17 Oct 2016-21 Oct 2016	College Of Engineering, Chengannur	35000	36440
117	Hariharan R L	Recent Trends In Robotics	17 Oct 2016-21 Oct 2016	College Of Engineering, Chengannur	35000	36440
118	Dr. Geetha S	Pedagogy	18 Aug 2016 - 20 Aug2016	IIT Madras	Nil	8322
119	Aryachandran S	Pedagogy	18 Aug 2016 - 20 Aug2016	IIT Madras	Nil	3289
120	Harilal R L	Pedagogy	18 Aug 2016 - 20 Aug2016	IIT Madras	Nil	3289
121	Niyas S K	Pedagogy	18 Aug 2016 - 20 Aug2016	IIT Madras	Nil	3289
122	Sajan J Mathew	Pedagogy	18 Aug 2016 - 20 Aug2016	IIT Madras	Nil	3289
123	Santhi Vijai	Pedagogy	18 Aug 2016 - 20 Aug2016	IIT Madras	Nil	3289
124	Swetha Saira Appose	Pedagogy	18 Aug 2016 - 20 Aug2016	IIT Madras	Nil	3289

125	Sethulekshmi U S	Pedagogy	29 Sept 2016 - 1 Oct 2016	IIT Madras	Nil	3337
126	Titumol C R	Pedagogy	29 Sept 2016 - 1 Oct 2016	IIT Madras	Nil	3337
127	Sheena S Nowshad	Pedagogy	29 Sept 2016 - 1 Oct 2016	IIT Madras	Nil	3337
128	Geetha S	Medical Imaging Techniques Image Processing Workshop	25 March 2016 27 March 2016	IIT Delhi	Nil	17686
129	Remya R S	Medical Imaging Techniques Image Processing Workshop	25 March 2016 27 March 2016	IIT Delhi	Nil	10019
130	Sabeena K	Medical Imaging Techniques Image Processing Workshop	25 March 2016 27 March 2016	IIT Delhi	Nil	17686
131	Smitha P	Medical Imaging Techniques Image Processing Workshop	25 March 2016 27 March 2016	IIT Delhi	Nil	18098
132	Deepa A K	National Seminar On Techniques And Applications Of Hyper Spectral Image Analysis	19 April 2016 - 20 April 2016-	Amritha Vishwa Vidyapeedam, Coimbatore	4500	5762
133	Sylish S V	National Seminar On Techniques And Applications Of Hyper Spectral Image Analysis	19 April 2016 - 20 April 2016-	Amritha Vishwa Vidyapeedam, Coimbatore	4500	5762
134	Dr. Hari V S	Symposium Of Teaching Learning In Higher Technical Education	22 Jan 2016 23 Jan 2016	IIT Madras	9000	10555
135	Binu V P	Symposium Of Teaching Learning In Higher Technical Education	22 Jan 2016 23 Jan 2016	IIT Madras	9000	8342

Conferences attended by faculty within the country						
1	Manoj Ray D	International Conference On Innovations In Bio-Inspired Computing And Applications	16 Dec 2015 18 Dec 2015	Mir Labs, Tist Kochi, India	Nil	10429
2	Remya R S	International Conference On Information Science (ICIS '16)	12 Aug 2016 - 13 Aug 2016	CE Cherthala	7500	9518
3	Sabeena K	International Conference On Information Science (ICIS '16)	12 Aug 2016 - 13 Aug 2016	CE Cherthala	7500	9318
4	Geetha S	17 Th National Conference On Technological Trends	19 Aug 2016 - 20 Aug 2016	CET Tvm	3818	3818
Total						40,4,8023
Programmes attended but the bills to be settled						
1	Libi A	Advances In Control System	7 Nov 2016 - 11 Nov 2016	Dr. Babasaheb Ambedkar Technical University, Maharashtra	20000	
2	Haseena P Y	Advances In Control System	8 Nov 2016 - 11 Nov 2016	Dr. Babasaheb Ambedkar Technical University, Maharashtra	20000	
3	Radhika R Chandran	Dc Smart Grids: Renewable Integration, Energy Storage And System Operation	10 Nov 2016 - 14 Nov 2016	Malaviya NIT, Jaipur	10000	
4	Reshma Ittiachan	Dc Smart Grids: Renewable Integration, Energy Storage And System Operation	10 Nov 2016 - 14 Nov 2016	Malaviya NIT, Jaipur	10000	
5	Seena Mathew	Dc Smart Grids: Renewable Integration, Energy Storage And System Operation	10 Nov 2016 - 14 Nov 2016	Malaviya Nit, Jaipur	10000	
6	Sabeena K	Pedagogy	10 Nov 2016 - 12 Nov 2016	IIT Madras	2000	
7	Aagi A S	Pedagogy	11 Nov 2016 - 12 Nov 2016	IIT Madras	2000	

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Action sought: BOG may kindly take note and ratify the expenditure.

2.5.3 Management Capacity Development Programmes attended by Faculty

Sl. No	Name of Faculty	Title of the programme	Dates Attended	Institution	Amount (Rs)
1	Dr. Hari V S	Workshop On Good Governance Leadership	30-Aug-16	India Habitat Centre, New Delhi	30621
2	Dr. V P Devassia	Workshop On Good Governance Leadership	30-Aug-16	India Habitat Centre, New Delhi	2461

Action sought: BOG may kindly take note and ratify the expenditure.

2.5.4 Staff Development Programmes attended outstation by Staff

Sl. No	Name of Staff	Title of the programme	Dates Attended	Institution	Advance Amount(Rs)	Amount (Rs)
1	Binny F	Power And Control Equipment Familiarization For Non Teaching Faculties Of Engg. College	3 Aug 2016-5 Aug 2016	PETARC, Moolamattom	Nil	14575
2	Anoop S D	Power And Control Equipment Familiarization For Non Teaching Faculties Of Engg. College	27 Sept 2016-29 Sept 2016	PETARC, Moolamattom	13,800	15,371
3	Anilkumar A	Power And Control Equipment Familiarization For Non Teaching Faculties Of Engg. College	27 Sept 2016-29 Sept 2016	PETARC, Moolamattom	13,800	15,371
4	Kuryachan T D	Power And Control Equipment Familiarization For Non Teaching Faculties Of Engg. College	27 Sept 2016-29 Sept 2016	PETARC, Moolamattom	13,800	15,978
5	Manoj K Mathew	Kerala Service Rules, Mop And Financial Coding	20 Oct 2016-22 Oct 2016	College Of Engineering, Cherthala	Nil	Not Settled
6	Sheeba Mol K K	Kerala Service Rules, Mop And Financial Coding	20 Oct 2016-22 Oct 2016	College Of Engineering, Cherthala	Nil	Not Settled

7	Sandhya Murali P	Automated Accounting Using Tally Erp 9 Solution	4 Sept 2016 06 Sept 2016	College Of Engineering, Chenganoor	15,000	1,63,19
8	Shajy L	Medical Imaging Techniques Image Processing Workshop	25 March 2016 27 March 2016	IIT Delhi	Nil	12,151
9	Anilkumar A	Recent Advances In Computing	18 April 2016 - 22 April 2016	IHRD Model Engineering College, Thrikkakkar a	35,000	37,030
10	Anilkumar A	Cyber Security: An Investigator's Perspective	18 July 2016 - 22 July 2016	IHRD, Model Finishing School, Thiruvananthapuram	35,000	36,920
Total						1,63,715

Action Sought: It is requested that the exact amounts spent for various Staff Development programmes attended by the staff members of the institution after the last BOG meeting may kindly be ratified by the BOG.

2.6 Ratification of the Expenditure incurred in organizing the International Conference ICCSP 2016

The International Conference on Computer, Communication and Signal Processing (ICCCSP-2016) was organized jointly by Department of Electronics and Communication Engineering and Department of Computer Science and Engineering of College Of Engineering, Karunagappally under the sponsorship of TEQIP II on 8th and 9th of July 2016 at The Beach Hotel, Kollam. Researchers from academia and industry were present to discuss research issues with experts from various reputed institutions across India and abroad, on the recent trends in Computing, Communication and Signal Processing. The Conference was well organized and everyone appreciated the Conference Secretary Dr.Gopakumar C. A brief report of the Conference with expenditure details is attached as **Annexure 2**. The total expenditure against the budgeted amount is as shown in the Table below. A total amount of Rs.13, 80,861/- has been spent for organizing the conference against a budgeted amount of Rs.17,95,000/-. The entire expenditure along with the bills and vouchers submitted by the Conference Secretary is audited by an external auditor and scrutinized by the Finance Committee of TEQIP as well.

Item	Budget Amount (Rs)	Actual Expenditure (Rs)
Venue	4,50,00	4,49,525
Printing of Brochures and Posters	50,00	47,955
TA for resource persons	4,50,00	4,79,295
Remuneration to resource persons	1,00,00	
Accommodation	90,00	
Transportation	50,000	
Publication of Conference Proceedings	2,50,000	1,18,363
Printing of Certificates/Badges	5,000	8,560
Conference Kit	70,000	60,661
Publicity	40,000	30,300
Other Miscellaneous expenses	70,000	39,222
Stage settings and logistics	170, 000	1,46,980
Total Amount	17,95,000	13,80,861

Action Sought: The BoG may kindly take note of the expenditure and ratify the expenditure.

2.7 Ratification of the remuneration paid to foreign delegates for Key note address

As part of the International Conference on Computing, Communication and Signal Processing (ICCCSP-2016) foreign delegates were invited for Key note addressing, who were very much reputed in their fields. It was suggested in the 7th meeting of the conference executive committee held on 15.05.2016 that the honoraria that to be paid to the five foreign delegates for key note addressing might be enhanced. The matter was circulated as an agenda notes to all the BoG members. The Hon'ble Chairman approved the same and the enhanced remuneration was paid to the five foreign delegates. The agenda note for circulation is attached as **Annexure 3**.

Action sought: The BoG may kindly take note and the remuneration paid to the five foreign delegates for key note addressing may be ratified.

2.8 Approval of Reimbursement of fee for PhD/MTech and Journal Publication.

2.8.1 Smt. Anisha Mohammed, Assistant Professor in Electronics and Communication Engineering (now she is transferred to College of Engineering Kalluoppara) submitted a request for the reimbursement of tuition fee for the M.Tech programme she had undergone at NIT Kozhikkode for an amount of Rs. 159600/-. The Academic committee that met on 22.7.2016 had approved the proposal vide decision No.84.3, subject to the approval by BOG.

Action sought: The BOG may consider the request and grant necessary approval.

2.9 International Conference attended by Sri. Anilkumar C V –Ratification of the amount paid.

Sri. Anilkumar C V, Associate Professor in EC had requested to provide funding from TEQIP II under International Travel Support Scheme to present a paper in the IEEE TENCON 2015 conducted at Holiday Inn, Sands Cotai Central, Macao from 01.11.2015 to 04.11.2015. He had presented the paper titled “**A Printed Antenna with Circular Cut for Bandwidth Enhancement**” in the conference. He had gone for the conference after getting approvals from BoG, IHRD and the Government. The NPIU had approved his travel as per the letter No. dated 04-7-2016 attached as **Annexure 4**. After getting the approval from NPIU, Sri. Anilkumar C V had submitted the bills and vouchers for reimbursing the expenditure incurred for attending the conference. Accordingly the Finance Committee which met on 30.7.2016, verified the bills and receipts submitted by Mr. Anilkumar C V and gave approval for reimbursement of Rs 1,70,882/- as per the decision no.149.1. Hence an amount of Rs. 1,70,882/- was paid to Sri. Anilkumar C V.

Action Sought: The BOG may kindly ratify the amount paid to Mr. Anilkumar C V, Associate Professor in EC for meeting the expenses towards travel, boarding/lodging and registration fee in attending the international conference IEEE TENCON 2015 conducted at Holiday Inn, Sands Cotai Central, Macao under ITSS.

2.10 Approval of the In-house and outstation programmes for faculty and staff for the next three months

2.10.1 In-house training Programmes planned for the next three months

The detailed proposal of in-house training programmes planned for the next 3 months is shown in the following table.

Department : Electronics and Communication							
No	Name of Coordinator	Course	Tentative date	Type (workshop/training)	Duration	Participation expected	Expenditure (Rs)
1	Mrs. Deepa A. K.	FSP on Recent Research Trends in Digital Image Processing	Dec 16	Training Programme	5 Days	35	60,000
2	Mr. Reji Thankachan	Introduction to EDA	Dec 16	FSD	5 Days	35	60,000
Total							1,20,000
Department : Electrical Engineering							
No	Name of Coordinator	Course	Tentative date	Type (workshop/training)	Duration	Participation expected	Expenditure (Rs)
1	Radhika Sajan Seena Mathew	Power Electronics Applications	Jan2017	Training	5 days	50	1,40,000
2	Reshma Deepthi Manu	Electrical System Design	Feb 2017	Training	5 days	50	1,40,000
Total							2,80,000
Department : Computer Science & Engineering/ IT							
No	Name of Coordinator	Course	Tentative date	Type (workshop/training)	Duration	Participation expected	Expenditure (Rs)
1	Sabeena K , Geetha S	Machine Learning Algorithm using Open source tools	December,2016	Training	3 days	35	75,000
2	Shani Raj, Jyothi R L	Number Theory and cryptography	January,2017	Training	5 days	35	1,00,000
Total							1,75,000
Administrative Staff							
1	Manoj	MOP and KSR	Dec 16	Training	3days	30	70,000
2	Anitha	Interpersonal Relation and Time Management	Feb 17	Training	3days	30	70,000

2.10.2 Outstation Training Programmes planned for the next three months

The detailed proposal of outstation training programmes planned for the next 3 months is shown in the following table. The list is prepared based on the courses available in the web site of various Institutions.

Department : Electronics and Communication						
No	Name	Course	Tentative date	Durati on in Days	Institution	Approx Expenditu re (Rs)
1	Dr. Hari V.S.	"Hands on training in open source tools in kernel programming and programming" Organizhe	DEC 5-9	5 Days	MEC/CEATT	40000
		CS/EC DEPT	27/2/2017-3/3/2017	5 Days	CE Chengannur	40000
2	Dr. Gopakumar C	International Short Course on "Advance Optimization Techniques (AOT-16)" under Malavia NIT, Jaipore.	November 21-25, 2016	5 Days	Malaviya National Institute of Technology Jaipur.	45,000
		Transforms	13/12/2016 - 17/12/2016	5 Days	CE Kallooppa	40000
		CS/EC DEPT	27/2/2017-3/3/2017	5 Days	CE Chengannur	40000
3	Mrs. Shiny C.	NBA Accreditaton ESCI Hyderabad	Dec 6-8 , 2016	3 Days	ESCI Hyderabad	25000
		Digital Signal Processing	13/3/2017-17/3/2017	5 Days	MEC,EKM	40000
		CS/EC DEPT	6/2/2016-10/2/2016	5 Days	Kottarakara	40000
4	Mrs. Deepa A. K.	National workshop on Image Processing on Biomedical Application	Dec 16-17	2 Days	Amritha Viswa Vidya peetham	6000
		Interpersonal Skills Effectiveness And Emotional Intelligence	DEC 6-8	3 Days	ESCI Hydeabad	40000
		CS/EC DEPT	27/2/2017-3/3/2017	5 Days	CE Chengannur	40000

		Transforms	13/12/2016 - 17/12/2016	5 Days	CE Kallooppara	40000
5	Deepa T R	NBA Accreditation ESCI Hyderabad	Dec 6-8 , 2016	3 Days	ESCI Hyderabad	30000
		Maths for Signal Processing	2/1/2017- 6/1/2017	5 Days	MEC,EKM	40000
		Digital Signal Processing	13/3/2017- 17/3/2017	5 Days	MEC, EKM	40000
		CS/EC dept	6/2/2016- 10/2/2016	5 Days	Kottarakkara	40000
6	Mr. Sylish S. V.	National workshop on Image Processing on Biomedical Application	Dec 16-17	3 Days	Amritha Viswa Vidya peetham	6000
		"Hands on training in open source tools in kernel programming and programming"	DEC 5-9	5 Days	MEC/CEATT	40000
		CS/EC DEPT	27/2/2017- 3/3/2017	5 Days	CE, Chengannur	40000
7	Mr. Reji Thankachan	One Week course on "Cyber Crime Investigation and Digital Forensics" NIT GOA	Nov 30- Dec 6 , 2016	One week	NIT GOA	40000
		Maths for Signal Processing	2/1/2017- 6/1/2017	5 Days	MEC,EKM	40000
		Digital Signal Processing	13/3/2017- 17/3/2017	5 Days	MEC, EKM	40000
8	Niyas S K	FDP on "Speech signal Processing " NIT Warrangal	21-11-2016 to 26-11- 2016	5 Days	NIT Warrangal	45,000
		Maths for Signal Processing	2/1/2017- 6/1/2017	5 Days	MEC,EKM	40000
		DSP	13/03/2017 to 17/03/2017	5 Days	TVM	40000
9	Ms. Leena B. R.	FDP on "Speech signal Processing " NIT Warrangal	21-11-2016 to 26-11- 2016	5 Days 10 Days	NIT Warrangal	45,000
		Maths for Signal Processing	2/1/2017- 6/1/2017	5 Days	MEC,EKM	40000

		CS/EC DEPT	27/2/2017-3/3/2017	5 Days	CE, Chengannur	40000
10	Mrs. Santhi Vijai	FDP on "Speech signal Processing " NIT Warrangal	21-11-2016 to 26-11-2016	5 Days 10 Days	NIT Warrangal	45,000
11	Shamna	FDP on "Real Time Embedded Systems and IoT, it's Applications " NIT Warrangal	05-12-2016 to 10-12-2016	5 Days	Vardhaman college of Engineering, Hyderabad	45,000
		Maths for Signal Processing	2/1/2017-6/1/2017	5 Days	MEC , EKM	40,000
		Transforms	13/12/2016 - 17/12/2016	5 Days	CE Kallooppa	40,000
12	Subeena	FDP on "Real Time Embedded Systems and IoT, it's Applications " NIT Warrangal	05-12-2016 to 10-12-2016	5 Days	Vardhaman college of Engineering, Hyderabad	45,000
		Maths for Signal Processing	2/1/2017-6/1/2017	5 Days	MEC , EKM	40,000
		"Hands on training in open source tools in kernel programming and programming" Organizhe	DEC 5-9	5 Days	MEC/CEATT	40,000
Total						13,37,000
Department :General Engineering						
No	Name	Course	Tentative date	Durati on in Days	Institution	Approx Expenditure (Rs)
1	Dr.Ajilkumar A	FDP on Thermal Engineering	Dec 16	5	IHRD College	36,000
		Make in India :Dreams to reality	Jan 3-14,2016	12	IIT Roorkee	40,000
		FDP on Design of Thermal Systems	Feb 16	5	IHRD College	36,000
2	Baiju V	Product Design and Innovation using CFD and FEM	Dec 27-31,2016	5	IIT(BHU),Varanasi	45,000
		FDP on Design Engineering	Jan 9-13	5	IHRD College	36,000
3	Premnath G	FDP on Computer Aided Drafting and Design	Nov 28-Dec 2, 2016	5	MFS Ernakulam	36,000

		Product Design and Innovation using CFD and FEM	Dec 27-31,2016	5	IIT(BHU),Varanasi	45000
4	Ganesh R	FDP on Thermal Engineering	Dec 16	5	IHRD College	36,000
		Product Design and Innovation using CFD and FEM	Dec 27-31,2016	5	IIT(BHU),Varanasi	40000
5	Ravikumar thampi	Advanced Composite Structures	Dec 17-20,2016	4	IIT, Kharagpur	40000
		FDP on Design Engineering	Jan 9-13	5	IHRD College	36,000
Total						4,26,000
Department :Electrical Engineering						
No	Name	Course	Tentative date	Durati on In Days	Institution	Approx Expenditure (Rs)
1	Libi A	Advances in Control Systems	07/11/16 – 11/11/16	5 Days	DBATU LONERE	42000
		National seminar on Control system design	14/12/16 – 16/12/16	3 Days	IIST Trivandrum	12000
		Maths for Signal Processing	02/01/17 - 06/01/17	5 Days	M E C Ernakulam	40,000
		DSP	13/03/17- 17/03/17	5 Days	Model Finishing School	40,000
2	Haseena P Y	Advances in Control Systems	07/11/16 – 11/11/16	5 Days	DBATU LONERE	42000
		National seminar on Control system design	14/12/16 – 16/12/16	3 Days	IIST Trivandrum	12000
		Maths for Signal Processing	02/01/17 - 06/01/17	5 Days	M E C Ernakulam	40,000
		DSP	13/03/17- 17/03/17	5 Days	Model Finishing School	40,000
3	Raju M	Technology enabled teaching & learning	12/12/16 – 16/12/16	5 Days	IIM Kozhikkodu	35,000
		Laboratory Management System Awareness & Internalauditing	17/01/17 – 20/01/17	4 Days	ESCI Hyderabad	30,000
		Life Skill	20/03/17 – 24/03/17	5 Days	M E C Ernakulam	40,000
4	ReshmaIttiachan	DC Smart Grids-Renewable Integration	10/11/16- 14/11/16	5 Days	MNIT Jaipur	30000
		Mechatronics, MEMS & Micro fabrication	19/12/16 – 23/12/16	5 Days	IIT Indore	25000

		EEE Course	20/02/17 – 24/02/17	5 Days	M E C Ernakulam	40,000
5	Radhika R	DC Smart Grids- Renewable Integration	10/11/16- 14/11/16	5 Days	MNIT Jaipur	30,000
		Design Engg	23/01/17 – 27/01/17	5 Days	CE Chengannur	30,000
6	Seena Mathew	DC Smart Grids- Renewable Integration	10/11/16- 14/11/16	5 Days	MNIT Jaipur	35,000
		Mechatronics, MEMS & Micro fabrication	19/12/16 – 23/12/16	5 Days	IIT Indore	40,000
		EEE Course	20/02/17 – 24/02/17	5 Days	M E C Ernakulam	40,000
7	Sajan Mathew	Recent Advances in alternate Energy sources	05/12/16 – 10/12/16	6 Days	NIT Goa	40,000
		Life Skill	20/03/17 – 24/03/17	5 Days	M E C Ernakulam	40,000
8	Deepthi P K	Mechatronics, MEMS & Micro fabrication	19/12/16 – 23/12/16	5 Days	IIT Indore	40,000
9	Anil Kumar V	Laboratory Management System Awareness & Internalauditing	17/01/17 – 20/01/17	4 Days	ESCI Hyderabad	40,000
10	Manu Madhavan	Design Engg	23/01/17 – 27/01/17	5 Days	CE Chengannur	40,000
Total						8,43,000
Department : Computer Science & Engineering/ IT						
No	Name	Course	Tentative date	Durati on In Days	Institution	Approx Expenditure (Rs)
1	Binu V P	Mobile systems security	Nov 21-25	4 Days	IIIT Kota	40,000
		Technology Enabled Teaching and Learning	Dec 12-16	5 Days	IIM-K	35,000
		Workshop on Quality Initiatives in Technical & Higher Educational Institutions (In Compliance with NBA & NAAC Accreditation)	Dec 6-8	3 Days	ESCI	25,000
		Maths for Signal Processing	Jan 2- 6,2017	5 Days	MEC	40,000
		Life Skills	Mar 20- 24,2017	5 Days	MEC	40,000
2	Smitha P	Deep Learning and Applications	Jan12- 16,2017	5 Days	IIT Kanpur	35,000

		Brain Science and Technology	Dec 14-18,2016	5 Days	IIT Delhi	35,000
		Hands on training in open source tools	Dec 5-Dec 9,2016	5 Days	MFS,TVM	40,000
		Computer Science Course	Feb 6-10,2017	5 Days	College Of EngineeringKottarakkara	40,000
3	Anilkumar A	Advancement of Signal Processing in Earth Observation	Dec 5-9,2016	5 Days	IIT Roorke	40,000
		Deep Learning and Applications	Jan12-16,2017	5 Days	IIT Kanpur	35,000
		Maths for Signal Processing	Jan 2-6,2017	5 Days	MEC	40,000
		Computer Science Course	Feb 27-March 3,2017	5 Days	College Of Engineering Chengannur	40,000
4	Geetha S	Optimization Techniques	Nov 21-25	4 Days	MNIT, Jaipur	40,000
		Deep Learning and Applications	Jan12-16,2017	5 Days	IIT Kanpur	35,000
		Maths for Signal Processing	Jan 2-6,2017	5 Days	MEC	40,000
		Hands on training in open source tools	Dec 5-Dec 9,2016	5 Days	MEC	40,000
5	Sabeena K	Optimization Techniques	Nov 21-25	4 Days	MNIT, Jaipur	40,000
		Hands on training in open source tools	Dec 5-Dec 9,2016	5 Days	MFS,TVM	40,000
		Maths for Signal Processing	Jan 2-6,2017	5 Days	MEC	40,000
		Deep Learning and Applications	Jan12-16,2017	5 Days	IIT Kanpur	35,000
6	Jyothi R L	Advancement of Signal Processing in Earth Observation	Dec 5-9,2016	5 Days	IIT Roorke	40,000
		Deep Learning and Applications	Jan12-16,2017	5 Days	IIT Kanpur	35,000
		Maths for Signal Processing	Jan 2-6,2017	5 Days	MEC	40,000

		Life skills	Mar 20-24,2017	5 Days	MEC	40,000
7	Shani Raj	Mobile systems security	Nov 21-25	4 Days	IIIT Kota	40,000
		Workshop on Quality Initiatives in Technical & Higher Educational Institutions (In Compliance with NBA & NAAC Accreditation)	Dec 6-8	3 Days	ESCI	25,000
		Computer Science Course	Feb 6-10,2017	5 Days	College Of Engineering Kottarakkara	40,000
		Life Skills	Mar 20-24,2017	5 days	MEC	40,000
8	Shajy L	Computer Science Course	Feb 6-10,2017	5 Days	College Of Engineering Kottarakkara	40,000
		Computer Science Course	Jan 16 - 20,2017	5 Days	College Of Engineering Chengannur	40,000
		DSP	March 3-17,2016	5 days	MFS,TVM	40,000
9	Alkha Mohan	Hands on Training in open source tools in kernel programming & Administration	Dec 5-Dec 9,2016	5 days	MFS,TVM	40,000
		Computer Science Course	Feb 6-10,2017	5 Days	College Of Engineering Kottarakkara	40,000
10	Arya Chandran	Research Simulations and Predictive Analysis using Open Source Tools	Nov14-18,2016	5 Days	MEC	40,000
		Computer Science Course	Jan 16 - 20,2017	5 Days	College Of Engineering Kottarakkara	40,000
		Computer Science Course	Feb 27-March 3,2017	5 Days	College Of Engineering Chengannur	40,000
11	Hariharan R L	Research Simulations and Predictive Analysis using Open Source Tools	Nov14-18,2016	5 Days	MEC	40,000

		Hands on Training in open source tools in kernel programming & Administration	Dec 5-Dec 9,2016	5 days	MFS,TVM	40,000
		Computer Science Course	Jan 16 - 20,2017	5 Days	College Of Engineering Chengannur	40,000
12	Aagi A S	Computer Aided Drafting and Design”	Nov28-Dec 2,2016	5 Days	MEC	40,000
		Computer Science Course	Feb 6- 10,2017	5 Days	College Of Engineering Kottarakkara	40,000
13	Tintumol C R	Research Simulations and Predictive Analysis using Open Source Tools	Nov14- 18,2016	5 Days	MEC	40,000
		Computer Science Course	Jan 16 - 20,2017	5 Days	College Of Engineering Chengannur	40,000
14	Sheena S Noushad	Research Simulations and Predictive Analysis using Open Source Tools	Nov14- 18,2016	5 Days	MEC	40,000
		Computer Science Course	Jan 16 - 20,2017	5 Days	College Of Engineering Chengannur	40,000
15	Swetha Saira Apose	Computer Aided Drafting and Design”	Nov28-Dec 2,2016	5 Days	MEC	40,000
		Hands on Training in open source tools in kernel programming & Administration	Dec 5-Dec 9,2016	5 days	MFS,TVM	40,000
15	SethuLekshmi U S	Research Simulations and Predictive Analysis using Open Source Tools	Nov14- 18,2016	5 Days	MEC	40,000
		Computer Science Course	Feb 27- March 3,2017	5 Days	College Of Engineering Chengannur	40,000
16	Remya R S	Hands on Training in open source tools in kernel programming & Administration	Dec 5-Dec 9,2016	5 days	MFS,TVM	40,000

	Deep Learning and Applications	Jan12-16,2017	5 days	IIT Kanpur	35,000
	Computer Science Course	Feb 27-March 3,2017	5 Days	College Of Engineering Chengannur	40,000
	Workshop on Quality Initiatives in Technical & Higher Educational Institutions (In Compliance with NBA & NAAC Accreditation)	Dec 6-8	3 days	ESCI	25,000
	Brain Science and Technology	Dec 14-18,2016	5 days	IIT Delhi	35,000
	DSP	March 3-17,2016	5 days	MFS,TVM	40,000
	Total				21,50,000

Action sought: It is requested that the proposals for the in-house and outstation programmes for the next three months may kindly be approved by the BOG.

2.10.3 Approval for Management Capacity Enhancement Programmes.

As per the PIP of TEQIP II, improving managerial and administrative abilities of Heads of Institutions, Deans, Heads of Departments, senior faculty and officials through specifically designed training programmes is an important Project activity to support effective implementation of reforms, to improve development, planning and implementation, and monitoring. The expected outcomes are enhanced management capacity, helping the institution to gain improved internal and external efficiencies. The expenditure incurred by the institution towards Management Capacity Enhancement Programmes is minimal and most of the senior faculty having more than eight years of experience wish to attend such training programmes conducted by institutions of national repute such as IIMs, IITs, NITs, ESCI etc.

Action sought: BoG may take note of this and approve deputing senior faculty having more than 8 years of experience

2.11 Ratification/Approval of IIC Activities

2.11.1 IIC activities conducted post the last BoG meeting

The IIC activities conducted by different departments are as given in the following Table. The expenditure incurred by the students for the Industrial visits has not been paid from TEQIP since no clarifications are given by SPFU.

Table IIC activities conducted by different departments

Sl No	Branch	Name of Program	Type of Program	Industry Name/ Institution Name	Date	No. of Days	No. of Students	Actual Expenditure (Rs)
1	ECE	Evaluation Of Converters	Seminar	Analog Devices, Bangalore	25-Jul-16	1	44	8007
2	ECE	Workshop On Microwave	Workshop	Innovative Instruments, Tvm	3 Aug 2016	1	46	7164
3	ECE	Entrepreneurship Development	Expert Talk	Union Bank Of India ,Ekm	3 Aug 2016	1	43	5452
4	CSE	How To Built A Career In Cyber Security	Expert Talk	Greytip Cyber Technologies	19-Aug-16	1	136	10083
5	ECE	Evangelising Social Entrepreneurs	Expert Talk	Tender Woods Solutions, Bangalore We Do Good, Infopark	8 April 2016	1		16439
6	EEE	Creative Innovation In Start Up Ecosystem	Expert Talk	Kerala Start Up Mission	31 March 2016-1 April 2016	2	137	15100
7	EEE	Recent Trends In Power Generation	Workshop	A G Hareendralal, Retd. Exe. Eng, Kseb	29 Aug 2016	1	120	16298
8	EEE	Life Skills	Workshop	Isstac, Palai, Jci, Kottayam	24 Aug 2016	1	76	13883
9	ECE	Antenna And Wave Propagation	Expert Talk	AIR, Calicut	25 Sept 2016	1	50	9544
10	IT	3d Max	Expert Lecture	Arc Designs, Kollam	24 Aug 2016, 27 Aug 2016, 1 Sept 2016	3		14130
11	ECE	Laptop Mobile Phone Servicing	Workshop	PC Engineers, Kottayam	03 Aug 2016	1	17	4391
12	CSE	Web Technology And Php Programming	Industrial Tutoring	White Oval Technologies Pvt. Ltd, Technopark, Tvm	21 Sept 2016 - 24 Sept 2016	2	231	45445
13	ECE	Ideation Boot Camp		We Do Good, Orendia Tech	12 Nov 2016	1		(Not Settled)
14	ECE	Designing With Cpld's & Fpga's		CDAC, Tvm	12 Nov 2016	1		Advance - Nil (Not Settled)

15	EEE	Industrial Visit	Non TEQIP	BHEL Kasargode	29/01/2016	1		
16	EEE	Industrial Visit	Non TEQIP	Diesel Power Plant Nallalam	30/01/2016	1		
17	CSE	Industrial Visit	Non TEQIP	Tejas Networks Limited,Bangalore	18 Feb 2016	1		
18	CSE	Industrial Visit	Non TEQIP	Infosys Bangalore	05 March 2016	1		
19	CSE	Industrial Visit	Non TEQIP	FCRI Palakkad	05 March 2016	1		
20	ECE	Industrial Visit	Faculty	High Voltage India Bangalore	02.04.2016	1		5354.00

Action sought: The BG may kindly take note and ratify the expenditure

2.11.2 IIC activities planned for the next three months

The detailed proposal of IIC activities planned for the next three months by different departments are given in the following Tables.

EEE Department: IIC Programs planned during November – March 2017					
No	Activity	Name of Expert/Field	Institution	Month /Year	Est. Expenditure (Rs)
1	Expert lecture	Er. K J Abdul Vahid	K S E B	Dec 2016	6500
2	Industrial Tutoring in collaboration with Industry	PLC & SCADA	Experts from various firms	Jan 2017	40000
3	STTP in collaboration with Industry	PSCAD	Nayak Power System	Jan 2017	40000
4	Seminar	Ms. Iswarya	Startup mission Kerala	Dec 2017	10000
5	Industrial Tutoring in collaboration with Industry	Transformer Testing & Protection	TELK	Feb 2017	40000
6	Expert lecture	Electrical Installation	Electrical Inspectorate	Feb 2017	6500
7	Expert lecture	Er. Jayaraj	Electrical Inspectorate	Feb 2017	6500

8	Expert lecture	Renewable Energy	ANERT	Feb 2017	6500
9	Expert lecture	Energy Auditing	Energy Management Cell	Feb 2017	6500
10	Expert lecture	Switch Gear & Protection	KSEB	Mar 2017	6500
11	2 days Workshop	Design Estimation & Costing	Electrical Inspectorate	Mar 2017	20000
12	Industrial Tutoring	Brushless alternator, PMMC Machines	KEL	Mar 2017	20000
Total					209000

Department : Computer Science & Engineering/ IT					
No	Name of program	Date	Duration	Industry	Est. Expenditure (Rs)
1	Workshop for Students - Android	Dec-16	3 days	Seaview support systems, Thiruvananthapuram	45,000
2	Workshop for Students – Open Software	Jan-17	3 days	Softex india ltd., Thiruvananthapuram	45,000
3	Workshop for Students – Open Hardware	Feb-17	3 days	Softex india ltd., Thiruvananthapuram	45,000
4	Workshop for staff - Android	Jan-17	3 days	Seaview support systems, Thiruvananthapuram	65,000
Total					2,00,000

EC Department: IIC Programs planned during November – March 2017						
Sl No	Type of Activity	Name of program	Date	Duration	Industry	Est. Expenditure (Rs)
1	Industrial Talk	Designing With CPLD's And FPGA's	Nov-16	1 day	CDAC , TVM	5,000
2	Workshop	Social Entrepreneurship Ii	Nov-16	1 day	Founder We do good, Orendia Technologies	10,000
3	Workshop	Hfss	Dec-16	1 day		8,000
4	Industrial Talk	Mobile Communication	Feb-16	1 day	BSL	5,000
5	Workshop	SPICE	Dec-16	1 day	SFO Technology	10,000

6	Expert Talk	Power Generation	Jan-16	1day	KSEB	7,000
7	Expert Talk	Airport Communication	Feb-16	1 day	Airport Authority	5,000
8	Workshop	3D Printing	Dec-16	1 day		5,000
9	Workshop	Open Hardware	Dec-16	1 day	Tata Elxsi	10,000
10	Visit	Industrial Visit To NEST Ernakulam By Faculty	Dec-16	1 day	NEST	18,000
11	Workshop	Open Source Software	Feb-16	2 days	ZXYware	15,000
12	Workshop	Pcb Fabrication	Dec-16	2 days	ZXYware	20,000
13	Workshop	Rtos	Dec-16	1 day	Wipro , Bangalore	10,000
14	Tutoring	Microcontroller	Dec-16	2 days	Brain Bitz, Ernakulam	20,000
15	Workshop	Iot	Feb-16	1 day	E bird	10,000
16	Workshop	Computer Servicing	Nov-16	1 day	PC Engineers	6,000
17	Workshop	Electrical Appliances Servicing	Nov-16	1 day	Anoop Domestic appliances Services	4,000
18		Industry Institute Interaction	Jan-16		TCS	6,000
19	Workshop	Preparation Of Technical Reports				7,000
20	Workshop	PCB Fabrication	Feb-16	2 days	ZXYware	20,000
Total						2,10,000

Action sought: The BOG may kindly approve the action plan under IIIC cell for the next three months.

2.12 Report of Progress of R & D Activities

The fourth meeting of the Research Guidance Committee (RGC) for TEQIP II of CE Karunagappally was held on 31.01.2016 under the Chairmanship of Senior Research Advisor of the Institution, Dr. Gopinathan E, Former Director of NIT Kozhikode in the presence of Dr. Rajkumar Choudhary, Scientist, Space Physics Laboratory, VSSC and Sri. Shajahan M, Scientist, Space Physics Laboratory, VSSC Thiruvananthapuram. The committee evaluated the proposals prepared by the Principal Investigators of the projects who utilized the seed money from TEQIP. The final approved minutes of the fourth RGC is attached as **Annexure 5** for reference. The Committee members had given suggestions to improve the proposals and after incorporating them the PIs have submitted the proposals to various funding agencies. Eight proposals have been sent to different external funding agencies for a total amount of Rs.185.72 lakhs. The details of the proposals

submitted to various funding agencies and the present status of the proposals are summarized as in the Table shown below.

Table: R and D Settlement Details of the seed money proposals under TEQIP II

S. No	Name of PI	Name of Proposal	Advance amount received	Amount Spent	Proposal amt (lakhs)	External Agency	Present Status
1	Dr. Hari V S	Development of Visualizer for k-spaceMRI Data, based on VTK and Quaratic filters, for Brain Segment Volume Estimation in Epilepsy Patients	1,00,000	39,967	42.5	SERB	Under consideration
2	Deepa A K	Early detection of Breast cancer from Digital Images	1,00,000	46,505	19.35	KSCSTE	Submitted
3	Smitha P	Development of Automated System for Immuno Scoring and Nuclear Grading of breast cancer	1,00,000	1,00,691	38.49	DBT	Two reviews over and placed before the committee
4	Jyothi R L	Hand written character recognition of current and ancient Malayalam fonts	1,00,000	40,146	11.07	SERB	Under consideration
5	Remya R S	Automated detection of Acute Lymphocytic Leukemia	1,00,000	98,272	16.31	KSCSTE	Submitted
6	Shajy L	Analysis of chromatin texture for the estimation of Malignancy Associated Changes (MAC) in sputum cells	1,00,000	99,087	33.36	KSCSTE	First level review over and placed before the committee
7	Jyothi R L	Offline HandWritten Character Recognition System to Convert Grantha Script on Ancient Palmleaves to Malayalam Characters	1,00,000	51,890	11.07	TDIL	Waiting for fund allocation
8	Remya R S	Automated video forgery detection	1,00,000	55,788	13.57	SERB	Submitted
Total Amount				5,32,346	185.72		

Action sought: BOG may note the progress of the proposals and comment.

2.13 Ratification of programmes under EAP

2.13.1 Remedial classes conducted

Remedial classes were conducted in various subjects for different groups of students. Bridge courses were conducted in Mathematics, Physics and Communication for the first year students. The details of these classes conducted are given in the following Tables.

SI NO	Name & Designation	Subject	Semester and Cass	Hours Engaged	No: of students	Total amount in Rs
1	Ajmal.K AP in EE	EE1506 Field theory	VII EE	6	9	3600
2	Ajmal.K AP in EE	EE1705 EL2HVDC	VII EE	3	9	1800
3	Ajmal.K AP in EE	EE1506 Field theory	V EE	6	10	3600
4	Ajmal.K AP in EE	EE1503 Power systems	V EE	3	10	1800
5	Preema R Chandran AP in EE	EE1604 Electrical machines III	VI EE	4	3	2400
6	Sujitha Surendran AP in EE	EE1603 Modern DSP	VI EE	6	3	3600
7	Alkha Mohan AP in CS	IT606 Computer networks	VIII IT	10	5	6000
8	Chippy Vijayan AP in EC	EC1404 Signals and systems	VIII EC	3	13	1800
9	Chippy Vijayan AP in EC	EC1404 Signals and systems	IVEC	9	20	5400
10	Aswathy.S. S AP in EC	EC1604 Communication engg:	VI EC	1	7	600
11	Aswathy.S. S AP in EC	EC1604 Communication engg:	VIII EC	3	4	1800
12	Reji Thankachen AP in EC	EE1605 DSP	VI EE	6	7	3600
13	Shamna.S.S AP in EC	EC1601 EMI	VI EC	1	4	600
14	Subeena.H AP in EC	EC1402 Microprocessor	IVEC	2	6	1200

15	Subeena.H AP in EC	Microwave techniques and devices	VI EC	5	5	3000
16	Subeena.H AP in EC	Microwave techniques and devices	VIII EC	3	2	1800
17	Remya.R.S AP in CS	CS1406 Automata theory	IVCS	22	20	13200
18	Ajmal.K, AP in EE	Introduction to Electrical Engineering	I EE	6	11	3600
			I CS	6	9	3600
			I EE	18	9	10800
19	Meera Murali AP in EE	EE1406 Industrial & Power Electronics	VIII EE/ VIEE	10	3,5	6000
Total						79800

2.13.2 Bridge Courses Conducted for First Year Students

Semester	Faculty	Subject	No. of students attended	Hours engaged	Date	Expenditure (Rs)
S1EE/EC/CS	Teetu Babu (Asst. Prof)	Mathematics	31+39+42	6	3.08.16	3600
S1EE/EC/CS	Teetu Babu (Asst. Prof)	Mathematics	31+39+42	3	4.08.16	1800
S1EE/EC/CS	Teetu Babu (Asst. Prof)	Mathematics	31+39+42	3	5.08.16	1800
S1EE/EC/CS	Neethu.A.S (Asst. Prof)	Physics	31+39+42	6	3.08.16	3600
S1EE/EC/CS	Neethu.A.S (Asst. Prof)	Physics	31+39+42	6	4.08.16	3600
S1EE/EC/CS	Neethu.A.S (Asst. Prof)	Physics	31+39+42	6	5.08.16	3600
S1EE/EC/CS	Libin Muslih.(Asst. Prof)	English	31+39+42	3	4.08.16	1800
S1EE/EC/CS	Libin Muslih.(Asst. Prof)	English	31+39+42	3	5.08.16	1800
		TOTAL	112	36		21600

Action Sought: The BOG may kindly note and ratify the expenditure incurred under EAP

2.13.3 Action Plan for the Programmes Under EAP Cell for the next 3 months

The action plan for soft skill training, remedial classes and High Intensity Training Programmes are given in the following sections.

A. Soft Skill Training Programmes During Nov 2016 – March 2017

SOFT SKILL TRAINING PLAN					
MAY 2015-JULY 2015					
Sl. No.	Year & Branch	Programme	No. of Days	Tentative Date	Expenditure (Rs)
1	Final M Tech	Soft skill training for MTech	2	Nov 16	20,000
2	Final BTech	Aptitude Test training for Final CS/IT	5	Dec 16	54,000
3	Final BTech	Aptitude Test training for Final EC	5	Dec 16	54,000
4	Final BTech	Aptitude Test training for Final EE	5	Dec 16	54,000
5	Third Yr BTech	Getting Ready for Placement- CS/IT	5	Dec 16	54,000
6	Third Yr BTech	Getting Ready for Placement- EC	5	Dec 16	54,000
7	Third Yr BTech	Getting Ready for Placement- EE	5	Dec 16	54,000
8	Second Yr BTech	Communication skill training-CS/IT	3	Dec 16	32,000
9	Second Yr BTech	Communication skill training-EC	3	Dec 16	32,000
10	Second Yr BTech	Communication skill training-EE	3	Dec 16	32,000
11	First Yr BTech	Orientation Programme-CS	2	Dec 16	20,000
12	First Yr BTech	Orientation Programme-EC	2	Dec 16	20,000
13	First Yr BTech	Orientation Programme-EE	2	Dec 16	20,000
14	Final Yr BTech	Soft skill Practice sessions-CS/IT	5	Jan 17	54,000
15	Final Yr BTech	Soft skill Practice sessions-EC	5	Jan 17	54,000
16	Final Yr BTech	Soft skill Practice sessions-EE	5	Jan 17	54,000
Total					6,62,000

B. Remedial Classes Planned During Dec 2016-March 2017

DECEMBER 2016-MARCH 2017

Semester	Subject	Hours	Expenditure (Rs)
1&IIEC	Engg:MathematicsI	10	6000
	Engg:Mechanics	10	6000
	Engg:Graphics	10	6000
	Computer Programming	10	6000
1&IICS	Engg:MathematicsI	10	6000
	Engg:Mechanics	10	6000
	Engg:Graphics	10	6000

	Computer Programming	10	6000
1&IIIEE	Engg:MathematicsI	10	6000
	Engg:Mechanics	10	6000
	Engg:Graphics	10	6000
	Computer Programming	10	6000
IV EC	Engg:Mathematics	15	9000
	Signals & Systems	10	6000
	Digital System Design	15	9000
IV EE	Engg:MathematicsIII	15	9000
	Digital electronics	15	9000
	Circuits signals&systems	20	12000
	Analog communication	10	6000
	Power electronics	10	6000
IV CS	Engg:MathematicsIII	15	9000
	Data Structure and Algorithms	10	6000
	Microprocessors	15	9000
	Comp. Archetecture and Organization	10	6000
	Data Communication	10	6000
	Automata Language and Computations	15	9000
VI EC	Microwave theory	10	6000
	VLSI design	10	6000
	Control systems	10	6000
VI EE	Modern communication Engg:	15	9000
	ModernDSP	20	12000
	Control system I	15	9000
	Electrical drawing	10	6000
VI CS	DSP	15	9000
	Compiler Construction	10	6000
	OS	10	6000
	Comp. Networks	10	6000
	Control Systems	15	9000
VI IT	Fin. Management	5	3000
	Compiler Construction	10	6000
	Knowledge Engg.	10	6000
	Formal Languages and Automata Theory	10	6000
	Comp. Graphics and Animation	10	6000
VIII EE	Electrical Mechine design	15	9000
	Powersystem III	20	12000
	Electronic instrumentation	15	9000
	Flexible AC transimission	10	6000
VIII CS	AAPP	10	6000
	Mob. Computing	10	6000
	Object Oriented Modeling and Design	10	6000
VIII IT	Real Time Systems	10	6000
	Distributed Computing	10	6000
VIII EC	Wireless Communication	10	6000
	CCN	10	6000
		650	390000

Action sought: BOG may kindly approve the action plan for remedial classes and the softskill training programme planned for the next three months.

C) High Intensity Training (HIT) Programme in Industrial Automation

One of the key activities of EAP under the aegis of finishing school is conducting High Intensity Training (of at least 4-weeks duration) for development of soft and professional skills in the students that graduate but fail to secure any employment. The HIT programme is also open to students of other colleges. No fee is to be collected from the students for this purpose

It is understood on discussions with experts from industry that there will be requirement of Engineering Graduates who are skilled in Industrial Automation for the next few years.. The Head of the Department of EEE Smt.Libi A has submitted a proposal for conducting the HIT programme in Automation and the Academic Committee approved it. The students from both EE and EC Departments can be participated in this HIT. In these circumstances, it is proposed to conduct a High Intensity Training programme on Automation which is to be initiated as a service on the Procurement Management Support System (PMSS). The Terms of Reference of the said proposal is attached as **Annexure 6**.

The estimated expenditure is Rs.9 lakhs

D) High Intensity Training (HIT) Programme in Automation Java and Android

It is also understood that there will be requirement of Engineering Graduates who are skilled in Java and Android for the next few years.. The Head of the Department of CS Sri.Binu V P has submitted a proposal for conducting the HIT programme in Java and Android and the Academic Committee approved it. The students from CS, EE and EC departments can be participated in this HIT. In these circumstances, it is also proposed to conduct a High Intensity Training programme on Java and Android which is to be initiated as a service on the Procurement Management Support System (PMSS). The Terms of Reference of the said proposal is attached as **Annexure 7**.

The estimated expenditure is Rs.9 lakhs.

2.14 Approval for Library Modernization and Digitalization

Presently the Institute library has more than 16000 books. The details of the books are entered and the books are issued manually. If a proper library management system is there and the entire books are digitalized, the system will work more efficiently. The librarian has submitted a proposal to digitalise the library by utilizing TEQIP fund. The activity has to be initiated as a service on the Procurement Management Support System (PMSS). The ToR of the proposal is attached as **Annexure- 8**. The estimated amount is Rs.3,87,000.

Action sought: The BOG may kindly approve the proposal.

2.15 Renewal of ICT Academy of Kerala Membership.

ICT Academy of Kerala has submitted a proposal for renewal of MoU which was expired. The objectives of this Memorandum of Understanding are:

a. To improve employability skills of the trainees (both Faculty and Students), Assessments and Certifications developed by ICTAK. This will be achieved through resources, regular workshops, training programs, capacity building and faculty development and Career Guidance & Placement support. Under this MoU, the ICTAK will ensure timely completion of training assessment and certification.

b. ICTAK will ensure that training, assessment and certification which will be done by ICTAK approved Trainers.

The membership fee is Rs 69,000/- including all taxes.

Under this MOU, ICTAK provides the following:

- Free 3 days FDP program on Concept Coaching / Technical training
- Free Employability Quotation Test for all the Students.
- Free Academia - industry interface Program
- International Magazine for Faculties to publish their work
- Membership college students will get an opportunity to work with IT companies (selection based) in Kerala on internship.

Action sought: The BOG may kindly note and approve.

2.16 Expenditure incurred under IOC-Ratification

The expenditure incurred under IOC post the eighth BOG meeting is Rs. **8,63,351/-**. This amount is due to Salaries of TEQIP staff, Consumables purchased for TEQIP cell and other departments, and Operation and Maintenance charges. All the amounts have been paid as per TEQIP II norms. The details are given in the tables below.

Table: Expenditure incurred under IOC

Sl. No	Item	Amount (Rs)
1	Salaries for TEQIP Staff	3,51,600.00
2	Consumables	57,923.00
3	Operation and Maintenance	4,53,828.00
Total		8,63,351

Action sought: BOG may kindly take note and ratify the expenditure.

Part 3

Reports

3.1 Summary of Expenditure as on 15 November 2016

The summary of expenditure as on 15.11.2016 is as below.

Total Fund Received: Rs.9,00,00,000

Sr.No.	Expenditure Name	Expenditure Upto March 2016	Expenditure From Apri-Nov 15, 2016	Cumulative Expenditure upto 15 th Nov 2016
1	Procurement	4,88,82,034	65,55,594	5,54,37,628
2	Providing Assistantships for Increased enrolment in existing and new PG Programmes in Engineering Disciplines	93,59,000	29,90,775	1,23,49,775
3	Enhancement of Research and Development and Institutional Consultancy Activities	7,42,408	13,39,252	20,81,660
4	Faculty and staff development for improved competence based on Training Needs Analysis(TNA)	63,53,771	51,73,769	1,15,27,540
5	Enhanced Interaction with Industry	5,98,457	1,92,424	7,90,881
6	Institutional Management Capacity enhancement	6,09,284	55,234	6,64,518
7	Implementation of Institutional reforms	8,98,880	---	8,98,880
8	Academic support for weak students	10,82,898	1,98,641	12,81,539
9	Incremental Operating Cost	37,50,998	8,63,351	46,14,349
9.1	Salaries	13,94,248	3,51,600	17,45,848
9.2	Consumables	4,17,642	57,923	4,75,565
9.3	Operation and Maintenance	19,09,008	4,53,828	23,62,836
Total		7,22,77,730	1,73,69,040	8,96,46,770

Action Sought: BOG may kindly take note of the expenditure under various heads.

3.2 Report on Examination Results

The latest results of BTech and MTech students under KTU and CUSAT are as shown in the following Tables.

Table B.Tech Result statistics in percentage

Branch	Semester	General	OEC	SC/ST	Total
EC	2	65.38	60	0	60.61
	3	33.33	NA	0	31.91
	6	38.46	33.33	0	25.25
	8	48.21	0	0	44.26
CS	2	75	0	NA	72.72
	3	41.46	100	0	41.86
	6	50	NA	0	45.24
	8	52	NA	20	49.09
EEE	2	72.72	50	0	65.79
	3	36.96	0	NA	35.42
	6	34.78	0	0	32.00
	8	55.10	100	33.33	56.36
IT	3	100	NA	NA	100
	6	33.33	NA	0	28.57
	8	40	100	0	41.18

Table: M.Tech Result Statistics in Percentage

Branch	Semester	General	OEC	SC/ST	Total
SP(EC)	1	100	100	100	100
	2	100	100	100	100
IP(CS)	1	75	100	100	78.95
	2	81.25	100	0	78.94

Action sought: The BoG may kindly take note of the results.

3.3 Report on visit of Performance Auditor

The Hon'ble performance auditor Dr. Sounak Kumar Choudhary, Professor in the Department of Mechanical Engineering, IIT Kanpur conducted the performance audit visit from 06.8.2016 to 8.8.2016 at CE Karunagappally. He interacted with the Principal, TEQIP Coordinators, Faculty, Technical and Office Staff and UG and PG students. He stressed the importance of acquiring accreditation and autonomy.

The auditor awarded highest grade (Grade 1) for three components and Grade 2 for another three components as can be seen from the auditor's report attached as **Annexure 9**.

The key points given as feed back by the performance auditor to the institution at the end of the visit are highlighted here:

- Overall, the fund received by the Institute from the TEQIP-II over the last three years has been utilised well for the development of the academic program and the overall functioning of the Institute.
- There is a shortage of Faculty as well as staff in the Institute. Hence, recruitment of the Faculty and Staff for the Institute should be planned at the earliest.
- Library facilities of the Institute should be enhanced with Library Automation in place and proper issuing of books to the students. Library should subscribe more number of e-journals.
- Students Placement should be properly taken care of with a separate cell, a dedicated personal and more contacts with the relevant industries.
- Laboratory space should be expanded and the laboratory equipment and machines should be upgraded.
- Faculty should be encouraged to take up Research, sponsored or consultancy projects. There should be more publications in the peer-reviewed International Journals.
- Overall, the Institute should introduce more B.Tech. and M.Tech. programs.

As reported by the Performance auditor the continuing shortcomings of the Institute are:

- Faculty and Staff shortage
- Space crunch
- Lack of sufficient infrastructure

Action Sought: The BOG may kindly take note

3.4 Report on status of Accreditation

The Institution had remitted the fees for accreditation by the National Board of Accreditation (NBA) as per the requirements of TEQIP-II for the UG Programmes in Electronics & Communication Engineering and Computer Science & Engineering that are eligible to apply for accreditation. The Self-Assessment Reports (SARs) of both the programmes were uploaded.

As per the email received from the NBA on July 13, 2016 Department of Computer Science and Engineering and Department of Electronics and Communication Engineering were requested to submit the pre-qualifiers of the programme for accreditation. The same were submitted through

email to NBA by both the departments. The submitted forms for the two Departments are attached as **Annexures 10 and 11**. According to the prequalifiers department of ECE is qualified for the upcoming accreditation visit. As regard Computer Science and Engineering programme, no PhD faculty is available in the Department at that time against the minimum one required. The current status of number of Ph.D. holders in the department is two. Documentation process of both the departments is going on.

- It is suggested to obtain ISO certification for the smooth conduct of accreditation documentation
- It is estimated approximately to rupees 3.5 lakhs for the display boards and other related items and is planned to procure through plan funds.
- It is suggested to appoint regular faculty/ equivalent regular faculty (more than two year contract) to satisfy the students faculty ratio as 20:1 (this condition is now not satisfied due to less number of faculty)
- The necessary institution wise and department wise infrastructural level requirements for accreditation are also listed in the following Tables.

Institution wise Infrastructure and amenities Requirement

Sl no	Item (Rooms)	Requirements	Current Status	Deficiency
1	Seminar Hall	1	1	0
2	CCF	1	0	1
3	Incubation center	1	0	1
4	NSS unit room	1	0	1
5	Placment cell	1	0	1
6	IEEE	1	0	1
7	IEDC	1	0	1
8	ISTE	1	0	1
9	Medical/counselling center	1	0	1
10	IIIcell	1	0	1
11	Recreation centre	1	0	1
12	Examination cell	1	0	1
13	Alumni Association	1	0	1
14	Canteen	1	1	0
15	Senate	1	0	1
16	LanguageLab	1	0	1

EC Department wise Infrastructure and amenities Requirement					
Sl no	Item	Requirements	Current Status	Deficiency	Remarks
1	Class Room-Btech	4	4	0	
2	Tutorial Room-Btech	3	1	2	
3	Class Room/Tutorial-Mtech	2	0	2	
4	Seminar Hall	1	0	1	
5	Lab Room BTech	5	3	2	Area not Sufficient
6	Lab Room MTech	2	2	0	
7	Center Computing Facility	1	0	1	
8	HOD Room	1	1	0	Not furnished
9	Staff Room -BTech	10(cabin)	0	10	
10	Staff Room -MTech	3(cabin)	0	3	
11	Department library	1	0	1	
12	Rest Room	1	0	1	
13	Placement Unit	1	0	1	
14	Staff- Professor	2	1	1	MTech post not sanctioned yet.
	Asso. Professor	3	1	2	
	Asst. Professor	10	7	3	
15	Room for Association	1	0	1	
16	Snacks/Cool bar	1	0	1	

CS Department wise Infrastructure and amenities Requirement					
Sl no	Item	Requirements	Current Status	Deficiency	Remarks
1	Class Room-Btech	4	4	0	
2	Tutorial Room-Btech	3	1	2	
3	Class Room/Tutorial-Mtech	2	0	2	

4	Seminar Hall	1	0	1	
5	Lab Room Btech	5	2	3	Area not Sufficient
6	Lab Room Mtech	2	0	2	
7	Center Computing Facility	1	0	1	
8	HOD Room	1	0	1	Not furnished
9	Staff Room -Btech	16(cabin)	6cabin	10cabin	No separate staff rooms
10	Staff Room -Mtech	3(cabin)	0	3	
11	Department library	1	0	1	
12	Rest Room	1	0	1	
13	Placement Unit	1	0	1	
14	Staff-				MTech post not sanctioned yet.
	Professor	2	0	1	
	Asso. Professor	4	2	2	
	Assi. Professor	12	7	5	
15	Room for Association	1	0	1	
16	Snacks/Cool bar	1	0	1	

Action Sought: The BOG may kindly take note and comment.

3.5 Report on the statutory audit for the FY 2015-16

Statutory audit for the Financial Year 2015-16 was conducted in July 2016. The audit report is attached as **Annexure 12**. Out of the total expenditure of Rs. 1,76,69,840/- during the financial year 2015-16, a sum of Rs. 11,500/- is reported to be ineligible. This amount was spent for purchasing a currency counter for the office and in spite of the management reply given to the auditors the same was observed as ineligible by the auditors stating that the procurement did not result in improvement of teaching, training or learning facilities.

Action Sought: The BOG may kindly take note.

Part 4

Any Other item with the permission of the chair

ANNEXURE I

Minutes of the Eighth BoG Meeting on April 12, 2016



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Minutes of the Eighth Meeting of the Board of Governors College of Engineering Karunagappally

Agenda for April 12, 2016

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Members Present

Prof. V P N Nampoori, Professor Emeritus (Chair)

Mr. Dilip Khan, Govt.Representative
Mr. James Joseph, Govt.Representative
Dr. Hari V S, Principal and Member Secretary
Dr. Sureshkumar P, Director,IHRD
Dr. Sam Thomas, Representative of CUSAT
Dr. Ajilkumar A, Member,TEQIP Coordinator
Mr. Manoj Ray D, Member

Absentee

Dr. V P Devassia, Educationist, Addln. Director,IHRD

Invitees

Mr. Sylish S V, Procurement coordinator
Mr. Reji Thankachan, Academic Coordinator
Mr. Shajy L, Finance Coordinator
Mrs. Premakumari K R, EAP Coordinator
Mr. Baiju V, IIIC Coordinator
Mrs. Smitha P, R and D Coordinator

Part I

Procedural Items

1 Silent Prayer

The eighth BoG held a silent prayer for the victims of Puttingal Temple fireworks tragedy.

2 Confirmation of the Minutes of the 7th BoG Meeting

2.1 Decision:

The BoG is requested to approve the courses and to ratify the payment of Rs. 785080.00. The minutes of the seventh BoG was sent to the Chairman and members for approval.

BoG sanctioned the minutes of the seventh meeting.

3 Report on the Action Taken/Pending on the Decisions in the 7th BoG

There were 24 decisions in the sixth BoG, the details of execution of which were presented in the BoG.

3.1 Decision :

The BoG decided to approve the action taken report.

Part II

Discussion, Ratification and Approval

4 Procurement Activities

The details of completed, cancelled, initiated and in progress packages are discussed.

4.1 Completed Packages

The details of payment made for various goods to the firms, as listed in the Table 1, are presented in the BoG.

4.1.1 Decision: The BoG ratified the payment of Rs. 20,46,617.00 towards the payment of 12 completed packages.

Table 1: The details of completed packages

No.	Package no	Package name	Mode	Actual cost	Estimated cost	Difference
1	...I/KL/KL1G18/196	E-journal subscription Science Direct	Direct Contract	556756	5,00,000	56,756.00
2	...I/KL/KL1G18/108	Books for Competitive Exams	Shopping	1,09,066.00	1,09,810.00	-744.00
3	...I/KL/KL1G18/116	Library Applied science	Shopping	2,60,000.00	2,59,204.00	796.00
4	...I/KL/KL1G18/166	Display Board	Shopping	73,738.00	56,000.00	17,738.00
5	...I/KL/KL1G18/174	Springer E journal	Direct Contract	2,03,837.00	2,07,000.00	-3,163.00
6	...I/KL/KL1G18/186	Computer table	Shopping	1,23,431.00	1,27,400.00	-3,969.00
7	...I/KL/KL1G18/187	3D Printer	Shopping	1,53,000.00	1,50,000.00	3,000.00
8	...I/KL/KL1G18/188	currency counter	Direct Contract	11,850.00	10,000.00	1,850.00

9	...I/KL/KL1G18/176 Portable Hardware Device	Direct Contract	37,280.00	42,000.00	-4,720.00
10	...I/KL/KL1G18/179 Microwave Test Benches	Shopping	1,86,942.00	1,95,000.00	-8,058.00
11	...I/KL/KL1G18/190 Keil development tools	Shopping	1,36,267.00	1,40,000.00	-3,733.00
12	...I/KL/KL1G18/191 Electronic Private Automatic Branch Exchange	Shopping	1,94,450.00	2,00,000.00	-5,550.00
Total			20,46,617.00	1996414.00	50,203.00

4.2 Packages with Revision in Estimate

The details of packages with revision in price are presented in Table 2.

4.2.1 Decision The BoG decided to approve the price revision of the package No. 195 E-journal subscription IEEE with the new estimate of of Rs. 6,19,000.00.

The BoG also decided to cancel the package No. 205 High Performance Cloud Computing(HPCC). following the procedures of PMSS.

Table 2: The packages with revision in price

No	Package no	Package name	Mode	Estimated cost
1	...I/KL/KL1G18/195	E-journal subscription IEEE	Direct Contract	6,19,000
2	...I/KL/KL1G18/205	High Performance Cloud Computing(HPCC)	Shopping	8,00,000
Total				14,19,000.00

4.3 Packages to be Cancelled

The details of packages to be cancelled are listed in Table 3.

4.3.1 Decision The BoG approved the cancellation of packages.

Table 3: The details of packages to be cancelled

No.	Package No.	Name	Type	Price	Reason
1	...I/KL/KL1G18/198	TV demo kit	Shopping	60,000	TV demo kit with CRT is not available. Only kits with LCD/LED sreena are available.

5 Academic Activities

The details of academic activities conducted post the 7th BoG are detailed below.

5.1 In house programmes post the 7th BoG Meeting

The details of in house programmes conducted are detailed in the Table 4 in page 10.

Decesion : The BoG approved the courses and to ratify the payment of Rs. 785080.00.

Table 4: The details of in house programmes conducted by the faculty

Sl No	Title	Coordinator	Dept	No. of External Participants	Date	Advance (Rs.)	Settled (Rs.)	Amount spent (Rs.)
1	PCB DESIGN AND FAB-RICATION TECHNIQUES	KURYACHAN T D	ECE	11	16 SEPT 2015- 18 SEPT 2015	78000	7508	37508.00
2	LINEAR AL- GEBRA AND ITS APPLICA- TIONS	BINU V P	CS	3	28 OCT 2015- 30 OCT 2015	56000	4641	60641
3	EXPERT LEC- TURE ON MACHINE LEARNING TECHNIQUES AND APPLI- CATIONS	REMYA R S	CSE	NIL	27/11/2015 and 9/12/2015	NIL	8136	8136
4	WORKSHOP ON STATIS- TICS APPLI- CATION OF IMAGE PRO- CESSING AND PROBABILITY	GEETHA S	CSE		16-Dec-15	10000	2220	12220

5	RESEARCH ISSUES AND EMERGING TRENDS IN CONTROL and AUTOMATION ENGINEERING	LIBI A	EEE	44	13 JAN 2016 -17 JAN 2016	99000	107060	206062
6	ADVANCEMENT AND ALGORITHMS IN IMAGE PROCESSING	SHANI RAJ	CSE	26	27 JAN 2016-01 FEB 2016	75000	23549	98549
7	WORKSHOP ON INTRODUCTION TO PYTHON PROGRAMMING	JYOTHI R L	CSE	Nil	17 DEC 2015	10000	4494.00	14494.00
8	AUTOMATED ACCOUNTING SYSTEM USING TALLY ERP 9 SOLUTION	SHEEJA, SANDHYA MURALI	Administrative Office	35	21 JAN 2016-23 JAN 2016	40000	43796	83796
9	MECHATRONICS ROBOTICS MEMS	RAJU M	EEE	34	3/12/2015-5/12/2015	75000	6333.00	81333.00

10	WORKSHOP ON DIFF- FERENTIAL EQUATIONS AND APPLI- CATIONS	SHEELA R	Applied science	8	25 FEB 2016-27 FEB 2016	45000	9674.00	54674.00
11	SEMINAR ON SATEL- LITE IMAGE PROCESSING	SUBEENA H, DEEPA A K	ECE	NIL	11 FEB 2016	5000	1627.00	6627.00
12	SEMINAR ON MULTIDI- MENSIONAL SIGNAL PRO- CESSING	SUBEENA H, REJI THANKACHAN	ECE	NIL	12 FEB 2016	7500	3724	11224.00
13	HANDS ON TRAINING IN LabVIEW AND USRP	DEEPA T R	ECE	8	19 FEB 2016 - 24 FEB 2016	70000	39816.00	109816.00
Total								785080.00

5.2 In house programmes post the 7th BoG Meeting whose bill settlement is pending

The details of in house programmes conducted are detailed in the Table 5 in page 13.

Decision : The BoG approved the in house courses in Table 5 presented before the BoG

Table 5: The details of in house programmes conducted by the faculty

Sl No	Title	Coordinator	Dept	No. of Ex-ternal Par-ticipants	Date	Advance (Rs.)
1	WORKSHOP ON COMPUTER VISION :TECHNIQUES AND APPLICATION	GEETHA S	CSE	NIL	17 March- March 19	0.0
Total						0.00

The in house academic programmes and the outstation programmes planned for the next three months are detailed.

5.3 Outstation Programmes and the Expenditure Incurred

The details of outstation programmes attended by faculty and staff and the expenditure incurred, as listed in Table 6, were presented in the meeting.

Decision: The BoG ratified the outstation courses in Table 6 and the expenditure of Rs. 782,943.00, incurred under this.

Table 6: The details of outstation programmes attended by the faculty and the expenditure

No. Name	Title	Course	Institution	Date	Advance (Rs.)	Settled (Rs.)	Spent (Rs.)	Repaid (Rs.)
1 SYLISH S V	Asst. Prof. in ECE	PEDAGOGICAL TRAINING PROGRAMME	TEACHING LEARNING CEN- TRE, IIT MADRAS	21 SEPT 2015- 23 SEPT 2015	Nil	8177	8177	Nil
2 DEEPA S V	Asst. Prof. in ECE	PEDAGOGICAL TRAINING PROGRAMME	TEACHING LEARNING CEN- TRE, IIT MADRAS	21 SEPT 2015- 23 SEPT 2015	Nil	8177	8177	Nil
3 ANUJA V NAIR	Asst. Prof. in ECE	PEDAGOGICAL TRAINING PROGRAMME	TEACHING LEARNING CEN- TRE, IIT MADRAS	21 SEPT 2015- 23 SEPT 2015	Nil	7891	7891	Nil
4 RAJU M	Asst. Prof. in EEE	POWER INDUS- TRY - FAMIL- IARISATION AT PETARC	PETARC, MOOLA- MATTON, IDUKKI	15 OCT 2015 - 17 OCT 2015-	11000	1191	12191	Nil
5 AJMAL K	Asst. Prof. in EEE	POWER INDUS- TRY - FAMIL- IARISATION AT PETARC	PETARC, MOOLA- MATTON, IDUKKI	15 OCT 2015 - 17 OCT 2015-	11000	700	11700	Nil
6 REVIKUMAR THAMPI V R	Asst. Prof. in ME	ACADEMIC LEADERSHIP FOR TEQIP INSTITUTIONS	IIM KOZHIKODE	27 OCT 2015 - 1 NOV 2015	Nil	2083	2083	Nil
7 ASWATHY S S	Asst. Prof. in ECE	PEDAGOGICAL TRAINING PROGRAMME	TEACHING LEARNING CEN- TRE, IIT MADRAS	29 OCT 2015 - 31 OCT 2015-	3000	357	3357	Nil

8	CHIPPY VIJAYAN	Asst. Prof. in ECE	PEDAGOGICAL TRAINING PROGRAMME	TEACHING LEARNING CENTRE, IIT MADRAS	29 OCT 2015 - 31 OCT 2015-	3000	357	3357	Nil
9	PREEMA R CHANDRAN	Asst. Prof. in EEE	PEDAGOGICAL TRAINING PROGRAMME	TEACHING LEARNING CENTRE, IIT MADRAS	29 OCT 2015 - 31 OCT 2015-	3000	357	3357	Nil
10	RENJINI S	Asst. Prof. in ECE	PEDAGOGICAL TRAINING PROGRAMME	TEACHING LEARNING CENTRE, IIT MADRAS	29 OCT 2015 - 31 OCT 2015-	3000	357	3357	Nil
11	ALKHA MOHAN	Asst. Prof. in CSE	PEDAGOGICAL TRAINING PROGRAMME	TEACHING LEARNING CENTRE, IIT MADRAS	3 NOV 2015 - 5 NOV 2015	3000	1157	4157	Nil
12	JISSY RAJU	Asst. Prof. in CSE	PEDAGOGICAL TRAINING PROGRAMME	TEACHING LEARNING CENTRE, IIT MADRAS	3 NOV 2015 - 5 NOV 2015	3000	1157	4157	Nil
13	SREE BHAGYA	Asst. Prof. in CSE	PEDAGOGICAL TRAINING PROGRAMME	TEACHING LEARNING CENTRE, IIT MADRAS	3 NOV 2015 - 5 NOV 2015	3000	1157	4157	Nil
14	HASEENA P Y	Asst. Prof. in EEE	FDP ON SIGNAL PROCESSING FOR BIOMEDICAL APPLICATIONS	MES COLLEGE OF ENGINEERING KUTTIUPURAM	16 NOV 2015 - 20 NOV 2015	Nil	4654	4654	Nil
15	JAYAKRISHNAN A	Asst. Prof. in CSE	PEDAGOGICAL TRAINING PROGRAMME	TEACHING LEARNING CENTRE, IIT MADRAS	16 NOV 2015 - 18 NOV 2015	3000	748	3748	Nil
16	NIMMI V	Asst. Prof. in CSE	PEDAGOGICAL TRAINING PROGRAMME	TEACHING LEARNING CENTRE, IIT MADRAS	16 NOV 2015 - 18 NOV 2015	3000	748	3748	Nil

17	RESMI RA- MACHAN- DRAN	Asst. Prof. in CSE	PEDAGOGICAL TRAINING PROGRAMME	TEACHING LEARNING CEN- TRE, IIT MADRAS	16 NOV 2015 - 18 NOV 2015	3000	748	3748	Nil
18	MEERA MURALI	Asst. Prof. in EEE	FDP ON ELEC- TRICAL SYS- TEM DESIGN AND ELECTRI- CAL CAD	CE VADAKKARA	16 NOV 2015 - 21 NOV 2015	3000	1488	4488	Nil
19	PREEMA R CHAN- DRAN	Asst. Prof. in EEE	FDP ON ELEC- TRICAL SYS- TEM DESIGN AND ELECTRI- CAL CAD	CE VADAKKARA	16 NOV 2015 - 21 NOV 2015	3000	1488	4488	Nil
20	ANU MO- HAN	Asst. Prof. in ECE	FDP ON RE- SEARCH METHOD- OLOGY	CE ADOOR	16 NOV 2015 - 20 NOV 2015	Nil	1878	1878	Nil
21	RAJU M	Asst. Prof. in EEE	STTP ON SO- LAR ENERGY CONVERSION AND MANAGE- MENT	IIT GUWAHATI	23 NOV 2015 - 27 NOV 2015	25000	7772	32772	Nil
22	GANESH	Asst.Prof. in ME	PEDAGOGICAL TRAINING PROGRAMME	TEACHING LEARNING CEN- TRE, IIT MADRAS	18 JAN 2016 20 JAN 2016	10000	3180	13180	Nil
23	RETHEEKUMAR S	Asst. Prof. in Physics	PEDAGOGICAL TRAINING PROGRAMME	TEACHING LEARNING CEN- TRE, IIT MADRAS	18 JAN 2016 20 JAN 2016	10000	3367	13367	Nil

24	SHEELA R	Asst. Prof. in Maths	PEDAGOGICAL TRAINING PROGRAMME	TEACHING LEARNING CEN- TRE, IIT MADRAS	18 JAN 2016 20 JAN 2016	10000	3367	13367	Nil
25	LIBI A	Asst. Prof. in EEE	WORKSHOP ON ADVANCED CONTROL EN- GINEERING (ACE - 2015)	NIT THIRUCHIRA- PALLI, TN	9 OCT 2015 10 OCT 2015	Nil	6651	6651	Nil
26	HASEENA P Y	Asst. Prof. in EEE	WORKSHOP ON ADVANCED CONTROL EN- GINEERING (ACE - 2015)	NIT THIRUCHIRA- PALLI, TN	9 OCT 2015 10 OCT 2015	Nil	6511	6511	Nil
27	BINU V P	Asso. Prof. in CSE	WORKSHOP ON CYBER SECURITY- FUNDAMEN- TALS AND ADVANCE- MENTS	IIT, DELHI	4 NOV 2015 6 NOV 2015	32250	1620	33870	Nil
28	JYOTHI R L	Asst. Prof. in CSE	WORKSHOP ON CYBER SECURITY- FUNDAMEN- TALS AND ADVANCE- MENTS	IIT, DELHI	4 NOV 2015 6 NOV 2015	32250	1317	33567	Nil

29	GEETHA S	Asst. Prof. in CSE	WORKSHOP ON CYBER SECURITY- FUNDAMEN- TALS AND ADVANCE- MENTS	IIT, DELHI	4 NOV 2015 6 NOV 2015	32250	1317	33567	Nil
30	REMYA R S	Asst. Prof. in CSE	WORKSHOP ON CYBER SECURITY- FUNDAMEN- TALS AND ADVANCE- MENTS	IIT, DELHI	4 NOV 2015 6 NOV 2015	32250	1317	33567	Nil
31	REVIKUMARA THAMPI V R	Asst. Prof. in ME	WORKSHOP ON DESIGN AND ENGI- NEERING	CE TRIVANDRUM	31 OCT 2015 1NOV 2015	Nil	2083	2083	Nil
32	ARYA A P	Asst. Prof. in EEE	WORKSHOP ON POWER SYSTEM SIMU- LATION STUD- IES USING ETAP SOFT- WARE	GEC, Barton Hill	12 NOV 2015 13 NOV 2015	2000	-392	1608	392

33	SUJITHA SUREN-DRAN	Asst. Prof. in EEE	WORKSHOP ON POWER SYSTEM SIMULATION STUDIES USING ETAP SOFTWARE	GEC, Barton Hill	12 NOV 2015 13 NOV 2015	2000	-392	1608	392
34	PRASANTHI R S	Asst. Prof. in EEE	WORKSHOP ON POWER SYSTEM SIMULATION STUDIES USING ETAP SOFTWARE	GEC, Barton Hill	12 NOV 2015 13 NOV 2015	2000	-392	1608	392
35	RENJINI S	Asst. Prof. in ECE	NATIONAL WORKSHOP ON ADVANCED DESIGN NANOSCALE DEVICE USING Tcad	CE CHENGAN-NOOR	28 DEC 2015 30 DEC 2015	Nil	1980	1980	Nil
36	ANILKUMAR C V	Asso. Prof. in ECE	WORKSHOP ON MATHEMATICAL ANALYSIS AND ITS APPLICATIONS TO ENGINEERING	IIT GUWAHATI	2 JAN 2016 - 4 JAN 2016	30000	10994	40994	Nil

37	Premakumary KsR. Prof.	WORKSHOP ON MATHEMATICAL ANALYSIS AND ITS APPLICATIONS TO ENGINEERING	IIT GUWAHATI	2 JAN 2016 - 4 JAN 2016	30000	10994	40994	Nil
38	DR. C Asst. Prof. GOPAKU- in ECE MAR	WORKSHOP ON MATHEMATICAL ANALYSIS AND ITS APPLICATIONS TO ENGINEERING	IIT GUWAHATI	2 JAN 2016 - 4 JAN 2016	30000	10994	40994	Nil
39	SMITHA P Asst. Prof. in CSE	WORKSHOP ON ENGLISH FOR WRITING Ph D THESIS AND JOURNAL PAPERS	NIT TRICHY	20 JAN 2016 - 22 JAN 2016	Nil	7937	7937	Nil
40	LISSA A Librarian	OPEN SOURCE LIBRARY MANAGEMENT SOFTWARE (KOHA)	KERALA AGRICULTURAL UNIVERSITY, VELLANIKKARA, THRISSUR	24 JULY 2015- 25 JULY 2015	Nil	982	982	Nil
41	Retheekumary S Asst. Prof. in Physics	STTP ON RECENT TRENDS IN APPLIED PHYSICS	DIVISION OF APPLIED SCIENCE AND HUMANITIES SOE, CUSAT	21 JAN 2016- 15 JAN 2016	Nil	5136	5136	Nil

42	REMYA R S	ASST.PROF. MICROSOFT IN CSE	MAR BASELIOUS COLLEGE OF ENGINEERING AND TECHNOLOGIES	07 SEPT 2015 - 12 SEPT 2015	Nil	2818	2818	Nil
43	RAJU M	Asst. Prof. in EEE	FDP ON MICROCONTROLLER AND ITS APPLICATION TO POWER CONVERTERS	21 DEC 2015 - 25 DEC 2015	22500	6107	28607	Nil
44	BAIJU V	Asst. Prof. in ME	COMPUTATIONAL FLUID DYNAMICS	11 JAN 2016 15 JAN 2016	5000	1218	6218	Nil
45	PREMNATH G	Asst. Prof. in ME	COMPUTATIONAL FLUID DYNAMICS	11 JAN 2016 15 JAN 2016	Nil	6218	6218	Nil
46	RAJU M	Asst. Prof. in EEE	CLEAN ENERGY AND TECHNOLOGY	7 DEC 2015 - 11 DEC 2015	15000	496	15496	Nil
47	AJMAL K	Asst. Prof. in EEE	CLEAN ENERGY AND TECHNOLOGY	7 DEC 2015 - 11 DEC 2015	15000	14584	438	
48	JYOTHI R L	Asso. Prof. in CSE	LANGUAGE COMPUTING	18 JAN 2016 22 JAN 2016	25000	5235	30235	Nil
49	SYLISH S V	Asst. Prof. in ECE	LANGUAGE COMPUTING	18 JAN 2016 22 JAN 2016	25000	6118	31118	Nil

50	ANILKUMAR SYSTEM ANALYST A	LANGUAGE COMPUTING	CDAC LAYAMBALAM	VEL- JAN 2016	18 JAN 2016	22	25000	6118	31118	Nil
51	ANILKUMAR System analyst A	STTP RESEARCH SKILLS AND METHODS	IIT KANPUR	ON	19 FEB 2016	21	12000	3303	15303	Nil
52	REJI Asst. Prof. THANKACHANECE	STTP RESEARCH SKILLS AND METHODS	IIT KANPUR	ON	19 FEB 2016	21	18000	2982	20988	Nil
53	SHAJY L Asst. Prof. in ECE	STTP RESEARCH SKILLS AND METHODS	IIT KANPUR	ON	19 FEB 2016	21	13000	2302	15303	Nil
54	JYOTHI R Asst. Prof. in ECE	STTP RESEARCH SKILLS AND METHODS	IIT KANPUR	ON	19 FEB 2016	21	18750	5223	23973	Nil
55	SHANI RAJ Asst. Prof. in ECE	STTP RESEARCH SKILLS AND METHODS	IIT KANPUR	ON	19 FEB 2016	21	18750	5223	23973	Nil

56	P C SUNIL	Trademan	SDP ON A CE ADOOR GLIMPSE INTO THE DESIGN AND IMPLEMENTATION OF ELECTRONICS HARDWARE RESOURCES	10 FEB 2016 12 FEB 2016	Nil	528	528	Nil
57	ANSAR	Demonstrator	SDP ON A CE ADOOR GLIMPSE INTO THE DESIGN AND IMPLEMENTATION OF ELECTRONICS HARDWARE RESOURCES	10 FEB 2016 12 FEB 2016	Nil	528	528	Nil
58	SHAMNA S S	Asst. Prof. in ECE	PEDAGOGICAL TRAINING PROGRAMME	25 FEB 2016 27 FEB 2016	Nil	3758.00	3758.00	Nil
59	RESHMA ITIACHAN	Asst. Prof. in ECE	PEDAGOGICAL TRAINING PROGRAMME	25 FEB 2016 27 FEB 2016	Nil	3758.00	3758.00	Nil
60	ARYA A P	Asst. Prof. in EEE	PEDAGOGICAL TRAINING PROGRAMME	25 FEB 2016 27 FEB 2016	Nil	3758.00	Nil	Nil
61	MEERA MURALI	Asst. Prof. in EEE	PEDAGOGICAL TRAINING PROGRAMME	25 FEB 2016 27 FEB 2016	Nil	3758.00	3758.00	Nil

62	SHAJY L	System analyst	NATIONAL WORKSHOP ON PATENTS AND INTELLECTUAL PROPERTY RIGHTS	DEPT. OF MANITIES AND SCIENCE, NIT GOA	HU- AND NIT	4 MARCH 2016	5 MARCH 2016	7000	10934.00	3934	Nil
63	REMYA R S	Asst. Prof. in CSE	NATIONAL WORKSHOP ON PATENTS AND INTELLECTUAL PROPERTY RIGHTS	NIT GOA		4 MARCH 2016	5 MARCH 2016	7000	10378	3378	Nil
64	SHANI RAJ	Asst. Prof. in CSE	NATIONAL WORKSHOP ON PATENTS AND INTELLECTUAL PROPERTY RIGHTS	NIT GOA		4 MARCH 2016	5 MARCH 2016	7000	10378	3378	Nil
										782,943.00	
Total expenditure											

5.4 Outstation Programmes Attended by Faculty with Bill Settlement Pending

The details of the outstation programmes, attended by the faculty and staff, whose bill settlement is pending are listed in Table 7 in page 25, were presented before the BoG for approval.

Decision: The BoG is decided to approve the courses in Table 7.

Table 7: The details of outstation programmes attended by the faculty whole settlement is pending

Sl No	Name	Title	Course	Institution	Date	Advance Amount
1	PREMNATH G	Asst. Prof. in ME	GREEN NANO TECHNOLOGY IN MATERIALS ENGINEERING AND ENERGY APPLICATION	CE ADOOR	15 DEC 2015 - 19 DEC 2015	Nil
2	SHEELA R	Asst. Prof. in Maths	ONE DAY SEMINAR ON DIFFERENTIAL EQUATIONS AND FOURIER SERIES - SOME APPLICATIONS	MAR BASE-LIOUS COLLEGE OF ENGG AND TECH-NOLOGY, TVM	14 JAN 2016	Nil
3	ASWATHY S S	Asst. Prof. in ECE	FDP ON ESTIMATION AND DETECTION THEORY	CE CHERTHALA	10 FEB 2016	Nil

5.5 Conferences Attended

The details of conferences attended by the faculty and staff and the expenditure incurred, listed in Table 8, are presented before the BoG for the approval.

Decision The BoG approved the conferences in Table 8 and sanctioned the payment of Rs. 9702.00 made to Alkha Mohan.

Table 8: The details of conferences attended post the seventh BoG and the expenditure incurred

Sl. No.	Participant	Title	Conference	Institution	Date(s)	Amt. Paid
1	Mr. Anilkumar C V	Asso. Prof in EC	IEEE TENCON	Macau, China	Nov 4 to 5	Unsettled
2	ALKHA MOHAN	Asst. Prof. in CSE	IEEE INTERNATIONAL CONFERENCE ON DATA MINING AND ADVANCED COMPUTING. (SAPIENCE - 16)	SN GURUKULAM COLLEGE OF ENGG, ERNAKULAM	16 MARCH 2016 to 18 MARCH 2016	9702.00
3	MANOJ RAY D	Asso. Prof. in CSE	INTERNATIONAL CONFERENCE ON INNOVATIONS IN BIO-INSPIRED COMPUTING AND APPLICATIONS	MIR LABS, TIST KOCHI, INDIA	16 DEC 2015 to 18 DEC 2015	Unsettled

5.6 Management Capacity Development Programme

The details of the management capacity enhancement programmes, attended by the faculty, are presented in Table 9.

Decision The BoG for the ratified the payment of Rs. 2,29,449.00 towards the management capacity development programmes in Table 9.

Table 9: The details of management capacity development programmes attended post the seventh BoG

Sl No	Name	Title	Course	Institution	Date	Advance (Rs.)	Settled (Rs.)	Spent (Rs.)
1	REVIKUMAR THAMPI V R	Asst. ME	HI in IM- PACT LEAD- ERSHIP BLUEPRINT FOR SUC- CESS	GEC, Bar- ton Hill, TVM	8 OCT 2015 - 10 OCT 2015	36000	2329	38329
2	REMYA R S	Asst. CSE	HI in IM- PACT LEAD- ERSHIP BLUEPRINT FOR SUC- CESS	GEC, Bar- ton Hill, TVM	8 OCT 2015 - 10 OCT 2015	36000	2154	38154
3	BAIJU V	Asst. ME	HI in IM- PACT LEAD- ERSHIP BLUEPRINT FOR SUC- CESS	GEC, Bar- ton Hill, TVM	8 OCT 2015 - 10 OCT 2015	36000	2329	38329

4	GEETHA S	Asst. Prof. in CSE	HI PACT LEAD-ERSHIP BLUEPRINT FOR SUC-CESS	IM- ton TVM	GEC, Bar-Hill, 2015	8 OCT 2015 - 10 OCT 2015	36000	2154	38154
5	C V ANILKU-MAR	Asst. Prof. in ECE	HI PACT LEAD-ERSHIP BLUEPRINT FOR SUC-CESS	IM- ton TVM	GEC, Bar-Hill, 2015	8 OCT 2015 - 10 OCT 2015	36000	2329	38329
6	DEEPA T R	Asst. Prof. in ECE	HI PACT LEAD-ERSHIP BLUEPRINT FOR SUC-CESS	IM- ton TVM	GEC, Bar-Hill, 2015	8 OCT 2015 - 10 OCT 2015	36000	2154	38154
Total									2,29,449.00

5.7 EAP Activities – Soft Skill Training Conducted

The details of soft skill training given to students post the seventh BoG, as listed in Table 10 are presented for approval.

Decision The BoG ratified of the payment of Rs. 346, 522.00 towards soft skill training.

Table 10: The details of soft skill training conducted for students post the seventh BoG

Sl No	Programme	Batch	Date	Trainer	Advance Amount	Reimburse Amount	Spent Amount
1	SOFTSKILL TRAINING FOR FINAL YEAR STUDENTS	B.Tech Sem 8 - ECE, IT, EEE	5,6,11,12 and 13 SEPT 2015	CL Edu-cate, TVM	100000	97272	197272
2	SOFTSKILL TRAINING FOR THIRD YEAR STUDENTS	B.Tech Sem 6 - ECE, IT, EEE	FEB13-14, FEB 19,20,21 2016	CL Edu-cate, TVM	99000	50250.00	149250
Total							346,522.00

5.8 EAP Activities - Counseling Course Conducted

The details of the counseling class given to students post the seventh BoG, as listed in Table 11 are presented for approval.

Decision The BoG approved the counseling conducted and the ratified the payment of Rs. 12122.00.

Table 11: The details of soft skill training conducted for students post the seventh BoG

Sl No	Programme	Batch	Date	Trainer	Advance Amount	Reimburse Amount	Spent Amount
1	Mind Tuning/Motivation for S ₆ EEE students	B.Tech EEE	6 February 11-12, 2016	Dr. T Padmakumar	9500.00	2622.00	12122.00

5.9 Remedial Courses Conducted

The details of the remedial classes given to students in the odd semester are listed in Table 12 are presented.

Decision The BoG ratified the payment of Rs. 68,400.00 towards remedial course conducted, as listed in Table 12.

Table 12: The details of remedial courses conducted for students in the odd semester

No	Faculty	Subject	Class	Date	Hours	Gen. Students	SC/ST students	Passed Gen.	Passed SC/ST	Expenditure
1	Jayadeepkumar.J (AP in ME)	Engineering graphics	S1EE	27/9/15	6	19	1	16	0	3600.00
2	Jayadeepkumar.J (AP in ME)	Fluid mechanics and heat engines	S3EE	1/8/15, 12/9/15	8	19	1			4800.00
3	Niyas.S search Associate IITTMK TVM)	(Re-Network theory EC1303	S3EC	08/01/2015	3	37	2			1800.00

4	Niyas.S search Associate IIITMK TVM)	(Re- Associate TVM)	Digital signal pro- cessing EC1506	S7EC	8/8/15, 9/8/15, 15/8/15, 16/8/15	24	11	0	14400.00
5	Chippy Vijayan (AP in ECE)		Electro magnetic theory	S5EC	1/8/15, 4/8/15	5	2	0	3000.00
6	Sree Bhagya (Ap in CSE)		Advanced com- puternetworks	S7CS	15/9-18/9, 22/9, 23/9, 28/9, 5/10 -7/10 of 2015	10	14	0	6000.00
7	Haseena.P.Y(AP inEE)		Circuits signals and systems	S3EE	1/8/15 13/8/15	4	15	0	2400.00
8	Haseena.P.Y(AP inEE)		Circuits signals and systemsEE	S5EE	4/11/15, 6/11/15	8	13	0	4800.00
9	Haseena.P.Y(AP inEE)		Control systems II	S7EE	08/01/2015	2	8	0	1200.00
10	Preema R Chan- dran(AP inEE)		Introduction to electrical engg:	S1EE	10/10/2015	3	10	3	1800
11	Preema R Chan- dran(AP inEE)		Electronics de- vices and circuits	S7EE	27/11/15	3	5	0	1800
12	Sujitha Suren- dran(AP inEE)		Electrical ma- chines II	S5EE	16/11/15	5	4	0	3000
13	MeeraMurali(AP inEE)		Linear integrated circuits	S5EE	5/11/15, 6/11/15	6	3	0	3600

14	MeeraMurali(AP inEE)	Design estimation and costing	S7EE	10/10, 17/10, 13/11, 14/11 of 2015	10	4	0	6000		
15	Arya.A(AP inEE)	Microprocessor based systems	S5EE	23/11/15, 24/11/15	8	4	0	4800		
16	Prasanthi.P.S(AP inEE)	Power system engg II	S7EE	3/11/15, 5/11/15, 6/11/15	9	12	0	5400		
17	Ajmal.K(AP inEE)	Field theoryEE1506	S7EE	15/8/15	6	8	1	4	1	Submitted
18	Ajmal.K(AP inEE)	Field theoryEE1506	S5EE	09/05/2015	6	8	1	Unsubmitted		
19	Ajmal.K(AP inEE)	EL2 HVDC1705	S7EE	26/11/15	3	10	0	Unsubmitted		
20	Ajmal.K(AP inEE)	Power system I 1505	S7EE	23/11/15	3	9	1	Unsubmitted		
Total									68,400.00	

Table 13 details the remedial teaching conducted for students in the even semester whose bills are not submitted and the examination results are not announced.

Decision The BoG decided to approve the remedial courses conducted, as in Table 13.

Table 13: The details of remedial courses conducted for students in the even semester whose bills are not submitted and the examination results are not announced

No	Faculty	Subject	Class	Date	Hours	Gen. Students	SC/ST students
1	Subeena H (AP in ECE)	Microprocessor architecture and programming	S4EC	20/2/16	2	5	2
2	Anu Mohan (AP in ECE)	Electronic circuits II	S4EC	17/3/16	1	4	1
3	Chippy Vijayan (AP in ECE)	Signals and systems	S4EC	5/3/16, 12/3/16, 19/3/16	9	28	3
4	Renjini S (AP in ECE)	Communication engg I	S4EC	02/05/2016	1	7	1
5	C.V.Anilkumar(Asso Prof: in ECE)	VLSIDesign	S6EC	23/1/16	2	22	2
6	Shamna S.S (AP in ECE)	Electronic measurements and circuits	S6EC	24/2/16,	1	3	0
7	Subeena H (AP in ECE)	Microwave techniques and devices	S6EC	5/2/2016, 24/03/2016	5	11	1
8	Aswathy S.S(AP in ECE)	Communication engg III	S6EC	02/04/2016	1	4	1
9	Anu Mohan (AP in ECE)	Hardware modeling	S6EC	23/2/16	1	19	2
10	Chippy Vijayan (AP in ECE)	Signals and systems EC1404	S8EC	5/3/16, 12/3/16	6	22	0

11	Renjini S (AP in ECE)	Wireless communication	SSEC	29/1/16	1	20	2
12	Deepa.A.K (AP in ECE)	Radar and navigation	SSEC	28/1/16	1	5	1
13	Sylsh S V (AP in ECE)	Multimedia Communication Systems	SSEC	03/04/2016	1	2	0
14	AswathyS.S(AP in ECE)	Communication engg III	SSEC	21/03/2016, 28/03/2016	3	6	0
15	Subeena H (AP in ECE)	Microwave techniques and devices	SSEC	28/03/2016, 29/03/2016	3	1	1

5.10 Refund of Fees towards Membership in Professional Societies

Mrs. Jyothi R L, AP in CS, Mr. Sylish S V, AP in EC had placed requests for the refund of half the annual membership fee of IEEE viz. Rs. 3275.00 and Rs. 2794.00 respectively. Anilkumar C V, Asso. Prof, in EC placed request for the refund of Rs 2630.00 towards half the amount paid to IEEE for refund from TEQIP.

Decision The BoG decided to ratify the payments to Mrs. Jyothi R L and Mr. Sylish S V and sanctioned the refund of Rs 2630.00 to Mr. Anilkumar C V.

5.11 Refund of Fee for Journal Publication

- Mr. Binu V P requested for the refund of an Amount of Rs. 14100.00 towards fee for publication of the paper titled *Secret Sharing Homomorphism and Secure E-Voting* in the *International Journal of Applied Engineering Research(IJAER)* .

The review comments for this paper were attached in the Appendix of the agenda of meeting.

Decision The BoG decided to sanction the amount of Rs. 14100.00 of to the author, Mr. Binu V P, towards the refund of fee for journal publication.

5.12 Meeting of the Research Guidance Committee

The meeting of the fourth Research Guidance Committee for TEQIP II at College of Engineering Karunagappally, Karunagappally, Kollam, Kerala Conducted on 30/01/2016 at 10:00 AM in Principal's room under the chairmanship of Senior Research Advisor Prof. E.Gopinathan. The Committee

- Examined the research proposals and suggested some changes before submission.
- Examined and approved the proposal for the international conference in July.

The draft minutes of the RGC meeting was included in the appendix of the agenda of the meeting.

Action Sought : The BOG approved the draft minutes of the RGC meeting.

5.13 Enhancement of PG Scholarship

As per the SPFU direction (Ref No. No. 199/SPFU/GOK/2012 dated 30.01.2016) the PG scholarship is increased to Rs. 8000/- with effect from 2016 December. This has been implemented from December 2016 scholarship onwards.

Decision: The BoG acknowledged the changes in the amounts of scholarship and directed the institution to comply with the new directive.

5.14 Refund of Fee for Qualification Upgradation

The Table 14 shows the requests for the refund of fee for the upgradation of qualification.

Action sought: The BoG decided to ratify the payment of Rs. 12260.00 to Mrs. Smitha P and Rs. 10640.00 to Mr. Shajy L towards the fee for the upgradation of qualification.

Table 14: The details of requests and the expenditure for the upgradation of qualification

Sl.No.	Name	Designation	Purpose	Amount
1	Smt.Smitha P	Asst. Prof. in CSE	Printing charges for PhD Thesis	12260.00
2	Mr.Shajy L	System Analyst	Printing charges for PhD Thesis	10640.00
Total				22900.00

The details of further requests by three more faculty are presented in Table 15.

Decision: The BoG decided to sanction the payment of Rs 79309.00 to members of the faculty, as listed in Table 15.

Table 15: The details of requests for the refund of fee for the upgradation of qualification

Sl.No.	Name	Designation	Purpose	Amount
1	Ms.Sabeena K	Asst. Prof. in CSE	Tuition Fee for M. Tech	32910.00
2	Mr.Vinod R	Asst. Prof. in CSE	Tuition Fee for M. Tech	17399.00
3	Ms.Shani Raj	Asst. Prof. in CSE	Ivth annual fee - Phd	29000.00
Total				79309.00

5.15 Request for Support under ITSS - Sanction Pending

The chairman approved the request by Mr.C V Anilkumar, Asso. Prof. in EC for support under ITSS for presenting paper at TENCON, Macau, China and submitted to NPIU through SPFU. The request was ratified by the seventh BoG. The applicant has attended the conference from Noveber 1–4, 2016 and presented the paper. But the request is not sanctioned by the NPIU yet. Mr.C V Anilkumar, Asso. Prof. in EC has now placed a request to the Principal for getting the sanction. His request was appended in the agenda of the meeting.

Decision: It is decided to send a letter by the chairman of the Bog to NPIU to sort the matter out.

5.16 IIIC Activities–Industrial Visit to Nuclear Plant, Koodankulam

Fifteen faculty visited the nuclear power plant at Koodankulam to get an exposure to the power generation and distribution from the plant.

Action Sought : The BoG decided to approve this industrial visit and to ratify the payment of Rs. 12,258.00, as listed in Table 16.

Table 16: The details of industrial visit by the faculty to Nuclear Plant, Koodankulam

Sl No	Coordinator	Activity	Department	Date	Advance Amount	Reimburse Amount	Amount Spent
1	LIBI A	KUDAMKULAM NUCLEAR POWER PLANT THIRUNELVELI, T N	FACULTY -EC, EEE	30 NOV 2015	10000	2258	12258.00

5.17 IIIC Activities–Industrial Tutoring

The details of industrial tutoring conducted post the seventh BoG is presented in Table 17.

Dececion : The BoG is decided to approve the industrial tutoring activities and ratified the payment of Rs. 1, 65, 870.00 as presented in Table 17.

Table 17: The details of industrial tutoring conducted for students post the seventh BoG

Sl No	Programme	Dept.	Industry	Advance (Rs.)	Settled (Rs.)	Amount (Rs.)	Date
1	INDUSTRIAL TALK ON ELEC-TRONIC PROD-UCT DESIGN	ECE	SFO TECHNOLOGIES, EKLM	NIL	4915	4915	15 SEPT 2015
2	INDUSTRIAL TALK ON INTER-NET OF THINGS	ECE	EARLY BIRD SECURITY SYSTEM, TVM	NIL	5615	5615	22 SEPT 2015

3	JAVA PROGRAMMING	CS, IT	SEAVIEW SUPPORT SYSTEM	26000	851	26851	30 SEPT 2015, 17 OCT 2015, 20 OCT 2015
4	MULTIMEDIA PROJECT USING MAYA	IT	SPOT WRITER TECHN. PVT LTD, TECHNO, TVM - ENTIRESOFT TECH. NILA, TVM	16875	6273	23148	19 and 26 SEPT 2015, 3 OCT 2015
5	PRINCIPLES and TECHNIQUES USED IN TI SIGNALING	ECE	BSNL, TVM	6000	3371	9371	9 OCT 2015
6	TALK ON AN-TENNA TYPES	ECE	DOORDARSHAN, OOTY	6500	5254	11754.00	16 OCT 2015
7	EMBEDDED SYSTEM DESIGN USING KEIL AND PROTEUS	ECE	TATA ELXSI, TVM	NIL	9994	9994	17 OCT 2015
8	INDUSTRIAL WORKSHOP ON RASPBERRY PI	ECE	BEGINOW, TVM	15000	6454	21456.00	31 OCT 2015, 1 NOV 2015
9	WORKSHOP ON MOBILE AND LAPTOP SERVICE	ECE	P C ENGINEERS, TEMPLE ROAD, THIRUNAKKARA, KOTTAYAM	NIL	5530.00	5530.00	16 NOV 2015

10	EXPERT TALK CS ON ADVANCE- MENTS AND APPLICATIONS IN INTERNET OF THINGS	GREY TECHNOLO- GIES, COCHIN	5600	2009	7609	18 FEB 2016
11	TALK ON SWITCH EEE GEAR AND PROJECT	KSEB 220 Kv SUB- STATION, MOOLA- MATTO	NIL	9651.00	9651	15 MARCH 2016 16 MARCH 2016
12	MOBILE APPLI- ECE CATION DEVEL- OPMENT USING PHONE GAP	TENDER WOODS SO- LUTIONS PVT, BAN- GALORU	22500	7476.00	29976	29 FEB 2016 01 MARCH 2016
Total					1,65,870.00	

5.18 IIIC Activities—Industrial Visits by Students

The details of industrial visits made by students is presented in Table 18.

Point of Discussion : Industrial visits are permitted in the guidelines in Annexure IX in the new Project Implementation Plan, The copy of the annexure was included in the appendix of the agenda of the meeting. It is to debated whether payment may be given to students in respect of their traveling expenses.

Decision : The BoG decided to give the minimal and admissible TA to students but without any allowance.

Table 18: The details of industrial visits conducted for students post the seventh BoG

1	Industrial Visit	Electrical and Electronics	and Nuclear Power Plant, Koodankulam	19 Feb 16	Not settled
2	Industrial Visit	Electrical and Electronics	and BHEL and KDPP Nal- lalam	01/16	Not settled
3	Industrial visit by S8 EC	Electronics and Communication	and FCRI	01/16	NOT SETTLED
4	Industrial visit by S6 EC	Electronics and Communication	and FCRI	03/16	NOT SETTLED

5.19 IIIC Activities–Internship by Students

The revised PIP include provision for reimbursing the TA, boarding, loading and sundry expenses to students who undertake internship, subject to the norms approved by the BoG. The extract of the relevant page of PIP was included in the appendix of the agenda of the meeting.

Decision : BoG is requested to frame policies for student internship.

5.20 International Conference on Computing, Communication and Signal Processing

The report, highlighting the progress of work in conducting the international conference was included in the in the appendix of the agenda of the meeting.

Selection of Publisher of the Conference Proceedings Being the first international conference, publishers such as Springer, Elsevier etc. were reluctant to publish the proceedings of the conference online. Mc Graw Hill has agreed to publish the hard copy of the conference proceedings with the following specifications.

- Book Size: Crown Quarto (trim size: $7\frac{1}{4}in \times 9\frac{1}{2}in$; print area: $6in \times 8in$)
- Pages: 400
- Book Cover: 4-Colour
- Paper: 70 GSM (White) Text Paper with Text printing in 1-colour
- Book Binding: Softcover
- Print-ready PDFs: we will receive camera ready copy (high resolution PDFs for printing) of the book for printing Based on the above specifications, the fresh quotes by McGraw Hill Education was:
 - 120 copies in Paperback @ INR 895/- per copy
 - 150 copies in Paperback @ INR 815/- per copy
 - Total Amount is Rs. 1,07,400.00

This amount is to paid in bulk on May 20, 2016.

Decision : The BoG is decided to approve the publisher and sanctioned the payment of Rs. 1,07,400.00 to McGraw Hill towards the cost of publication.

Revision of the Estimate of Conference The unanticipated item *Stage Decorations and Logistics* with estimated expenditure of Rs. 170,000.00 is to be included in the original estimate of conference, approved in the seventh BoG. The revise estimate now becomes Rs. 17,95000.00.

Decision : The BoG is requested to include the item *Stage Decorations and Logistics* in the estimate of conference and to sanction the revised estimate of Rs. 17,95000.00.

Payment to Beach Hotel, Kollam Beach Hotel, Kollam has raised an invoice for Rs. 449,525.00 towards the cost of venue. The invoice was included in the appendix of the agenda of the meeting. A token advance amount of Rs 50000.00 will be paid initially.

Decision : The BoG decided to approve the cost of Rs. 449,525.00 and the token advance payment of Rs 50000.00.

Point of Discussion We needed the NOC from Ministry of External Affairs, Ministry of Home Affairs and Ministry of Human Resources Development for foreign delegate to attend the conference. We submitted the application through proper channel on February 2, 2016 but the necessary papers are still held up in the state home department. They instruct that the application for the NOC should be routed directly to the central ministries with a copy for information to the state home department, on account of the recent changes in procedure. Accordingly, we sent the letters directly. The concern on the chance of not getting the NOC in time is shared with the BoG.

Decision : The BoG made the recommendation to contact Mr. Ajayan, Liason Officer, Kerala Hoose, Delhi to ease the affairs related to the international conference in Central Ministries.

5.21 Quarterly Plan for In House Training

The plan for in house training for the next three months is presented in Table 20.

Decesion : The BoG is requested to approve the plan and the estimate of Rs. 14.20 lakh.

Table 19: The courses planned for the next three months

No	Title	Coordinator	Month /Year	No of Days	Expenditure (in lakhs)
1	Tools for Biomedical Research	Remya S, Geetha S	R April	5 days	1
2	Research Methodology	Mr. C V Anil Kumar, Smt. Deepa A K	April	5 days	1.2
3	Student counselling and stress relief techniques	Mrs. Deepa T R,	April	3 days	0.5
4	Circuit design tools	Mr. Kuriachan T D	April	5 days	1.25
5	Workshop on Fuzzy Logic and Neural Network	Raju M	April	6 Days	1

6	Mathematics for engineering research	Jyothi R L,Shani Raj	May	5 days	1
7	Networking and Simulation using NS2	Binu V P ,Remya R S	May	3 days	0.75
8	How to do a Good Phd	Libi A	May	5 days	1.25
9	Electrical System Design	Haseena PY	May	5 days	1
10	KSR rules	Vidhya	May	3 days	0.75
11	Pattern recognition and optimization Techniques in Image Processing	Geetha S,Jyothi R L	June	5 days	1
12	English for Thesis writing	Binu VP,Smitha P	June	3 days	0.75
13	Design and Development of Electronic products	Mr. Sylish S V, Mrs Renjini S	June	3 days	0.5
14	Signal and Image Processing	Dr. Gopakumar, Remya R S	June	5 days	1.5
15	Personality Development	Sandhya	June	3 days	0.75
Total					14.20

5.22 Quarterly Plan for Outstation Training

The plan for the outstation training for the next three months is presented. The plan for outstation training for the next three months is presented in Table 20.

Decesion : The BoG is requested to approve the plan and the estimate of Rs. 19.0 lakh.

Table 20: The outstation training planned for the next three months

No	Title	Participants	Month /Year	No of Days	Expenditure (' in lakhs)
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1	Algebra and number Theory ,IIT GUWAHATI	Binu V P	April 5 days	0.45
2	Mobile Application Development,ESCI	Binu P,Anilkumar A,Shaji L	V April 5 days	1
3	Pedagogy, IIT Madras	Mr. C V Anil Kumar	April 3 days	0.05
4	Pedagogy, IIT Madras	Dr. Gopakumar C	April 3 days	0.05
5	Mobile Application Development Using Android,ESCI	Mr. Reji Thankachan	April 5 days	0.4
6	Mobile Application Development Using Android,ESCI	Mr. Kuriachan T D	April 5 days	0.4
7	EMBEDDED SYSTEM DESIGN,IIT Kharagpur	Anilkumar.A,Shaji L	May 5 days	0.75
8	Pedagogy,IIT Madras	Smitha P,Shani Raj,Binu V P	May 3 days	0.75
9	Cyber defence tools for mobile and wireless technologies,ESCI	Jyothi R L,Shani Raj,Geetha.S,Remya R S	May 5 days	1.15
10	Pedagogy, IIT Madrass	Mrs. Shiny C	May 3 days	0.05
11	Technology 5G Wireless Communication Network,IIT Kanpur	Mr. C V Anil Kumar	May 5 days	0.35
12	Technology 5G Wireless Communication Network,IIT Kanpur	Dr. Gopakumar C	May 5 days	0.35
13	Mobile Application Development Using Android,ESCI	Mr. Sylish S v	May 5 days	0.4
14	Personality Development ,ESCI	Raju M	May 3 days	0.35
15	Personality Development ,ESCI	Libi A,Haseena PY	May 3 days	0.35

16	Refresher course in Software Engineering,IIT Kharagpur	Manoj Ray D, Jyothi R L, Shani Raj	June 5 days	1
17	Pedagogy,IIT Madras	Remya S,Sabeena K,Geetha S	June 3 days	0.75
18	EMBEDDED SYSTEM DESIGN,IIT Kharagpur	Reji Thankachan,Sylish S V	May 5 days	0.8
18	Mobile Application Development Using Android,ESCI	Mrs. Deepa A K	June 5 days	0.4
19	Energy management and energy efficiency at IIT, Guwahati	Mrs. Libi A, Mrs. haseena P Y, Mr. Raju M	May 23-27	1.0
20	Pedagogy,IIT Madras	Baiju V	April 3 days	0.25
21	Pedagogy,IIT Madras	Mrs. Prema	April 3 days	0.25
22	Recent Advancements in Computing by IHRD at MEC, Ekm	Geetha S Jyothi R.L Remya R.S Shani Raj Anil Kumar Jisy Raju Alka Mohan Jayakrishnan Vidhya S Binu V.P Smitha P	April 18-22,2016	3.85
23	Recent Advanced Linux Administration by IHRD at MEC, Ekm	Preema R Chandran Prasanthi P.S Arya A.P Sujitha Surendran Anu Mohan Aswathy S.S Renjini S Subeena H Deepa T.R Ganesh R Sheela R	April 18-22,2016	3.85
Total				19.0

5.23 Plan for the IIIC Activities for the Next Three Months

The plan for IIIC activities for the next ththree months is presented in Table 21.

Action Sought: The details are placed before the BoG for approval of the planned IIC activities.

Table 21: The for IIC activities for the next three months

Sl. No.	Programme	Dept.	Industry	TARGET GROUP	Date	Estimate
1	Expert lecture	EE	Startup Mission Kerala	S8 and S6 EEE students	04/16	1500
2	Expert lecture	EE	Energy Management Cell	S8 and S6 EEE students	04/16	7500
3	Expert lecture	EE	Electrical Inspectorate	S8 and S6 EEE students	06/16	7500
4	Industrial Visit	EE	High Voltage India Bangalore	EEE Dept Faculty	04/16	15000
5	Internship	EE	Nuclear Power Plant, Koodankulam	S8 and S6 EEE students	06/16	20000
6	Internship	EE	Advanced Training Institute, Madras	S6 EEE students	06/16	20000
7	Workshop on PCB Design	EC	Ebird	S7EC	07/16	20000
8	Internet of things	EC	Ebird	S5EC	07/16	5000
9	Electronic Production Design	EC	SFO Technologies	S7EC	07/16	5000
10	Internship	EC	KMML	S6EC/M2	May/June 2016	10000
11	Internship	EC	KELTRON	S6EC/M2	May/June 2016	10000
12	Internship	EC	BSNL	S6EC/M2	May/June 2016	10000
13	Talk on Nuclear Power Station	EC	Nuclear Power Station, Koodankulam	S2EC	04/16	5000

14	Entrepreneurship Development	EC	Union Bank	Mtech	04/16	5000
15	Talk on airport communication	EC	Airport authority	M Tech	03/16	5000
16	Industrial training for staff	EC	Texas Instruments Bangalore	Faculty	May/June 2016	30000
17	Industrial visit of staff	EC	NeST	Faculty	May/June 2016	40000
18	Industrial visit of staff	EC	ITI	Faculty	May/June 2016	10000
19	Industrial visit of staff	EC	High voltage India	Faculty	May/June 2016	10000
20	Industrial visit of staff	EC	Startup Village	Faculty	May/June 2016	10000
21	Industrial visit of staff	EC	SCTIMST	Faculty	May/June 2016	10000
22	Graphics and Web Designing	CS	Seaview Support System Pvt. Ltd. Technopark	B-Tech	May/June 2016	15,000
23	JAVA Application Development	CS	Softtex digital private limited Technopark	B-Tech	May/June 2016	15,000
24	Android Application Development	CS	Seaview Support System Pvt. Ltd. Technopark	B-Tech and M-Tech	May/June 2016	45,000
25	DOT NET Technologies	CS	Seaview Support System Pvt. Ltd. Technopark	B-Tech	May/June 2016	30,000
26	Linux Customization	CS	Softtex digital private limited Technopark	B-Tech	May/June 2016	30,000
27	Industrial visit	CS	Cdot Bangalore	Faculty	May/June 2016	30,000
28	Industrial visit	CS	CDAC, Trivandrum	Faculty	May/June 2016	20,000
29	Industrial visit	CS	IBM, Bangalore	Faculty	May/June 2016	40,000

30	Industrial visit	CS	NeST Institute of Fiber Optic Technologies	Faculty	May/June 2016	20,000
31	Industrial visit	CS	Seaview Support System Pvt. Ltd. Technopark	Faculty	May/June 2016	20,000
32	Training on database administration	CS	Seaview Support System Pvt. Ltd. Technopark	Faculty	May/June 2016	70,000
33	Training on Network Administration	CS	Seaview Support System Pvt. Ltd. Technopark	Faculty	May/June 2016	70,000
34	Training on Information Security	CS	Appins Technologies, Trivandrum	Faculty	May/June 2016	70,000
35	Linux Administration	CS	Seaview Support System Pvt. Ltd. Technopark	B-Tech	May/June 2016	40,000
36	Graphics Implementation with OpenGL	CS	Technopark, Trivandrum	M-Tech	May/June 2016	20,000
37	Internship	CS	BSNL Training Centre, Trivandrum	B-Tech	May/June 2016	70,000
38	Industrial visit	CS	VSSC, Trivandrum	B-Tech	May/June 2016	20,000
39	Industrial visit	CS	CDAC, Trivandrum	B-Tech	May/June 2016	20,000
40	Industrial visit	CS	IBM, Bangalore	M-Tech	May/June 2016	50,000
41	Industrial visit	CS	Infopark, Cochin	B-Tech	May/June 2016	30,000
Total						981500.00

5.24 Plan for Remedial Courses

The plan for conducting remedial classes prior to University Examinations is presented in Table 22.

Action Sought : BoG is requested to approve the plan for remedial teaching and the estimate of Rs. 391,500.00.

Table 22: The remedial teaching planned for April and May 2016

SI No	Name and designation of faculty	Subject	Class	Hours	Estimate
1	Shiny.C (AP in ECE)	Digital system design	S8EC	20	12000
2	Deepa.T.R (AP in ECE)	Digital system design	S8EC	20	12000
3	Chippy Vijayan (AP in ECE)	Signals and systems	S8EC	20	12000
4	AswathyS.S(AP in ECE)	Communication engg III	S8EC	5	3000
5	Subeena H (AP in ECE)	Microwave techniques and devices	S8EC	6	3600
6	Shiny.C (AP in ECE)	Digital system design	S6EC	20	12000
7	Deepa.T.R (AP in ECE)	Digital system design	S6EC	20	12000
8	Chippy Vijayan (AP in ECE)	Signals and systems	S6EC	20	12000
9	Shiny.C (AP in ECE)	Digital system design	S4EC	15	9000
10	Deepa.T.R (AP in ECE)	Digital system design	S4EC	15	9000
11	Renjini S (AP in ECE)	Communication engg III	S4EC	8	4800
12	MeeraMurali(AP inEE)	Electrical machines design	S8EE	8	4800
13	Prasanthi.P.S(AP inEE)	Power systemIII	S8EE	6	3600
14	Preema R Chandran(AP inEE)	Electronic instrumentation	S8EE	6	3600
15	Ajmal.K,Sujitha(AP inEE)	Digital system processing	S6EE	10	6000

16	Preema R Chandran(AP inEE)	Electrical machines III	S6EE	10	6000
17	Haseena.P.Y(AP inEE)	Control system I	S6EE	8	4800
18	Arya.A,Prasanthi.P.S(AP inEE)	Electrical drawing	S6EE	8	4800
19	Libi.A(AP inEE)	Optimization technique	S6EE	6	3600
20	MeeraMurali(AP inEE)	Industrial power electronics	S4EE	15	9000
21	Preema R Chandran(AP inEE)	Digital electronics	S4EE	10	6000
22	Haseena.P.Y Libi.A(AP inEE)	Circuits,Signals and systems	S4EE	10	6000
23	Arya.A(AP inEE)	Analog communication	S4EE	6	3600
24	Renu.K.K	Engg Mathematics III	S4EE	5	3000
25	Preema R Chandran(AP inEE)	Basic electrical engg	S2EE	8	4800
26	Jayadeepkumar.J (AP in ME)	Engg Mechanics	S2EE	10	6000
27	Shiny.C (AP in ECE)	Basic electronics engg	S2EE	8	4800
28	Jyothi.R.L(A.P in CS)	Introduction to Computing and problem Solving	s2CS	8	4800
29	Binu VP(Asso Prof in CS)	Introduction to Computing and problem Solving	s2CS	8	4800
30	Achama O N(AP in Applied Sciene)	Engineering Chemistry	S2CS	10	6000
31	Ajilkumar A(Asso Prof in M.E)	Engineering Mechanics	S2CS	10	6000
32	Ajmal K(AP in EE)	Basic Electrical Engg	S2CS	10	6000
33	Sree Bhagya	Data Communication	S6 CS	8	4800

34	Remya R S(AP in CS)	Automata lan- guages and computations	s4CS	10	6000
35	Premakumari(AP in Ap- plied Science)	Engineering Mathamematics IV	S6IT	10	6000
36	Libi.A(AP inEE)	Electrical Technology-S3	s6IT	10	6000
37	Nimmy V(AP in ECE)	Logic System and Electronic Circuits	S6IT	10	6000
38	Alkha Mohan(AP in CS)	Data and Com- puter Networks	s4IT,S6IT	10	6000
39	Suni .S(AP in CS)	Microprocessor Architecture and System Design	S6IT	10	6000
40	Nimmy V(AP in ECE)	Knowledge Engi- neering	S6IT	10	6000
41	Jyothi.R.L(A.P in CS)	DBMS	S6IT	10	6000
42	Sree Bhagya(AP in IT)	Data Structures and Algorithm	S6IT	10	6000
43	Suni .S(AP in CS)	Internet Pro- gramming	S6IT	10	6000
44	Baiju V(AP in ME)	Financial Man- agement and E Banking	S6IT	10	6000
45	Alkha Mohan(AP in CS)	Compiler Con- struction	S6IT	10	6000
46	Geetha S.(AP in CS)	System Program- ming	S4IT	10	6000
47	Remya R S(AP in CS)	Formal Lan- guages and Automata The- ory	S6IT	10	6000
48	Arya Chandran (AP in CS)	Computer Graph- ics and Anima- tion	S6IT	10	6000
49	Vidhya S(AP in CS)	Datamining and Ware housing	S6IT	10	6000

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50	Ganesh R(AP in ME)	Engineering Me- chanics	S4IT	10	6000
51	Renu K K(AP in Applied Science)	Enginnering Mathematics	S4IT	10	6000
52	Geetha S.(AP in CS)	Computer Archi- tecture and Or- ganisation	S4 CS	10	6000
53	Renu K K(AP in Applied Science)	Engineering Mathematics	S4CS	10	6000
54	Suni .S(AP in CS)	Micro processor	S4CS	10	6000
55	Binu VP(Asso Prof in CS)	Data Structures and Algorithm	S4CS	10	6000
56	Premnath.N	Engineering Me- chanics	S4CS	10	6000
57	Premnath.N	Engineering Graphics	S4CS	10	6000
58	Achama O N(AP in Ap- plied Sciene)	Engineering Chemstry	S4CS	10	6000
59	Premakumari(AP in Ap- plied Science)	Engineering Mathematics -II	S4CS	10	6000
60	Nimmy V(AP in CS)	Logic Design	s4CS	10	6000
61	Binu VP(Asso Prof in CS)	Object oriented Programming	S4CS	10	6000
62	Geetha S.(AP in CS)	Principles of Programming Languages	S4CS	10	6000
63	AswathyS.S(AP in ECE)	Electronic devices and Circuits	S4CS	10	6000
Total					391, 500.00

Part III

Reports

6 Summary of Expenditure

The statement of expenditure post the sixthg BoG is presented in Table 23. The total expenditure as on March 31, 2016 is Rs. **72276930.00** out of the nine crore we received.

Decision: The BoG examined and approved the statement of expenditure, given in Table 23.

Table 23: The statement of expenditure from November 1, 2015

Sr.No.	Expenditure Name	Cumulative Expenditure up to October 2015	Expenditure for November 2015	Expenditure for December 2015	Expenditure for January 2016	Expenditure for February 2016	Expenditure for March 2016	Cumulative Expenditure up to March 31, 2016
1	Procurement	46971684	109066	260000	492118	630494	418672	48882034
2	Providing As-sistantships for Increased enrolment in existing and new PG Programmes in Engineering Disciplines	6701000	624000	Nil	900000	630000	504000	9359000
3	Enhancement of Research and Development and Institutional Consultancy Activities	645846	24650	Nil	Nil	23957	47955	742408
4	Faculty and staff development for improved competence based on Training Needs Analysis(TNA)	4778138	54897	261083	159246	331222	769185	6353771
5	Enhanced Interaction with Industry	411593	49999	12258	32586	34791	57230	598457

6	Institutional Management Capacity enhancement	379835	229449	Nil	Nil	Nil	Nil	609284
7	Implementation of Institutional reforms	898880	Nil	Nil	Nil	Nil	Nil	898880
8	Academic support for weak students	724254	Nil	197272	Nil	12122	149250	1082898
9	Incremental Operating Cost	3264623	161075	49200	127323	88762	59215	3750198
9.1	Salaries	1145048	50000	49200	50000	50000	50000	1394248
9.2	Consumables	380115	7947	Nil	500	19865	9215	417642
9.3	Operation and Maintenance	1709360	103928	Nil	76823	18897	nil	1909008
To tal		64775853	1253136	779813	1711273	1751348	2005507	72276930

Part IV

Any Other Item with the Permission of the Chair

There were no special item, presented before the BoG.

ANNEXURE II

Report of International Conference on Computer, Communication and Signal Processing (ICCCSP-2016)

On 8-9 July 2016, in The Beach Hotel, Kollam, Department of Electronics and Communication Engineering and Department of Computer Science and Engineering of College Of Engineering, Karunagappally under the sponsorship of TEQIP II jointly organized two-days International Conference, “*INTERNATIONAL CONFERENCE ON COMPUTING COMMUNICATION AND SIGNAL PROCESSING*” (ICCCSP-2016): that brought together over 200 participants from all over India. The purpose of the conference was to provide a platform for presentation of original research findings, exchange and dissemination of innovative ideas and practical development experiences in the field of Computing, Communication and Signal Processing. The venue was selected by considering the proximity with air and railways and the convenience of accommodation of delegates and participants. This choice of venue was discussed and confirmed by 4th RGC meeting on 30/1/2016 and BoG meeting of College of Engineering, Karunagappally. Total amount sanctioned for the conference was Rs 17, 95,000. The registration fee details as approved by BoG can be found in Appendix.

Researchers from academia and industry were present to discuss research issues with experts from various reputed institutions across India and abroad, on the recent trends in Computing, Communication and Signal Processing. It is being organized specifically to help computer industry, Communication system developments and advancements in Signal processing to derive innovations in concerned domains. During the past three decades, the research and developments in Computing, communication and Signal Processing dramatically changed the lives and livelihoods of people throughout the developing world. The change is still ongoing and this motivates the younger generation to enhance their skills and knowledge sets. All the trends interlock, many of them depending on the advancement of other technologies in order to move forward.

A workshop was organized in the college on 20th June 2016 to 24th June 2016 with the same theme of the conference and a Seminar was conducted on 7th June on ‘Big Data Design and Application Platforms’ by Prof. Zoren Boshnevic, University of Belgrade from Serbia prior this conference. The conference website was inaugurated by Dr. N. Sundararajan, Prof., Nan yang Technological University, Singapore on 13/01/2016. Totally 201 papers were received to the conference. Papers were received through Easy Chair conference management software system. Out of received ones, 68 papers were selected by double review process by an expert review panel comprising more than 70 experts in the related fields. Three invited papers were also presented in the conference. The plagiarism policy and review policies as mentioned in the Brochure and Conference website were strictly followed and only one third of received papers were accepted.

The Inaugural ceremony of the conference was maintained simplicity and elegance. Presidential address was by Dr. V.P.N. Nampoore, Emeritus Professor, International School of Photonics, CUSAT followed by inaugural address by Dr. Anil Bhardhwaj, Director Space Physics Laboratory. In his talk he pointed out the new issues in the field of computing, communication and signal processing in space research. He also pointed out the need of fast means of communication techniques in view of the forthcoming space explorations. He put forward the challenges in the space research including the necessity of fast computing, effective communication and noise free signal processing. He elaborated the prestigious

Chandrayan and the Mangalyan Project of our country and shared his experiences in the same. Proceedings, published by McGrawHill, were officially brought out by Dr. Anil Bhardhwaj.

There were three venues, where research papers in computing, communication and signal processing were presented. After keynote addressing by various foreign delegates on the morning session, the technical session for paper presentation was commenced on the afternoon of each day of the conference. There were two sessions in each of the three tracks for the two days. Detailed schedule of the conference can be referred in Appendix. After the inaugural ceremony, Prof. Lekshmi Narasimhan, during his keynote, pointed out the relevance of IoT in daily life. The way how security and privacy issues of individuals are affected by IoT were discussed in the Keynote address. Prof. Zoran S. Bojkovic discussed the recent trends and research opportunities in Big data analytics. Afternoon session was engaged with paper presentations by research scholars working in computing, communication and image processing areas. The details of Chairs engaged the various sessions are attached in the Appendix. The day ended with ambient and vibrant discussion forum where scholars shared their experiences and problems in their respective domain. Participants cleared their doubts regarding the submission of research proposals, choice of right journals etc.

Second started with keynote address by Dr. Narasimhan Sundararajan from Nanyang Technological University, Singapore. He gave an insight on computational intelligence specifically in the area of neural networks and their applications. This was followed by the Keynote session on 'Recent Advances in Frequency Estimation' by Prof. SamanS.Abeyssekera, which was discussing the issues related to Frequency estimation, Time-frequency analysis, Signal processing for communications, Blind/adaptive signal processing and Sonar/radar signal processing.

Dr. Lee Ching Kwang from Nanyang university discussed the qualities that the engineers of 21st century should possess. Relevant curriculum modification needed to achieve this were projected. This session was followed by discussion about various audio and video compression techniques by Dr. R. Krishnamurthy. After noon session was engaged with paper presentations on domains such as VLSI & embedded systems and Image processing.

Posters of different research presentations were displayed during lunch hours on both days. The programme ended with closing ceremony.

The Budget and Actual Expenditure details are given in the Appendix.

Appendix

Budget	
Item	Amount (Rs)
Venue	4,50,00
Printing of Brochures and Posters	50,00
TA for resource persons	4,50,00
Remuneration to resource persons	1,00,00
Accommodation	90,00
Publication of Conference Proceedings	2,50,000
Printing of Certificates/Badges	5,000
Conference Kit	70,000
Publicity	40,000
Transportation	50,000
Other Miscellaneous expenses	70,000
Stage settings and logistics	170,000
Total Amount	17,95,000

Actual Expenditure	
Item	Amount (Rs)
Venue	4,49,525
Printing of Brochures and Posters	47,955
TA for resource persons	4,79,295
Remuneration to resource persons	
Accommodation	
Transportation	
Publication of Conference Proceedings	1,18,363
Printing of Certificates/Badges	8,560
Conference Kit	60,661
Publicity	30,300
Other Miscellaneous expenses	39,222
Stage settings and logistics	1,46,980
Total Amount	13,80,861

Registration Fee Structure

CATEGORY OF PARTICIPANT	REGISTRATION FEE	
	Before 09/05/2016	After 09/05/2016
Student	Rs. 2500	Rs. 3000
Foreign Student	USD 100	USD125
Delegates:		
From Academic and R&D Institutions	Rs. 4000	Rs. 5000
From Industries	Rs. 5000	Rs. 6000
From Overseas	USD 200	USD 250
Attendee*	Rs. 1500	USD 50
*Attendee - An attendee can attend all technical sessions. Conference kits + Proceedings will not be provided, only certificate will be given to attendee.		

Keynote Speakers

Sl. No.	Name and Affiliation	Area of Specialization
1	Dr. Prof. V. Lakshmi Narasimhan Vice-President (Research), Srikar & Associates Intl. Inc. 109 Fairmount Way, NC 28562, USA	Various aspects of the theory and practice of information systems design, management and exploitation.
2	Dr. Zoran Boljkovic Full Professor, University of Belgrade, Studentski Trg 1, 11000 Belgrade: SERBIA	Digital signal and image processing. Data compression by various techniques for digital transmission or storage audio and video at reduced rates. Wire/wireless multimedia communications and networks.
3	Dr. Lee Ching Kwang Associate Professor, Director of Graduate Institute of Engineering, Faculty of Engineering, Multimedia University, Cyberjaya, MALAYSIA.	Frequency selective surfaces, Microstrip Antennas, Electromagnetic Modeling.
4	Dr. Narasimhan Sundararajan Professor (Retired), School of Computer Engineering, Nan yang Technological University, Singapore.	Neural Network Algorithms, Minimal Resource Allocation Network, Adaptive Flight Control
5	Dr. R. Krishnamoorthy Professor, Department of CSE & IT, Bharadhidasan Institute of Technology Campus,	Biometrics, Computer Vision and Image Processing, Software Testing, Networks, Data and Web Mining

	Anna University-Tiruchirappalli, INDIA .-	
6	Dr. Saman S. Abeysekera Associate Professor, School of Electrical & Electronic Engineering, Nanyang Technological University, SINGAPORE.	Frequency estimation, Time frequency domain analysis of audio and electrocardiographic signals, Signal processing for communications, Applications of sigma delta modulators and radar/sonar signal processing.

Inaugural Programme Schedule

09:30AM

Prayer

09:35AM

Welcome Address

Dr. Hari V. S.

Organizing Chair, Principal, CE Karunagappally

09:40AM

Presidential Address

Dr. V. P. N. Nampoori

Emeritus Professor, International School of Photonics, CUSAT

09.45AM

Inaugural Address

Dr. Anil Bhardwaj

*Director, Space Physics Laboratory,
VSSC, Trivandrum*

10:15 AM

Felicitations

Dr. S. Jayakumar

Director, SPFU-TEQIP-II

Dr. E. Gopinathan

Former Director, NIT Calicut Senior Research Adviser

Dr. K. T. Mathew

Former Professor, CUSAT.

Former Principal, VCET, MOOVATTUPUZHA

Dr. Prof. V. LAKSHMI NARASIMHAN,

Vice-President (Research) Srikar & Associates Intl. Inc. USA.

Dr. Lee Ching Kwang,

*Associate Professor, Director of Graduate Institute of Engineering
Multimedia University Cyberjaya, Malaysia,*

Dr. Sundararajan N.,

*Professor, School of Computer Engineering,
Nanyang Technological University, Singapore.*

10:33 AM

Vote of Thanks

Dr. Gopakumar C.

Organizing Secretary

Conference Schedule				
Day	Time	Venue 1 (Convention Centre 2)	Venue 2 (Desinganadu Hall)	Venue 3 (Quilon Hall)
8/7/2016	08.30 AM onwards	Registration Starts		
	09.30 AM to 10.30 AM	Inauguration (at Convention Centre 1)		
	10.30 AM to 11.00 AM	Tea Break		
	11.00 AM to 11.45 AM	Keynote Adress 1 <i>Prof. V. Lakshmi Narasimhan</i>		
	11.45 AM to 12.30 PM	Keynote Adress 2 <i>Prof. Zoran S. Bojkovic</i>		
	12.30 PM to 01.30 PM	Lunch Break		
	01.30 PM to 03.10 PM	Track 1 Session 1	Track 2 Session 1	Track 3 Session 1
	03.10 PM to 03.30 PM	Tea Break		
	03.30 PM to 05.00 PM	Track 1 Session 2	Track 2 Session 2	Track 3 Session 2
	05.15 PM to 06.00 PM	Discussion Forum (Board Room Kollam)		
	07.00 PM	Welcome Dinner		
9/7/2016	09.30 AM to 10.15 AM	Keynote Adress 3 <i>Dr. Narasimhan Sundararajan</i>		
	10.15 AM to 11.00 AM	Keynote Adress 4 <i>Dr. Lee Ching Kwamg</i>		
	11.00 AM to 11.15 AM	Tea Break		
	11.15 AM to 12.00 PM	Keynote Adress 5 <i>Prof. Saman S. Abeysekera</i>		
	12.00 PM to 12.45 PM	Keynote Adress 6 <i>Dr. R. Krishnamoorthy</i>		
	12.45 PM to 01.30 PM	Lunch Break		
	01.30 PM to 03.00 PM	Track 1 Session 1	Track 2 Session 1	Track 3 Session 1
	03.00 PM to 03.15 PM	Tea Break		
	03.15 PM to 04.45 PM	Track 1 Session 2	Track 2 Session 2	Track 3 Session 2
	04.45 PM	Closing Ceremony		

Track Chairs for Technical Sessions

Venue	Day	Area	Chair	Institution
Venue 1	Day 1	Computing	Dr. Saman Abeysekera	Nanyang Technological University, Singapore.
			Dr. N. Sundararajan	Professor, Nanyang Technological University, Singapore.
			Dr. Sumitra S.	IIST, TVM.
Venue 2	Day 1	Communication	Dr. Lee Ching Kwang	Director of Graduate Institute of Engineering, Multimedia University, Cyberjaya, Malaysia.
			Dr. Praveen Kumar A. V.	BITS PILANI, Rajasthan.
			Dr. Jibukumar M. G.	SoE, CUSAT
Venue 3	Day 1	Image Processing	Dr. N. Vijaya Kumar	Govt. Engg. College, Barton Hill.
			Dr. Vinu Thomas	MEC, Ernakulam.
			Dr. Krishna Moorthy	Bharathidasan Institute of Technology Campus, Anna University, Tiruchirappally.
Venue 1	Day 2	VLSI & Embedded Systems	Dr. Ajayan K. R.	CET, TVM
			Dr. Jacob Thomas	CE Kallooppa.
Venue 2	Day 2	Image Processing	Dr. V. Lekshmi Narasimham	Vice-President (Research) Srikar & Associates Intl. Inc. USA
			Dr. Jyothisha J. Nair	Amrita School of Engg., Amritapuri.
Venue 3	Day 2	Image Processing	Dr. Sheeba O.	TKM
			Dr. Zoran Bojkovic	FULL PROFESSOR, UNIVERSITY OF BELGRADE Belgrade; Serbia

Chairs for Keynote

All Venues	Day 1 & 2		Dr. Gopinathan	Former Director, IIT Calicut
All Venues	Day 1 & 2		Dr. Sethunath	Scientist F, VSSC, TVM

ANNEXURE III

Agenda Note for Circulation

As part of the International Conference of Computing, Communication and Signal Processing (ICCCSP-2016) we have invited foreign delegates for Key note addressing, who are very reputed in their field of interest. It will be greatly appreciated if they could be remunerated as per their stature. It was suggested in the 7th executive committee of conference held on 15/05/2016 that decision may be taken to pay the honoraria noted against the name of the Key note speaker as shown below.

Dr. Prof. V. Lakshmi Narasimhan B.Sc., B.E., M.E., Ph.D., GCM, CELD, P.E., SrMACM, MAAEE, SrMIEEE, Fellow ACS, Fellow IEAUST, Fellow IEE (IET) Vice-President (Research) Srikar & Associates Intl. Inc. 109 Fairmount Way, NC 28562, USA (also at India & Australia)	Rs. 10,000/-
Dr. Zoran Bojkovic FULL PROFESSOR, Senior Member IEEE UNIVERSITY OF BELGRADE Studentski Trg 1, 11 000 Belgrade; Serbia ENGINEERING ACADEMY OF SERBIA Kneza Milosa 9/IV, 11 000 Belgrade, Serbia	Rs. 10,000/-
Dr. Lee Ching Kwang Associate Professor, Director of Graduate Institute of Engineering Faculty of Engineering, Multimedia University Cyberjaya, Malaysia	Rs. 10,000/-
Dr. Sundararajan N Professor, (Retired), Fellow, IEEE; Fellow, IES; Asso. Fellow AIA, School of Computer Engineering, Nanyang Technological University, Singapore.	Rs. 10,000/-
Dr. Saman S. Abeysekera Associate Professor School of Electrical & Electronic Engineering Nanyang Technological University, Singapore.	Rs. 10,000/-

Necessary approval may kindly be granted for paying the honoraria noted against the name of each persons. The same may be ratified in the next BoG meeting as no BoG meetings are scheduled before the conduct of the conference.

ANNEXURE IV

Y!hrd - Yahoo Search Res... X Y!yahoo - Yahoo Search R... X (2537 unread) - aji_a... X Bay Flat Urban Cross... X Macau China - Proceedi... X ENG 114/0 in 37 Overs... X Board of Governors X

https://mg.mail.yahoo.com/neo/launch?rand=5u1pi2dev2e8t#8674293368

Home Mail News Cricket Celebrity Movies Lifestyle Flickr Mobile More

YAHOO! MAIL

Search Mail Search web

Compose Search results Archive Move Delete Spams More Collapse all

Inbox (2537)

Fwd: (2)

To,
Director of Technical Education
State Project Facilitation Unit (SPFU)
Kerala,

This is to inform you that MHRD has accorded the approval for the following ↓ participants.

Name of the Person	Designation/Institution	Place	Dates of Visit
Prof. A. Mohammed Jakkil	Assistant Prof. THH College Kollam	Malaysia	18/8/2015 to 21/8/2015
Sh. Shahul Hameed	Associate Professor in electronics and communication eng. THH college-kollam		23/4/2015 to 26/4/2015
Sh. Babu Raj P.	Assistant Professor in Electronics (Electrical Eng., Govt. College of Eng. Iannar		30 th May to 5 th June, 2015to 05/6/2015
Sh. Biju K.S	Associate Professor of electronics and communication eng.,GEC Barpethil	France	21/4/2015 to 01/5/2015
Sh. Sadiq A	Associate Professor-Associate professor in Mechanical Eng., THH college, Kollam		15/5/2015 to 24/5/2015
Sen. Seema K Nayan	Associate Professor in civil eng. THH College Kollam	Delft, the Hague, Netherland	26/06/2015 to 07/07/2015
Dr. P. Iya Prakash	Associate Professor in electronics and Electrical Eng., Govt. College of Eng. Iannar	Dubai	22 nd -30 th May, 2015
Prof. C.V. Anil Kumar	Associate Professor in Electronics & Communicate Eng. College of Eng. Kannagappally	Macau, China	30th October to 9th Nov. 2015

2. It is to inform you that henceforth, no post-facto approval will be granted. You are requested to send the cases well in advance.
3. This issues with the approval of Competent Authority. You are kindly requested to take the necessary action.

With regards,

(Dr. Rita G)
Sr. Consultant (Acade

10thBOGagenda.pdf 11thBOGagenda.pdf 12thBOGagenda.pdf ADVT_ECT.pdf agendaeight.pdf mergedminutes.pdf

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ANNEXURE V

Minutes of the Fourth Research Guidance Committee for TEQIP II at College of Engineering Karunagappally, Karunagappally, Kollam, Kerala Conducted on 30/01/2016 at 10:00 AM in Principal's room under the chairmanship of Senior Research Advisor Prof. E.Gopinathan

No: CEK/TEQIP/RPC/04/2014.

30-01-2016

Agenda

Silent Prayer

Welcome address by the Principal.

1.1 Confirming the Minutes of the Third Meeting of the Research Guidance Committee held on 21-03-2015 at College of Engineering Karunagappally.

The Minutes of the third Meeting of the Research Guidance Committee held on 21-03-2015 at College of Engineering Karunagappally was sent to the Chairman for his approval and upon his approval copies were circulated among the other members of the RGC. A copy of the Minutes is appended as **Annexure 1** for confirmation.

The Committee may consider the Minutes for approval.

1.2 Evaluation of the submission of the projects submitted by the Principal Investigators

The Principal investigators submitted the project reports with financial statement on utilization of the fund for which they had availed Research Seed Money. The Principal Investigators may be asked to clarify the doubts in the reports. A copy of the final expenditure statement is appended as **Annexure 2** for verification.

1.3 Ratifying the extension period based on the Extension request reports

Extension reports of the principal investigators are submitted to chairman for his approval and got permission for the same. A copy of the extension requests and approval letters from Chairman-RGC are appended as **Annexure 3** for verification.

1.4 Ratification of decision to conduct the International Conference on July 8th to 10th 2016.

The details regarding the conduct of International Conference on Computing Communication and Signal Processing are also attached as **Annexure IV**.

1.5 Any other matter regarding improvement of Research and Development

The following members were present:

1. Prof. (Dr) Gopinathan E, Former Director, NIT Calicut, SRA of the Institution (Chairman)
2. Prof. (Dr) Hari V.S, Principal (Convenor)
3. Dr RajkumarChoudhary,Scientist Space Physics Laboratory, VSSC, Member
4. Sri. Shajahan M,Scientist Space Physics Laboratory, VSSC, Member
5. Dr Ajilkumar A, TEQIP II Coordinator, Member
6. MsSmitha P,R&D Coordinator, Member

The following members of the RGC conveyed their inability to attend the meeting

1. Prof. Libi A, HOD EEE, Member
2. Prof. Anil Kumar C V, HOD ECE, Member
3. Prof.Binu V.P, HOD CE, Member

The Meeting started at 10.00.AM under the presidency of the Honourable Chairman with a silent prayer followed by welcome address by DrAjilkumar A. He also briefed about TEQIP II and the progress of R & D activities at CE Karunagappally. .

The Principal introduced the agenda to the committee members and the agenda items were taken one by one for discussion.

Resolutions Adopted

Item No 1.1 / RGC 4: Confirming the Minutes of the Third Meeting of the Research Guidance Committee held on 21-03-2015 at College of Engineering Karunagappally.

Minutes of the first RGC meeting held on 21.03.2015 was circulated to the RGC members for confirmation. Based on the discussions, the RGC confirmed the approved minutes of the RGC meeting held on 21.03.2015.

Item No 1.2 / RGC 4: Evaluation of the submission of the projects submitted by the Principal Investigators

The Projects submitted by the Principal Investigators (PIs) were discussed in detail. The comments received from the Honourable Chairman were also discussed. The Committee approved the proposals pointing out the modifications that are to be done before submitting the proposals(which are not yet submitted) to external funding agencies and all the reports are verified by the chairman in first level. The committee discussed the proposals which are to be submitted first in the following order.

1. DrHari V S: the proposal was submitted for 65.97 lakhs to DeiTy. Dr RajkumarChoudry suggested to aim for 100 percent fund and also added that, with proper justification, we can claim upto Crores. He also asked the justification for the instruments to be purchased. Dr

Gopinathan suggested that we are having freedom to review and complete for success and asked to provide clear objectives. Latest literature survey is missing in the reference. Mr Shajahan pointed out that the quoted price for the Skin Tech is high. Also, added that the methodology of the work and the results must be clear with appropriate title. Objective must help directly to the society, or it must have some application to the society. He also predicted the indirect applications in other area. He added using reusable FPGA which will support other applications. Dr Gopinathan informed to find the possibility of appointing research assistant in the project for smooth running. Finally all the committee members suggested bringing the amount down to 49.99 lakhs to avoid critical review.

2. Deepa A K: Project proposal is for 25.35 lakhs and all the committee members expressed their opinion to increase the amount. Dr Rajkumar Choudry asked for proper justification for the purchase of a printer, and also to add references with latest papers. He also suggested equipment justification and reference in background part of the proposal. Dr Gopinathan suggested that the applications and content of the project proposal to be explained elaborately with catching title. He added to have proper justification for equipment purchase in the budget. Mr Shajahan asked for the scope of the work, contingency amount and the stationary required. Specification should not have any brand name and it must have future predictions. He suggested having solid state hard disks, FPGA software (available for around 10 lakhs) for model simulation. In the manpower part, the qualification must be specified. All members had the opinion the project proposal lacks information about background work, latest technology and motivation.

3. Shajy L: Proposal amount is for 29.95 lakhs to the KSCSTE and all the members were unanimously convinced with the proposal and suggested that it is an excellent one.

4. Smitha P: Proposal amount is for 38.49 lakhs to DBT and all the committee members had the opinion to add overhead amount. Dr Rajkumar Choudry found some minor correction in the presentation of the project proposal and suggested some changes in the sentences.

5. Jyothi R L: Both the proposals (Grandha Script of 11.07 lakhs to TDIL and Malayalam Script of 11.07 Lakhs to SERB) of this principal investigator are submitted to the funding agency and all the committee members had common opinion to wait for the comments.

6. Remya R S: Both the proposals (Automated video forgery detection of 13.57 lakhs to SERB and Automated detection of Acute Lymphatic Leukaemia of 16.31 lakhs to KSCSTE). The principal investigator informed the members that both proposals are in the submission process to the funding agency. The committee members had common opinion to wait for the comments.

The committee ratified all proposals and suggested minor corrections in the proposals. All members are satisfied with the R & D activity happening in the college and extended their help in any regard in this process. **Item No 1.3 / RGC 4: Ratifying the extension period based on the Extension request reports**

Extension requests of the principal investigators were submitted to the chairman for his approval and got permission for the same. These requests are presented before the committee for ratification. The committee studied the requests and approved the requests upto 30th October 2015.

Item No 1.4 / RGC 4: Ratification of decision to conduct the International Conference on July 8th and 9th 2016.

The details regarding the conduct of International Conference on Computing Communication and Signal Processing on July 8th and 9th, 2016 were discussed.

The committee discussed about the formation of committees and their budget preparation as given below. The committee met on 13/11/2015 and prepared the budget.

Venue:	4,50,000/-
Printing of Brochures and Posters:	50,000/-
TA for resource persons:	4,50,000/-
Remuneration to resource persons:	1,00,000/-
Publication of Conference Proceedings:	2,50,000
Printing of Certificate:	5,000/-
Conference Kit:	70,000/-
Accommodation:	90,000/-
Publicity:	40,000/-
Transportation:	50,000/-
Other Miscellaneous expense:	70,000/-
Total Amount:	Rs. 16,25,000/-

The committee ratified the budget. The committee also considered the venue selection since the chosen venue lacks facility to host an International Conference of this magnitude, at College of Engineering Karunagappally, and ratified the venue selection as "The Quilon Beach Hotel" in view of the proximity to the Trivandrum Air Port, National High Way, Railway Station etc.

The committee discussed about the current status of the conference and satisfied with the progress made. The committee suggested speed up the process, reminded the limited time available and to utilize the remaining period effectively to the full extent. All the members extended their helping hands in all aspects. Mr Shajahan and Dr Rajkumar Choudary informed that they are conducting an international conference in VSSC Trivandrum in this year and are ready to help at any time.

The meeting came to an end at 4 PM

ANNEXURE VI

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME Phase – II

Terms of Reference (ToR)

For

Selection of Training Providers in Industrial Automation

Under

Technical Education Quality Improvement Program - Phase-II

April 2016

College of Engineering Karunagapally

Thodiyoor P.O

Terms of Reference (ToR) for Technical Selection of Training Providers in Industrial Automation Under Technical Education Quality Improvement Programme - Phase-II

1. BACKGROUND

The Ministry of Human Resource Development (MHRD), Government of India in the year 2002 conceived and designed the Technical Education Quality Improvement Programme (TEQIP) as a long term programme for implementation in 2 to 3 phases over duration of 10-12 years for systemic transformation of the technical education system. TEQIP Phase-I commenced in March 2003 and was successfully completed in March, 2009, covering 127 institutions. Encouraged by the highly significant achievements of Phase-I of the Programme, the Government of India has decided to implement Phase-II of the Programme through MHRD. A key component of the Phase-II Project is the support to weak students under Equity Action Plan. Under this plan, it is considered important that focused efforts be made by institutions to improve the academic performance of SC/ST/OBC academically weak students through innovative methods such as remedial teaching in professional subjects and soft skills development for increasing transition rate, pass rate and employability.

For increasing institutional focus on providing academic and guidance support to the SC/ST/OBC/ academically weak students, all project institutions are required to constitute a Finishing School with a senior faculty as coordinator. The key activities under the aegis of the Finishing School will be:

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

The Finishing School activities are to be conducted using the existing infrastructure, laboratories, workshops, computer centers, library and the existing faculty. Expertise from outside the institution and from employer organizations can also be used. There will be no course fee for students for either activity at (a) or (b) or (c). The benefit of activity at (c) of the Finishing School can be extended to graduate-engineers from other institutions in the vicinity who fail to secure employment. All students attending training under activity (c) will be responsible for their boarding and lodging arrangements and expenditure.

The activities of the Finishing School will be regularly supervised and monitored by the respective SPFUs and the NPIU, especially in respect of the number of students participating in the 30 days training and the percentage of these participants securing employment within 6 months of completion of training.

2. OBJECTIVES OF HIGH INTENSITY TRAINING ON INDUSTRIAL AUTOMATION

The main objectives of TEQIP-II project are Strengthening Institutions to improve Learning Outcomes and Employability of Students. Many organizations visiting campuses for recruitment point out that the employability of students are not as expected due to poor communication and professional skills. The broad objectives of high intensity training on “Industrial Automation” are

- a) To gain strong underpinning knowledge and expertise in Industrial Automation covering a wide range of skills ranging from instrumentation, automation and process control, industrial data communications, process plant with a strong practical focus.
- b) To have guidance from industrial automation experts in the field with extensive experience.
- c) Since industrial automation is an extremely fast moving & the field is diverse and dynamic it offers students the opportunity for a well-paid and enjoyable career.

d) To empower the students with practical knowledge that will improve their productivity in the area and make them stand out as a leader in industrial automation.

e) To assist the Placement Cell of the College for a placement drive.

3. SCOPE OF WORK

a) The Project provides for hands on training of passed out students in Electrical & Electronics Engineering and Electronics & Communication Engineering.

b) The training is to be imparted in-situ (at the institution) in 150 hours (25days @ 6 hours per day) of training on Industrial Automation.

c) The details of the modules in terms of the elements of training are given at Annexure-1. The program aims to train 50 B.Tech. Passed out students.

d) Training is to be imparted at College of Engineering Karunagapally in one batch of 30 candidates.

e) The training providers will need to ensure coverage of all the elements identified for the course.

f) The training providers are free to add more elements in main module that will be covered during the training, provided that these additional elements and additions to the contents can be covered within the stipulated duration of the training. The additional elements and contents are to be declared in the proposal submitted.

g) The training providers are also free to suggest alternates to the suggested modes of training of various elements.

h) To qualify for being selected, a training provider will need to demonstrate capability for the training in Industrial Automation and agree to provide the same at the institution and according to schedules as agreed with the College.

4. ELIGIBILITY AND CAPABILITY OF TRAINING PROVIDERS

1. Public and private training organizations are eligible to provide training.
2. The training provider should meet the following benchmarks:
 - ✓ Should be ISO certified
 - ✓ Should be authorized training center approved by Govt. of India, NIELIT
 - ✓ Minimum 3 years' experience in providing "Industrial Automation" training (please provide the copies of the credentials/ self-certificate for the last three years 2013- 14, 2014-15, 2015-16; Ref. Annex-II,III).
 - ✓ All the training personnel should be certified in industrial automation.
 - ✓ In addition to this, the firm should have at least 2 experienced resource persons (fulltime or otherwise) with at least a Bachelor's Degree. Brief experience profile of at least 5 of the resource persons in the format given at Annexure-III must be provided.
 - ✓ The training provider will need to demonstrate that it possesses the capacity to impart training to about 2 batches of students in a year.
 - ✓ An undertaking (self-certificate) is to be submitted that there has been no outstanding bankruptcy, judgment or pending legal action that could impair operating as a going concern.
 - ✓ An Undertaking (Self Certificate) is to be submitted that the organization hasn't being black listed by any Central/State Government Department/Central Government Funded Organizations/State Government Funded Organization/World Bank, or other World Bank Organizations (including the UN Organizations) and is not under investigation by Government or UN Member State Government.

5. SELECTION OF TRAINING PROVIDERS

A list of technically qualified Institutions will be finalized, following the procurement norms of TEQIP II. This process will involve short-listing all qualified institutions that responds to the Request for Expressions of Interest (EoI), inviting technical proposals from the short listed agencies, technical evaluation of proposals submitted by shortlisted agencies and final selection of agencies on the basis of technical competencies for the assignment.

6. PAYMENT TO TRAINING PROVIDERS

Training will take place at the institutions as per the schedule. The training of students will be followed by a feedback session and a post-training assessment. The aggregated results of these will be made available to the respondents, Head of Institution and the training provider. The contracted cost for any training package will cover training in all the elements, contents and modes as quoted in the proposal submitted to the College. The payment of this cost will be made in two installments. The first installment will be 75% of the contracted cost which will be paid after the successful completion of all the training modules. The second installment (25%) will be paid after six months of completion of the training program under the condition that 25% of students undergone training got placed within six months with a minimum starting salary package of Rs.10000/-.

7. COPIES OF RESPONSE

Respondents must submit one hard copy and one soft copy in CD, of their response to this invitation to the designated point of contact by the date and time specified in the invitation.

8. DESIGNATED POINT OF CONTACT

The Principal
College of Engineering, Karunagapally
Thodiyoor P.O, Kollam-690523

Training on Industrial Automation

Course Contents:

- 1. Programmable Logic Controllers (PLC)*
- 2. Supervisory Control And Data Acquisition (SCADA)*
- 3. Human Machine Interface (HMI)*
- 4. Variable Frequency Drive (VFD)*

Syllabus:

PLC

- *PLC - Architecture*
- *Operation Instructions*
- *Control Instructions*
- *Interfacing with SCADA*
- *Programming on branded PLC (1)Delta (2) Siemens (3) Mitsubishi(4)AB*

SCADA

- *Role of SCADA in industrial automation*
- *Dynamic Properties*
- *Trend and Alarm Configurations*
 - *Historical data storage & reporting*
 - *Alarm management*
 - *Reporting of events & parameters*
- *Interfacing with PLC*
- *Script programming*
 - *Programming techniques for*
 - *Creation of pages*

- *Sequencing of pages*
 - *Creating graphics & animation*
 - *Dynamos programming variables*
- *Any one of the brand mentioned (1)Invensys Intouch*

HMI

- *Need, concepts & features of HMI*
- *HMI types (OP/TP)*
- *Specifications & selection criteria*
- *Configuration & Application*
- *Project development*
- *BRAND (1) Delta*

VFD

- *VFD Selection Parameterization*
- *Rated Voltage, Current, RPM*
- *Speed Modulation, ON/Off Command, Trip Status*
- *Real Time Interface with PLC & SCADA*
- *BRANDS : (1) AB Power flex 525*

ANNEXURE VII

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME

Phase – II

Sub-component 1.1

Terms of Reference (ToR)

For

High Intensity Programme in Java J2EE, Aptitude and Soft Skill Developments.

Organized by Computer Science and Engineering and Information Technology Departments

Under

Technical Education Quality Improvement Program - Phase-II

College of Engineering Karunagappally

Thodiyoor PO, Kollam, Kerala

TERMS OF REFERENCE (ToR) FOR **High Intensity Programme in Java J2EE,**
Aptitude and Soft Skill Developments.

UNDER TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME

PHASE-II

1. Background

The Ministry of Human Resource Development (MHRD), Government of India in the year 2002 conceived and designed the Technical Education Quality Improvement Programme (TEQIP) as a long term programme for implementation in 2 to 3 phases over duration of 10-12 years for systemic transformation of the technical education system. TEQIP Phase-I commenced in March 2003 and was successfully completed in March, 2009, covering 127 institutions. Encouraged by the highly significant achievements of Phase-I of the Programme, the Government of India has decided to implement Phase-II of the Programme through MHRD. A key component of the Phase-II Project is the support to weak students under Equity Action Plan. Under this plan, it is considered important that focused efforts be made by institutions to improve the academic performance of SC/ST/OBC academically weak students through innovative methods such as remedial teaching in professional subjects and soft skills development for increasing transition rate, pass rate and employability.

For increasing institutional focus on providing academic and guidance support to the SC/ST/OBC/ academically weak students, all project institutions are required to constitute a Finishing School with a senior faculty as coordinator. The key activities under the aegis of the Finishing School will be

- Conducting remedial teaching throughout academic sessions for improving transition rate and pass rate of students.
- Conducting specialized soft skills and professional skills development training during semester-breaks and vacations (preferably starting from 5th Semester onwards) for increasing employability.

- Conducting high intensity training (of at least 4-weeks duration) for development of soft and professional skills in the students that graduate but fail to secure any employment
- Organizing campus interviews and making other efforts to secure employment for graduate engineers that complete the training under activity (c) above.

The Finishing School activities are to be conducted using the existing infrastructure, laboratories, workshops, computer centers, library and the existing faculty. Expertise from outside the institution and from employer organizations can also be used. There will be no course fee for students for either activity at (a) or (b) or (c). The benefit of activity at (c) of the Finishing School can be extended to graduate-engineers from other institutions in the vicinity who fail to secure employment. All students attending training under activity (c) will be responsible for their boarding and lodging arrangements and expenditure.

The activities of the Finishing School will be regularly supervised and monitored by the respective SPFUs and the NPIU, especially in respect of the number of students participating in the 4-week training and the percentage of these participants securing employment within 6 months of completion of training.

2. Objectives of High Intensity Programme in Java J2EE, Aptitude and Soft Skill Developments.

The main objectives of TEQIP-II project are Strengthening Institutions to improve Learning Outcomes and Employability of Students. Many organizations visiting campuses for recruitment point out that the employability of students are not as expected due to poor communication and professional skills.

The broad objectives of high intensity programme in **Java J2EE, Aptitude and Soft Skill Developments.**

- Basics of Java
- Introduction to Core Java
- Collections, Multithreading, Enterprise Java Bean
- Advance JDBC Programming:

- Overview of Database Driver Architecture
- Introduction to JDBC Standard Extension API (javax.sql)
- Connection Pooling
- JDBC Programming with ORACLE, MYSQL, etc.
- Batch Processing
- Connecting to non-conventional databases
- Use of Excel API
- Database caching (case study with HSDB,CSQL)
- Working with Multiple Databases
- Introduction to J2EE
- J2EE Overview
- Why J2EE?
- J2EE Architecture
- J2EE APIs
- J2EE Containers
- Java Server Technologies
- Verbal Ability
- Numerical Ability
- Communication Skills
- Presentation skills, Interview skills
- Group discussion, Interpersonal skills
- Behavioral attitude,
- Time Management
- Ethics, Values, Attitudes

*****Detailed syllabus given in Annexure-I**

3. Scope of Work

- The Project provides hands on training for passed out students in Computer Science and Engineering, Information Technology and Electronics and Communication Engineering
- The training is to be imparted in-situ (at the institutions) through two sections: 160 hours training on J2EE and 20 hours in Aptitude and Soft Skill Training in continuous weeks.
- Schedule: **Monday to Saturday 6hrs each.**
- The training providers should provide a minimum of three placement opportunities for all the attended students and should give at least 25 percentage of placements with reasonable packages.
- The program aims to train maximum of 30 B-Tech passed out students.
- Training is to be imparted at College of Engineering Karunagappally in one batch of maximum 30 candidates.
- The training providers will need to ensure coverage of all the elements identified for the course.
- The training providers are free to add more elements in main module that will be covered during the training, provided that these additional elements and additions to the contents can be covered within the stipulated duration of the training. The additional elements and contents are to be declared in the proposal submitted.
- To qualify for being selected, a training provider will need to demonstrate capability for the training in Java J2EE and Aptitude and Soft Skill Training.
- All the study materials for the course should be provided for the students.
- Lodging, Boarding and TA/DA will not be provided for the trainers.

4. Eligibility and Capability of Training providers

- Public and private training organizations are eligible to provide training.
- The training provider should meet the following benchmarks:
 - Minimum 3 years' experience in providing the above training programme. (provide the copies of the credentials/ self-certificate for the last three years 2013-14, 2014-15,2015-2016). Ref forms I,II
 - The firm should provide at least 2 full-time resource persons with at least a Bachelor's Degree having relevant experience in the respective field. Brief experience profile of at least 5 of the resource persons in the format given at [Form -II](#) must be provided.
 - The training provider will need to demonstrate that it possesses the capacity to impart training to students.
 - An undertaking (self-certificate) is to be submitted that there has been no outstanding bankruptcy, judgment or pending legal action that could impair operating as a going concern.
 - An Undertaking (Self Certificate) is to be submitted that the organization hasn't being black listed by any Central/State Government Department/Central Government Funded Organizations/State Government Funded Organization/World Bank, or other World Bank Organizations (including the UN Organizations) and is not under investigation by Government or UN Member State Government.

5. Selection of Training Providers

A list of technically qualified Institutions will be finalized, following the procurement norms of TEQIP II. This process will involve short-listing all qualified institutions that responds to the Request for Expressions of Interest (EoI), inviting technical proposals from the short listed agencies, technical evaluation of proposals submitted by shortlisted agencies and final selection of agencies on the basis of technical competencies for the assignment.

6. Payment to Training Providers

Training will take place at the institutions as per the schedule. The training of 30 students will be followed by a feedback session and a post-training assessment. The aggregated results of these will be made available to the respondents, Head of Institution and the training provider.

The contracted cost for any training package will cover training in all the elements, contents and modes as quoted in the proposal submitted to the College. The payment of this cost will be made in two instalments.

7. Copies of Response

Respondents must submit one hard copy and one soft copy in CD, of their response to this invitation to the designated point of contact by the date and time specified in the invitation.

8. Designated Point of Contact

Principal,

College of Engineering Karunagappally,

Thodiyoor PO

Kollam-690523

Kerala

Ph: -

Email:

Form -I

(Format for providing details of experience and resources of training provider)

1. Name:

2. Address and Contact details:

3. Relevant Work Experience (experience related to providing Training on **Java J2EE and Aptitude and Soft Skill Developments.**

Sl. No.	Requirement	Please provide the relevant information summary in this format
1	No. of years in providing training on Java J2EE, Aptitude and Soft Skill Developments.	
2	No. of engineers trained so far and in how many batches	
3	No. of trainers engaged along with their CVs	

Form - II

(Format for experience profile of resource persons on the training provider's team)

1. Name:
2. Address and contact details:
3. Educational Qualifications:
4. Present Employment, if any:
5. Past Employment record (employer, period of service, designation of the post occupied)
6. Relevant Work Experience (experience related to providing Training on **Java J2EE and Aptitude and Soft Skill Developments** to be given in the tabular format given below)

Sl. No.	Duration	No. of students	

Form - III

(Format for the list of firms which recruited trainees of and details of trainees who were placed.)

Sl. No	Name of the Employee	Name of the Firm	Address of the Employee	Position in the Firm	Approximate Salary

Syllabus

JAVA & J2EE

CORE JAVA

1. Getting Started with Java SE

- What is Java?
- Installing Java:
- The jdk Directory Structure:
- Sdk structures
- OOPS Concept:
- Java Language:
- Java Virtual Machine:
- World Wide Web and Java:
- Java Platforms:

2. First Java Programs:

- Writing your first Java program "Hello, World", your first small step towards learning Java
- Program Structure:
- Output in Java:
- Variables and Expressions:

3. Datatypes and Variables

- Primitive Datatypes:
- Variable Names:
- Numeric Literals:
- Character Literals:
- String:
- String Literals:
- Arrays:

4. Introduction to Objects:

- Object Models:
- Classes and Objects:
- Abstract methods and Classes:
- Input in Java:
- InputWrapper Class:
- Packages:

5. Data Types and Operators:

- Strong Typing

- Integer Data Types
- Floating Point
- Conversions Between Types:
- Arithmetic Operators:
- Doing Math in Java:
- Precedence
- Errors in Integer Arithmetic

6. **Control Flow:**

7. **Booleans and Enumerations:**

8. **Loops and Program Flow:**

9. **Object-Oriented Programming**

- Classes and Objects:
- Fields and Methods:
- Encapsulation
- Access Control
- Inheritance:
- Polymorphism
- Interface:
- Best Practices

10. **Methods:**

- Methods
- Calling Methods
- Defining Methods
- Method Parameters
- Method Overriding
- Method Overloading

11. **Characters and Strings:**

- Char Data Type
- Character Codes
- ASCII and Unicode
- String Class:
- String Input and Output
- String Methods:

12. **Modular Programming**

- Monolithic Programs
- Static Variables and Methods:
- Functional Modularity
- Object Modularity
- Top-Down and Bottom-Up Development
- Pass-By-Value and Pass-By-Reference

- Nested Classes

13. **Exception Handling and More Flow Control:**

- Exceptions Overview:
- Exceptions:
- Declaring Exceptions
- Defining and Throwing Exceptions:
- Errors and Runtime Exceptions
- Catching Exceptions:
- The finally Block:
- Exception Methods
- I/O Exceptions vs. Runtime Exceptions

14. **Input/Output Streams**

- Overview of Streams
- Bytes vs. Characters
- Converting Byte Streams to Character Streams
- File Object
- Binary Input and Output
- Print Writer Class
- Reading and Writing Objects
- Basic and Filtered Streams

15. **Core Collection Classes**

- The Collections Framework:
- The Set Interface:
- Set Implementation Classes:
- The List Interface:
- List Implementation Classes :
- The Queue Interface :
- Queue Implementation Classes :
- Implementing a Stack:
- The Map Interface:
- Map Implementation Classes:

16. **Collection Sorting and Tuning:**

- New Features in JSE 6:
- Changing in I/O(JSE 6):
- Using Java 6.0 Features with Collections:
- Sorting with Comparable
- Sorting with Comparator
- Sorting Lists and Arrays:
- Collections Utility Methods
- Tuning Array List
- Navigable Map and Navigable Set:
- Tuning Hash Map and Hash Set:

17. **Inner Classes**

- Inner Classes
- Member Classes
- Local Classes
- Anonymous Classes
- Instance Initializes
- Static Nested Classes

18. **Introduction to Threads:**

- Overview of thread:
- Life Cycle of thread:
- Creating Threads:
- Multithreading:
- Deadlock:
- Inter-Thread Communication:
- Thread States
- Runnable Threads
- Coordinating Threads
- Interrupting Threads
- Runnable Interface
- Thread Groups

19. **Packages:**

- Packages:
- The import Statement
- Static Imports
- CLASSPATH and Import
- Defining Packages
- Package Scope

20. **Advanced Java Features**

- Reusable Software Components
- Abstraction
- Inheritance:
- Inheritance Hierarchies:
- Polymorphism
- Abstract Classes:
- Interfaces:
- Collections:
- Iterators:
- Auto-Boxing

21. **Introduction to JDBC:**

- Features of JDBC 3.0:
- Features of JDBC 4.0:
- New Features in JDBC 4.0:
- Difference between JDBC 3.0 and JDBC 4.0:

- The JDBC Connectivity Model:
- Database Programming:
- Connecting to the Database:
- Creating a SQL Query:
- Getting the Results:
- Updating Database Data:
-

22. JDBC SQL Programming:

- Error Checking and the SQLException Class
- The SQLWarning Class
- JDBC Driver Types:
- ResultSetMetaData:
- Using a Prepared Statement:
- Parameterized Statements
- Stored Procedures:
- Transaction Management

J2EE Syllabus

Advance JDBC Programming:

Overview of Database Driver Architecture

Introduction to JDBC Standard Extension API (javax.sql)

Connection Pooling

JDBC Programming with ORACLE, MYSQL, etc.

Batch Processing

Connecting to non-conventional databases

Use of Excel API

Database caching (case study with HSDB,CSQL)

Working with Multiple Databases

Introduction to J2EE

J2EE Overview

Why J2EE?

J2EE Architecture

J2EE APIs

J2EE Containers

Java Server Technologies

Servlet

Web Application Basics.

Architecture and challenges of Web Application.

Introduction to servlet

Servlet life cycle

Developing and Deploying Servlets

Exploring Deployment Descriptor (web.xml).

Handling Request and Response

Initializing a Servlet

Accessing Database

Servlet Chaining

Session Tracking & Management

Dealing with cookies

Transferring Request

Accessing Web Context

Passing INIT and CONTEXT Parameter

Sharing information using scope object

Controlling concurrent access

User Authentication

Filtering Request and Response

Programming Filter

Filter Mapping

Servlet Listeners

Java Server Pages Technology (JSP)

Basic JSP Architecture

Life Cycle of JSP (Translation, compilation)

JSP Tags and Expressions

Role of JSP in MVC-2

JSP with Database

JSP Implicit Objects

Tag Libraries

JSP Expression Language (EL)

Using Custom Tag

JSP Capabilities:

Exception Handling

Session Management

Directives

JSP with Java Bean

RMI (Remote Method Invocation)

RMI overview

RMI architecture

Example demonstrating RMI

Enterprise JAVA Beans (EJB)

Enterprise Bean overview

Types of enterprise beans

Advantages of enterprise beans

The Life Cycles of Enterprise Beans

Working with Session Beans

Statefull vs. Stateless Session Beans

Working with Entity Beans

Message Driven Beans

JNDI (Java Naming and Directory Interface)

JNDI overview

JNDI API

Context operations

Using JNDI in J2EE applications

Struts Framework:

What is Struts?

Struts Architecture

Struts classes - ActionForward, ActionForm,

ActionServlet, Action classes

Understanding struts-config.xml

Understanding Action Mappings

Struts flow with an example application

Struts Tiles Framework.

Struts Validation Framework

Internationalizing Struts Application

Struts with Message Resources

Awareness to Other J2EE Technologies:

Java Mail

JTA

Web Services

JMS1

ANT

Log4J

JSF

Hibernate1

Spring Framework

Design Pattern

Aptitude and Soft Skill

- Communication Skills
- Oral and Written communication
- Presentation skills, Interview skills
- Group discussion, Telephone strategies.
- Team Work – Interpersonal skills, Behavioural attitude
- People management – Intrapersonal skills, Personality development
- Clean and healthy living tips.
- Organizational Behaviour – Goal setting, Individual goal, Organizational goal.
- Time Management – Planning, Scheduling.
- Ethics, Values, Attitudes.

ANNEXURE VIII

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME

Phase – II

Sub-component 1.1

Terms of Reference (ToR)

For

Library Modernisation and Digitalisation

Under

Technical Education Quality Improvement Program - Phase-II

College of Engineering Karunagappally

Thodiyoor PO, Kollam, Kerala

Terms of Reference (TOR) for Library Modernization and Digitalization of library aims at making the library, an intellectual hub of the campus by effectively utilizing the innovations of information technology and reduce paper wastage and leads to an echo friendly knowledge hub Under Technical Education Quality Improvement Programme - Phase-II

BACKGROUND

The Ministry of Human Resource Development (MHRD), Government of India in the year 2002 conceived and designed the Technical Education Quality Improvement Programme (TEQIP) as a long term program for implementation in 2 to 3 phases over duration of 10-12 years for systemic transformation of the technical education system. TEQIP Phase-I commenced in March 2003 and was successfully completed in March, 2009, covering 127 institutions. Encouraged by the highly significant achievements of Phase-I of the Programme, the Government of India has decided to implement Phase-II of the Programme through MHRD. A key component of the Phase-II Project is the support to weak students under Equity Action Plan. Under this plan, it is considered important that focused efforts be made by institutions to improve the academic performance of students through innovative methods such as remedial teaching in professional subjects and soft skills development for increasing transition rate, pass rate and employability.

MISSION

The Mission of the library is to deliver quality, user oriented services in response to information needs of the users, proper management of scholarly information and development of learning and information literary skills. Based on the needs and trend action plan is to be prepared for modernizing the library.

SCOPE

- Needs for Library Automation
- Integrated Library Management systems
- Standards
- Preparing a Plan for Library Automation
- Selection and acquisition of Library Management system
- Implementation of Integrated Library System

LIBRARY AUTOMATION

Library automation is the general term for information and communication technologies that are used to replace manual system in the library.

OBJECTIVES

- To drive the quality of library services up to the level of the best
- To reverse the current trend of decline in library usage and grow the numbers

using the library service

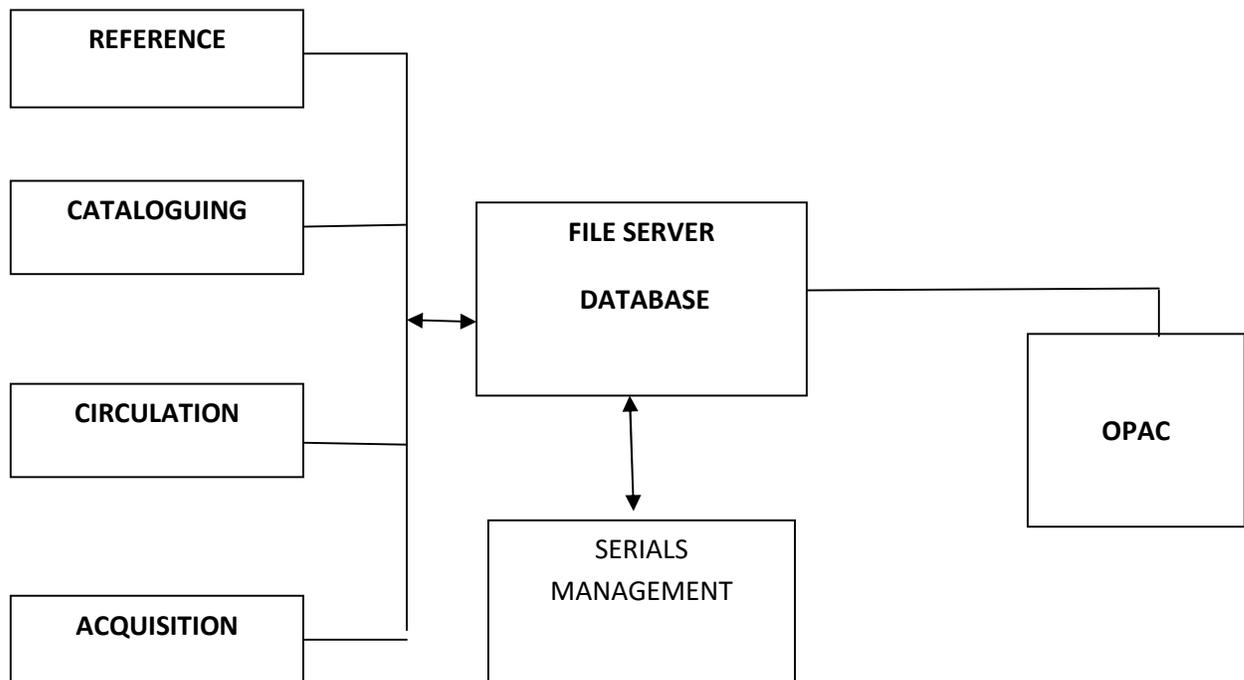
- To ensure that libraries respond to changing expectations of users who want immediate access to information
- The user communities grasp the opportunities presented by digitization

LIBRARY MANAGEMENT SYSTEM

A Library Management system is also known as an automated library system that handles the following functions:

- Allocating Resources
- Implementation of Hardware
- Implementation of Software
- Data Conversion
- Implementation for System Maintenance
- Training
- Making changes

A LIBRARY WITH AN INTEGRATED LIBRARY SYSTEM



LIBRARY AUTOMATION MODULES

- Functional Modules
 - Cataloguing
 - OPAC
 - Circulation
 - Acquisition
 - Serials Control
- Operating systems
- Database Systems
- Network Architecture
- User Interface
- Library Automation Standards(MARC)

LIBRARY AUTOMATION STEPS

- Objectives or Vision
- Present Status of Library
- Requirement gaps
- Feasibility
- Technology Plan
- Project Proposal
- Approval of Proposal Project

PROJECT PROPOSAL

By comparing the actual status with objectives of the project the systems requirement can be determined

- a) Data Entry of Books by including the modules -Title, Author, ISSN No., Classification No, Edition, Place of Publication, Publisher Name, Year of Publication, Page No, Note, Subject, Additional Author Accession No., Price, Barcode No, Copy etc.
- b) Software Installation
- c) High security implementation, multi level security logins, archival support, auto mail generation, mail alerts, easy search and filter facility, auto backup facility, multi user in nature should be the main feature of software.

These library modernization activities are to be conducted using the existing infrastructure, and services, expertise from outside the institution and from employer organizations can also be used.

Book's Front page Content pages and Back page Digitalization

Supporting the “Transformation” of libraries is a priority the rapid shift from print to digital content is one of the more dramatic developments now transforming libraries of all types of books front cover content pages and back cover.

New digital forms of information offer rich and extraordinary opportunities for libraries to expand community access to information and to revolutionize in positive ways the relationship between libraries and users. At the same time, these new forms of digital content pose new challenges.

This digital materials attaching to the database in library software

More than 16000 books in college central library

General books

Subject books and

Reference books

Eight stages of processing

1. Data entry of books around 22 fields are entering in software.
2. Classification of Books DDC 22nd Edition
- 3 Barcode pasting in two type one is Accession Number another one is Classification (2 sticker each).
4. Subject wise Books arrangements in shelf.
5. Digital document uploading in software (books front cover, content pages & books back cover)
6. Patron creations with photo
7. Teachers (subject wise) presentation for books (Video Creation)
8. Training for Library Management Software (Students, Teachers and Library Staff etc.)

Projected Amount

--	--	--

Library Management software		
Books Data entry, Classification of Books, Barcode pasting, Subject wise books arrangement (shelf) etc	16000 books	Rs.2,40,000.00
Digitalization & uploading Books front cover, content pages and back cover	16000 books	Rs.1,12,000.00
Teachers (subject wise) presentation for books		Rs. 35,000.00
Total		387000.00
Projected Amount Rs. Three lakhs eighty seven thousand only		

ANNEXURE IX

Annex 4 (1)

PERFORMANCE AUDIT FORMS (FINAL ROUND under TEQIP-II)

INSTITUTIONAL PERFORMANCE PROFILE

NAME OF PERFORMANCE AUDITOR: Dr. SOUNAK KUMAR CHOUDHURY

DATES OF PERFORMANCE AUDIT: 6 – 8 August 2016

NAME OF INSTITUTION WITH LOCATION: College of Engineering, Karunagappaly, Kollam,
Kerala

PIP REF	INSTITUTIONAL PERFORMANCE PROFILE	OVERALL EVALUATION GRADES
COMPONENT 1: IMPROVING THE QUALITY OF EDUCATION IN SELECTED INSTITUTIONS		
1.1	STRENGTHENING INSTITUTIONS TO IMPROVE LEARNING OUTCOMES AND EMPLOYABILITY OF GRADUATES	2
1.2	SCALING-UP POSTGRADUATE EDUCATION AND DEMAND-DRIVEN RESEARCH AND DEVELOPMENT AND INNOVATION	2
1.2.1	ESTABLISHING CENTRES OF EXCELLENCE	3
1.3	FACULTY DEVELOPMENT FOR EFFECTIVE TEACHING (PEDAGOGICAL TRAINING)	1
COMPONENT 2: IMPROVING SYSTEM MANAGEMENT		
2.1	CAPACITY BUILDING TO STRENGTHEN MANAGEMENT	1
2.1.1	IMPLEMENTATION OF GOOD GOVERNANCE	1
2.2	PROJECT MANAGEMENT, MONITORING AND EVALUATION	2

INSTITUTIONAL PERFORMANCE PROFILE GRADES AND GRADE DESCRIPTORS	
1.	Substantial evidence of good practice in the quality and standards achieved (Assessment identifies clear supporting evidence for at least 75% of the relevant practices.)
2.	Some evidence of good practice in the quality and standards achieved (Assessment identifies clear supporting evidence for at least 50% of the relevant practices.)
3.	Not in place (there may be one of the three primary reasons for this: a) no evidence can be found, b) there is evidence, but it is not of acceptable quality, or c) that there are plans for development but these have not yet taken place – in which case the auditor can indicate the expected date of completion/implementation but the grade should remain 3.)

NOTE: Supporting evidence: The grade descriptors have two elements: one relating to the amount of the evidence (none, some or substantial); and one relating to the quality of the practice about which the evidence is gathered (is it good quality, or not?). So, for example, a grade of 1 means both that the evidence is good quality and that there is a substantial amount to demonstrate that it is of good quality (75% or more for the practices found).

PERFORMANCE AUDIT FORM (1.1)**COMPONENT 1: IMPROVING QUALITY OF EDUCATION IN SELECTED INSTITUTIONS**

NAME OF PERFORMANCE AUDITOR: Dr. SOUNAK KUMAR CHOUDHURY

DATES OF PERFORMANCE AUDIT: 6 – 8 August 2016

NAME OF INSTITUTION WITH LOCATION: College of Engineering, Karunagappaly, Kollam, Kerala

1. STRENGTHENING INSTITUTIONS TO IMPROVE LEARNING OUTCOMES AND EMPLOYABILITY OF GRADUATES

MONITORING AND PROJECT OUTPUT/OUTCOME PARAMENTERS	SUPPORTING EVIDENCE (NOTE: GRADES MUST BE SUPPORTED BY SOUND EVIDENCE OF ACHIEVEMENT OF THE INSTITUTIONAL DEVELOPMENT PROPOSAL GOALS AND TARGETS)
<p>A. Effectiveness of funds utilized for the teaching, training, learning and research equipment, library, computers, etc. by Institutions, including:</p> <ul style="list-style-type: none"> ▪ Increase in the satisfaction index of student and faculty 	<p>In terms of teaching, one regular Faculty member has been added in each of the three existing Departments of Electronics and Communication Engg. (ECE), Computer Science and Engg. (CSE) and Electronics and Electrical Engg. (EE) during the last three years of being inducted in the TEQIP-II program. (<i>Evidence Source: Attendance Register</i>)</p> <p>In terms of training, During the period of last three years when the institute was inducted to the TEQIP – II program, following numbers of training/workshops/seminars were conducted: CSE-20; EC-18 (including 2 seminars); EE-06; 3 workshops on Applied Sciences; 04 workshops for the Office Staff and 1 International Conference. (<i>Source of Evidence: List signed by the Principal</i>) This information is also displayed on the following Institute TEQIP-II website : http://www.ceknp.ac.in/img/teqip/tevents.html</p> <p>Learning and Research Equipment: For enhancing the students learning process, Digital Storage Oscilloscopes (57 numbers, Rs. 19,78,275), one 3-D printer (Rs.1,53,000), PLC training kits (Rs.1,63,632), USRP (Rs.5,10,300), Digital Signal Processing kits (15 numbers, Rs. 3,75,000), Power Supplies (40 numbers, Rs. 6,96,733), Function Generators (40 numbers Rs. 3,57,000), One RF signal generator for Rs.4,24,783, High Frequency structure simulator software for Rs.6.6 lakh, Arbitrary Waveform Generators (8 numbers, Rs.1,99,920), 55 Microprocessors and micro controller trainers for Rs.5,44,504, 20 Digital IC trainer kits for Rs. 1.17 lakh, various software for Rs.34,66,315 were procured in the EE and ECE laboratories from the TEQIP-II funds. (<i>Source of evidence: Asset Register audited by the</i></p>

	<p><i>Internal as well as Statutory Auditors and the physical verification of the labs by the Performance Auditor)</i></p> <p>Library: Chief Librarian was appointed after the TEQIP-II program started in the Institute. During the last three years, 6062 volumes of books were purchased in the Library from the TEQIP-II fund for Rs. 25,89,634. Three e-journals related to three existing departments were also procured during the last three years from the TEQIP-II fund for Rs. 24,25,733 (<i>Source of evidence: Asset Register audited by the Internal as well as Statutory Auditors)</i>)</p> <p>Computers: 208 computers, amounting to Rs. 94,06,608, 20 laptops for 9,96,975 and 7 servers for Rs.7,71,481, FOUR Mac machines for 3,01,984 and 1 workstation for Rs. 1,56,015 were purchased from the TEQIP-II fund that have been distributed to the laboratories of the three existing Departments. (<i>Source of evidence: Asset Register audited by the Internal as well as Statutory Auditors)</i>)</p> <p>Overall procurement of Rs. 4,77,82,860 along with the civil works for Rs. 46,95,260 was made from the TEQIP-II fund.</p> <p>While meeting students and Faculty, it was found out that the satisfaction index has been substantially increased (more than 90%) among them.</p>
<p>B. Obtaining Academic Autonomy status, including:</p> <ul style="list-style-type: none"> ▪ Number of institutions that have obtained ‘Autonomous Institution status’ as per University Grants Commission process within 2 years of joining the Project, or 	<p>So far Autonomy status has not been obtained. Applied to the University (CUSAT) for forwarding the application to the UGC for autonomous status; SAR is uploaded in October 2015 (<i>Source of Evidence: Institution Response)</i>)</p>
<ul style="list-style-type: none"> ▪ Effectiveness of utilization of academic autonomy possessed/ obtained (<i>See Table-26 in PIP)</i> 	<p>So far Autonomy status has not been obtained.</p>
<p>C. Effort made by Institutions for upgrading qualifications of faculty members, including:</p> <ul style="list-style-type: none"> ▪ Percentage of faculty enrolled in MTech and PhD 	<p>Present Regular Faculty – 32 Deputed for PhD: Full time – 1; Part Time – 1; For M.Tech. – 4 40.6% of faculty is deputed for up gradation of qualification by enrolling in M.Tech. and Ph.D. programs. (<i>Source of Evidence: Institute Office Records and Office Orders signed by the Principal)</i>)</p>

<p>D. Existing teaching and staff vacancies and effort made by Institutions for filling the vacancies, including:</p> <ul style="list-style-type: none"> ▪ Percentage of faculty and staff positions filled and vacant 	<p>Sanctioned Faculty Strength – 66 as per the GO dated 14.02.2014 Present Regular Faculty – 32 (<i>Source of Evidence: Institute Office Records signed by the Principal and the Attendance Register</i>) Percentage of Faculty Filled – 48.5% Percentage of Faculty vacant – 51.5% For filling up the vacancy of 34 Faculty Members, 24 Guest Faculty have been appointed (<i>Evidence: Office Records signed by the Principal</i>) Advertisement has gone for the Professor Posts (sanctioned posts – 3) [see the advertisement in the IHRD website: www.ihrd.ac.in] Proposed Action plan to fill up faculty positions: (<i>Source of Evidence: Institution Response</i>)</p> <ol style="list-style-type: none"> 1. It has been decided in the Principals' meeting of IHRD to recruit new regular faculty members in the cadre of Assistant Professors after getting permission from Govt. 2. Through general transfer from various IHRD Engineering Colleges. <p>Sanctioned strength of the Staff Members (Office Staff + Technical Staff) – 69 Present Number of Staff Members – 48 Presently there is NO PLAN for the Staff Recruitment Drive. Percentage of Staff Filled – 69.6% Percentage of Staff vacant – 30.4% (<i>Source of Evidence: Institute Office Records signed by the Principal and the Attendance Register</i>)</p>
<ul style="list-style-type: none"> ▪ Increase in faculty appointed on regular basis 	<p>6 Regular Faculty Members have been transferred from other IHRD Engineering colleges during the last three years since the induction of the Institute into the TEQIP-II Program. (<i>Source of Evidence: Institute Register</i>)</p>
<p>E. Effectiveness of equity at Institutional level, including:</p> <ul style="list-style-type: none"> ▪ Transition rate of students from the First to the Second year in Undergraduate programmes 	<p>Transition rate of students from the First to the Second year in Undergraduate programmes: It has been increased from 38.55% to 54.5% (<i>Source of Evidence: CUSAT University Result</i>)</p>
<p>OVERALL EVALUATION GRADE FOR 1.1</p> <p>USING THE 3-POINT GRADING SCALE AND GRADE DESCRIPTORS IN ANNEX 4(1)</p>	

PERFORMANCE AUDIT FORM (1.2)**COMPONENT 1: IMPROVING QUALITY OF EDUCATION IN SELECTED INSTITUTIONS**

NAME OF PERFORMANCE AUDITOR: Dr. SOUNAK KUMAR CHOUDHURY

DATES OF PERFORMANCE AUDIT: 6 – 8 August 2016

NAME OF INSTITUTION WITH LOCATION: College of Engineering, Karunagappaly, Kollam, Kerala

1.2: SCALING-UP POSTGRADUATE EDUCATION AND DEMAND-DRIVEN RESEARCH & DEVELOPMENT AND INNOVATION

MONITORING AND PROJECT OUTPUT/OUTCOME PARAMETERS	SUPPORTING EVIDENCE (NOTE: GRADES MUST BE SUPPORTED BY SOUND EVIDENCE OF ACHIEVEMENT OF THE INSTITUTIONAL DEVELOPMENT PROPOSAL GOALS AND TARGETS)
<p>A. Effectiveness of funds utilised for the teaching, training, learning and research equipment, library, computers, etc. by the institutions, including:</p> <ul style="list-style-type: none"> ▪ Increase in the satisfaction index of student and faculty 	<p>In terms of teaching, one regular Faculty member has been added in each of the three existing Departments of Electronics and Communication Engg. (ECE), Computer Science and Engg. (CSE) and Electronics and Electrical Engg. (EE) during the last three years of being inducted in the TEQIP-II program. (<i>Evidence Source: Attendance Register</i>)</p> <p>In terms of training, During the period of last three years when the institute was inducted to the TEQIP – II program, following numbers of training/workshops/seminars were conducted: CSE-20; EC-18 (including 2 seminars); EE-06; 3 workshops on Applied Sciences; 04 workshops for the Office Staff and 1 International Conference. (<i>Source of Evidence: List signed by the Principal</i>) This information is also displayed on the following Institute TEQIP-II website : http://www.ceknp.ac.in/img/teqip/tevents.html</p> <p>Learning and Research Equipment: For enhancing the students learning process, Digital Storage Oscilloscopes (57 numbers, Rs. 19,78,275), one 3-D printer (Rs.1,53,000), PLC training kits (Rs.1,63,632), USRP (Rs.5,10,300), Digital Signal Processing kits (15 numbers, Rs. 3,75,000), Power Supplies (40 numbers, Rs. 6,96,733), Function Generators (40 numbers Rs. 3,57,000), One RF signal generator for Rs.4,24,783, High Frequency structure simulator software for Rs.6.6 lakh, Arbitrary Waveform Generators (8 numbers, Rs.1,99,920), 55 Microprocessors and micro controller trainers for Rs.5,44,504, 20 Digital IC trainer kits for Rs. 1.17 lakh, various software for Rs.34,66,315 were procured in the EE</p>

	<p>and ECE laboratories from the TEQIP-II funds. (<i>Source of evidence: Asset Register audited by the Internal as well as Statutory Auditors and the physical verification of the labs by the Performance Auditor</i>)</p> <p>Library: Chief Librarian was appointed after the TEQIP-II program started in the Institute. During the last three years, 6062 volumes of books were purchased in the Library from the TEQIP-II fund for Rs. 25,89,634. Three e-journals related to three existing departments were also procured during the last three years from the TEQIP-II fund for Rs. 24,25,733 (<i>Source of evidence: Asset Register audited by the Internal as well as Statutory Auditors</i>)</p> <p>Computers: 208 computers, amounting to Rs. 94,06,608, 20 laptops for 9,96,975 and 7 servers for Rs.7,71,481, FOUR Mac machines for 3,01,984 and 1 workstation for Rs. 1,56,015 were purchased from the TEQIP-II fund that have been distributed to the laboratories of the three existing Departments. (<i>Source of evidence: Asset Register audited by the Internal as well as Statutory Auditors</i>)</p> <p>Overall procurement of Rs. 4,77,82,860 along with the civil works for Rs. 46,95,260 was made from the TEQIP-II fund.</p> <p>It is worth mentioning that during 2014 and 2015 four students from the Institute secured I and II ranks in the University result as follows: In 2014 – Arya P. secured II rank in B,Tech. (IT) In 2014 – Arya Chandran secured II rank in M.Tech. CS (Image Processing) In 2015 – Jyothis Mary John secured I rank in M.Tech. CS (Image Processing) In 2015 – Varsha secured II rank in M.Tech. EC (Signal Processing) (<i>Source of Evidence: University Result and Institute website</i>)</p> <p>While meeting students and Faculty, it was found out that the satisfaction index has been substantially increased (more than 90%) among them.</p>
<p>B. Effectiveness of scaling-up Postgraduate Technical Education, including:</p> <ul style="list-style-type: none"> ▪ Increased enrolment for MTech and PhD 	<p>Enrolment in M.Tech Program has decreased in 2015-16 by 18 students (<i>Source of Evidence: Admission Records</i>)</p>
<ul style="list-style-type: none"> ▪ Establishment of proposed laboratories 	<p><u>Establishment of 3 new laboratories for PG that were proposed</u></p> <ol style="list-style-type: none"> 1. Dept of ECE: Signal Processing Lab and Project Lab 2. Dept of CSE: Digital Image Processing Lab (Source of evidence: Physical Lab Visit by the Performance Auditor)

	<i>(Source of Evidence: Physical verification of the labs by the Performance Auditor)</i>
<ul style="list-style-type: none"> ▪ Cumulative number of assistantships granted 	Up to 2015-16, 63 Students enrolled in the M.Tech program have obtained financial assistantship of Rs. 8000 per month per student from the TEQIP-II fund <i>(Source of evidence: TEQIP file No: T/13/CEK/TRA and the meeting of the Performance Auditor with the PG students)</i>
C. Progress/achievement in <u>starting new Postgraduate programmes, including:</u> <ul style="list-style-type: none"> ▪ Securing AICTE approval 	Since the existing courses are not yet accredited, AICTE do not accept proposal for new programmes. Other formalities including the permission from the Director of IHRD has been obtained to start two new PG programmes, MTech in Embedded Systems and VLSI Design and Computer Information Science as planned. <i>(Source of Evidence: Institute Records)</i>
<ul style="list-style-type: none"> ▪ Establishment of laboratories 	Not Applicable
<ul style="list-style-type: none"> ▪ Adequacy of student enrolments 	Not Applicable
D. Effectiveness of collaborations made with other Institutions in India and abroad, including <ul style="list-style-type: none"> • Increase in number of co-authored publications in refereed journals 	Number of research publications co-authored with faculty/ researchers/ industry experts from outside the institution is 19 in the last three years since the induction of the Institute into the TEQIP-II program. This is an increase of about 53% with respect to previous two years. <i>(Source of evidence: copies of published papers)</i>
E. Increased collaboration with industry in research and development, including: <ul style="list-style-type: none"> ▪ Increase in number of joint and industry sponsored research and development work undertaken 	Seed money for 8 project proposals has been given to faculty members from the TEQIP-II fund and they have submitted final proposals for a total amount of Rs181.12 lakhs to various funding agencies. <i>(Source of Evidence: Institution Response)</i>
<ul style="list-style-type: none"> ▪ Increase in financial contribution by industry for R & D 	NIL
<ul style="list-style-type: none"> ▪ Increase in industry personnel registered for Masters and Doctoral programmes 	NIL
<ul style="list-style-type: none"> ▪ Increase in industry personnel trained by the institution in knowledge and/or skill areas 	NIL
<ul style="list-style-type: none"> ▪ Increase in the number of consultancy assignments secured 	NIL
<ul style="list-style-type: none"> ▪ Increase in the number of students' and faculty visits to and/or training in industry 	NIL

<ul style="list-style-type: none"> Improvements in graduate placement rate 	<p>In 2013 -14 – No M.Tech. student was placed through campus placement In 2014 -15 – 5 M.Tech students among 46 were placed in Cognizant IT companies In 2015 -16 – 5 M.Tech students among 34 were placed in Cognizant and Ernest and Young IT companies This is an increase of 3.83% in the placement <i>(Source of evidence: Physical verification of Placement Records, e-mails from the companies and appointment letters)</i></p>
<ul style="list-style-type: none"> Increase in involvement of industry experts in curricula & syllabi improvements, laboratory improvements, evaluation of students and delivering expert lectures 	<p>Industry experts are being requested by the coordinator of the M.Tech. curricular development cluster to suggest and propose the changes in the curricula. Apart from that, Industry experts do not participate in laboratory improvements, evaluation of students or delivering expert lectures. <i>(Source of evidence: e-mail communications between the Industry Experts and the Institute Representative for curricular development cluster)</i></p>
<ul style="list-style-type: none"> Increase in the number of sandwich programmes between industries and the institution. 	<p>NIL</p>
<p>F. Increase in percentage of revenue from externally funded research and development projects and consultancies as a percentage of the total revenue of the institution from all sources</p>	<p>NIL</p>
<p>G. Increase in the number of publications in refereed journals</p>	<p>Till 2013 the average number of research publication in International journals was 4.5 which have been enhanced to 16 during the last three years since the induction of the Institute in the TEQIP program. That makes an increase of 72%. <i>(Source of evidence: Physical verification of publication records)</i></p>
<p>H. Increase in the number of patents filed</p>	<p>NIL</p>
<p style="text-align: center;">OVERALL EVALUATION GRADE FOR 1.2 USING THE 3-POINT GRADING SCALE AND GRADE DESCRIPTORS IN ANNEX 4(1)</p>	
<p style="text-align: right;">2</p>	

PERFORMANCE AUDIT FORM (1.2.1)**COMPONENT 1: IMPROVING QUALITY OF EDUCATION IN SELECTED INSTITUTIONS**

NAME OF PERFORMANCE AUDITOR: Dr. SOUNAK KUMAR CHOUDHURY

DATES OF PERFORMANCE AUDIT: 6 – 8 August 2016

NAME OF INSTITUTION WITH LOCATION: College of Engineering, Karunagappaly, Kollam, Kerala

1.2.1 ESTABLISHING CENTRES OF EXCELLENCE

MONITORING AND PROJECT OUTPUT/OUTCOME PARAMENTERS	SUPPORTING EVIDENCE (NOTE: GRADES MUST BE SUPPORTED BY SOUND EVIDENCE OF ACHIEVEMENT OF THE INSTITUTIONAL DEVELOPMENT PROPOSAL GOALS AND TARGETS)	
A. Establishing Centres of Excellence Improvement in Research and Development facilities through: <ul style="list-style-type: none"> ▪ Establishment of new laboratories for applicable thematic research 	NA	
<ul style="list-style-type: none"> ▪ Establishment of a knowledge resource centre (library) in the thematic area 	NA	
<ul style="list-style-type: none"> ▪ Procurement of furniture 	NA	
<ul style="list-style-type: none"> ▪ Civil works 	NA	
OVERALL EVALUATION GRADE FOR 1.2.1 USING THE 3-POINT GRADING SCALE AND GRADE DESCRIPTORS IN ANNEX 4(1)		3

PERFORMANCE AUDIT FORM (1.3)**COMPONENT 1: IMPROVING QUALITY OF EDUCATION IN SELECTED INSTITUTIONS**

NAME OF PERFORMANCE AUDITOR: Dr. SOUNAK KUMAR CHOUDHURY

DATES OF PERFORMANCE AUDIT: 6 – 8 August 2016

NAME OF INSTITUTION WITH LOCATION: College of Engineering, Karunagappaly, Kollam, Kerala

1.3: FACULTY DEVELOPMENT FOR EFFECTIVE TEACHING (PEDAGOGICAL TRAINING)

MONITORING AND PROJECT OUTPUT/OUTCOME PARAMENTERS	SUPPORTING EVIDENCE (NOTE: GRADES MUST BE SUPPORTED BY SOUND EVIDENCE OF ACHIEVEMENT OF THE INSTITUTIONAL DEVELOPMENT PROPOSAL GOALS AND TARGETS)
A. Effort made by Institutions providing Pedagogy Training to faculty, including:	Pedagogy Training has been imparted by the Teaching and Learning Centre of IIT Madras that was attended by the Faculty Members.
<ul style="list-style-type: none"> Percentage of faculty who have benefitted from the core and advanced modules of pedagogy training 	2013-14 -4 Faculty 12.5% 2014-15 – 10 Faculty 31.25% 2015-16 – 33 Faculty 100% (<i>Source of evidence: Participation certificates</i>)
<ul style="list-style-type: none"> Improvements in (and/or updating, and more relevant) curricula and /or syllabi 	B.Tech Curriculum is framed by CUSAT and Kerala Technological University (KTU) and revised in every four years as per market demand. Last revision was in 2012 and 2016 in CUSAT and KTU respectively. For M.Tech, since the syllabus is prepared cluster wise, the institution has a major role in the syllabus revision. Frequency of course revision is decided by the members of the respective cluster. (<i>Source of evidence: Institution Response</i>)
<ul style="list-style-type: none"> Improvements in (and/or updating, more relevant) course assessment methods 	The procedure is set by the CUSAT with two internal tests along with minimum two alignments per semester which is being followed by the Institute,
<ul style="list-style-type: none"> Improvements in teaching and learning methods, including provision for students needing extra/remedial support 	TEQIP-II fund has been utilised for making two smart class rooms for PG and four smart class rooms for UG students. (<i>Source of evidence: physical verification by the Performance Auditor</i>) Remedial classes of mainly mathematics oriented courses are being regularly held From which a total number of 516 General Category Students and 45 SC Students were benefited. (<i>Source of evidence: Institution Response and meetings of UG and PG students with the Performance Auditor</i>)
<ul style="list-style-type: none"> Percentage of faculty with UG qualification registered/deputed for improving their qualification 	Currently there is only one Faculty Member with B.Tech. qualification who has registered for M.Tech. program.

<p>(see Section-3, 4(b) on page 20 of PIP)</p>	<p>Percentage of faculty with UG qualification registered/deputed for improving their qualification is 100% (<i>Source of evidence: Deputation letter from the Principal</i>)</p>
<ul style="list-style-type: none"> Percentage of faculty deputed for subject domain training, seminars, etc. (<i>faculty are required to share their gains with peers and put reports on training on institution's web site</i>) 	<p>All of the 32 Faculty Members attended subject domain training or seminars. The gain has been shared with the peers and the reports were uploaded on to the Institute TEQIP website: http://www.ceknpy.ac.in/img/teqip/tevents.html <i>(Source of evidence: Management Information System)</i></p>
<ul style="list-style-type: none"> Progress in securing accreditation of eligible UG & PG programs (<i>institutions to achieve target of 60% of eligible UG & PG programmes accredited - appliedfor within 2 years of joining the Project</i>) 	<p><u>For CSE and ECE Programs:</u></p> <ul style="list-style-type: none"> Fee for Accreditation has been paid. SAR is submitted in Oct 2015 Faculty positions will be filled soon by promotion and transfer Applications are invited to appoint Professors. For increasing the built up area, construction is progressing under NABARD scheme, construction of second floor of main building with institution fund is finished and the building with PTA fund is also competed. <p><i>(Source of evidence: Institution Response and physical verification)</i></p>
<p>B. Effectiveness of Pedagogy Training, including</p>	<p>Pedagogy training has proved to be very effective for all the Faculty Members, particularly for about 10-15% of the Faculty Members who score less in the students evaluation. For those few Faculty Members, effectiveness in teaching improves by more than 50% after attending the pedagogy training courses. <i>(Source of evidence: Meetings of UG and PG students, and Faculty Members with the Performance Auditor)</i></p>
<ul style="list-style-type: none"> Percentage of students satisfied with the quality of teachers and changes/developments specifically undertaken as a result of student evaluations 	<p>During the meeting between the Performance Auditor and the students, almost all the students (100%) agreed to the fact that the performance of the Faculty Members improve after attending the pedagogy training courses. <i>(Source of evidence: Meetings of UG and PG students, and Faculty Members with the Performance Auditor)</i></p>
<p>OVERALL EVALUATION GRADE FOR 1.3 USING THE 3-POINT GRADING SCALE AND GRADE DESCRIPTORS IN ANNEX 4(1)</p>	

1

PERFORMANCE AUDIT FORM (2.1)
COMPONENT 2: IMPROVING SYSTEM MANAGEMENT

NAME OF PERFORMANCE AUDITOR: Dr. SOUNAK KUMAR CHOUDHURY

DATES OF PERFORMANCE AUDIT: 6 – 8 August 2016

NAME OF INSTITUTION WITH LOCATION: College of Engineering, Karunagappaly, Kollam, Kerala

2.1: CAPACITY BUILDING TO STRENGTHEN MANAGEMENT

MONITORING AND PROJECT OUTPUT/OUTCOME PARAMETERS	SUPPORTING EVIDENCE (NOTE: GRADES MUST BE SUPPORTED BY SOUND EVIDENCE OF ACHIEVEMENT OF THE INSTITUTIONAL DEVELOPMENT PROPOSAL GOALS AND TARGETS)
A. Implementation of academic and non-academic reforms, including:	
<ul style="list-style-type: none"> ▪ Improved understanding of the need and ways for increased autonomy, and new instruments for accountability 	<p>The faculty and staff are aware about the added responsibility of autonomy. Most of them are involved in different committees formed for obtaining autonomy and accreditation. They are keen to accept and run the autonomy effectively and efficiently. An Academic System Software exists for monitoring, transparency All the stakeholders are given username so that they can verify the data. A dedicated server is maintained for it.</p> <p><i>(Source of Evidence: Institute website and meetings of UG and PG students, and Faculty Members with the Performance Auditor)</i></p>
<ul style="list-style-type: none"> ▪ Modernization and decentralisation of administration and financial management 	<ol style="list-style-type: none"> 1. Computerization and automation of the office is done. The accounting of the revenue and expenditure is automated using Tally software that goes through a three level verification, the last being done at the Headquarters of the IHRD, the parent organization. 2. The collection of fees is facilitated through SBI collect internet banking scheme. 3. The academic administration is made online using a dedicated server, with log in facility for all students, parents and teachers, which adds to the transparency of the academic activities. 4. IHRD, being an autonomous organization, the Principal is endowed with the purchasing power of Rs.100000.00 . Under TEQIP, he is authorized to procure goods

	worth 50 lakh rupees. <i>(Source of Evidence: Office Orders from the Principal of 20th Jan 2014 and 23rd April 2014; Circular from the Director, IHRD dated 3rd December 2012).</i>
<ul style="list-style-type: none"> ▪ Extent of delegation of administrative and financial decision making powers to senior functionaries 	The heads of Departments are delegated to procure goods worth one lakh under the TEQIP project as per the project implementation plan. But the institution and the number of faculty being small, this delegation is not resorted to. <i>(As per the TEQIP guidelines)</i>
<ul style="list-style-type: none"> ▪ Responsiveness to stakeholders (students, faculty, staff, industry, local communities) 	The stakeholders of the institution are made aware of the merits, opportunities and the outcomes of the TEQIP project and the consequential developments in the institution through meetings, bulletins etc. The complaints, if any, of students and parents are addressed through the student advisory system. <i>(Source of Evidence: Discussion with the Students, Faculty, Staff and the Principal)</i>
<ul style="list-style-type: none"> ▪ Institutional quality assurance and enhancement strategies, including student feedback mechanisms 	<p><i>Ensuring the Academic Quality.</i></p> <p>The academic activities are bounded within the academic calendar, prepared at the beginning of the semester. It is also ensured that sufficient number of contact hours are available for each subject. <i>(Source of Evidence: Copy of the Academic calendar)</i></p> <p><i>Academic Information System</i></p> <p>The progress of the students and the evaluation is made online with visibility for the management, teachers, students and parents, using a dedicated server. This ensures the accountability of teachers and the commitment of students. <i>(Source of Evidence: Principal's Order dated 20th Jan 2014)</i></p> <p><i>Student's feedback</i></p> <p>The feedback of the student in every subject is collected by the respective heads of departments and deficiency in teaching, if any, are discussed with the respective teachers and the defects are rectified. <i>(Source of Evidence: Discussion with the Students and the Faculty)</i></p> <p><i>Involvement of PTA</i></p> <p>Both class PTA and the general PTA meetings are used to ensure and enhance the quality of education. Also, the PTA strives to engage more students in remedial sessions. <i>(Source of Evidence: Discussion with the Students and the Faculty)</i></p>

<ul style="list-style-type: none"> Maintenance of academic and non-academic infrastructure and facilities, including sufficiency and quality of academic buildings 	<p>The buildings are constructed by the state Public Works Department. The academic buildings are constructed following the standards laid out by the AICTE.</p> <p>The maintenance is done by the IHRD with the help of PWD. The maintenance of the instruments, purchased under TEQIP, is done by the respective departments with the help of supporting staff. The maintenance or repairs outside the project duration and or warranty period will be undertaken by the institute.</p> <p><i>(Source of Evidence: Discussion with the Principal and the Faculty and the physical verification of related registers)</i></p>
<ul style="list-style-type: none"> Development, maintain and utilisation of institutional resources 	<p>Registers are kept in labs in which entries are made by users of the resources. The maintenance and upkeep is the responsibility of the technical supporting staff, who are given sufficient training.</p> <p><i>(Source of Evidence: Discussion with the Principal and the physical verification)</i></p>
<ul style="list-style-type: none"> Generation, retention and utilization of Income Revenue Generation. 	<p>The tuition fees, collected in the institution, are kept with the institution to meet the establishment expenses. Two percent of the recurring expenditure is deposited with the four TEQIP funds.</p> <p><i>(Source of Evidence: Discussion with the Principal and the TEQIP Coordinator and the physical verification)</i></p>
<p>OVERALL EVALUATION GRADE FOR 2.1 USING THE 3-POINT GRADING SCALE AND GRADE DESCRIPTORS IN ANNEX 4(1)</p>	
<p>1</p>	

PERFORMANCE AUDIT FORM (2.1.1)
COMPONENT 2: IMPROVING SYSTEM MANAGEMENT
2.1: CAPACITY BUILDING TO STRENGTHEN MANAGEMENT (Continued)

2.1.1: IMPLEMENTATION OF GOOD GOVERNANCE

(See Also Annex 4 of the Good Governance Guide for Governing Bodies for examples of supporting evidence)

MONITORING AND PROJECT OUTPUT/OUTCOME PARAMETERS	SUPPORTING EVIDENCE (NOTE: GRADES MUST BE SUPPORTED BY SOUND EVIDENCE OF ACHIEVEMENT OF THE INSTITUTIONAL DEVELOPMENT PROPOSAL GOALS AND TARGETS)	
A. PRIMARY ACCOUNTABILITIES		GRADE
<ul style="list-style-type: none"> • Has the Governing Body approved the institutional strategic vision, mission and plan – identifying a clear development path for the institution through its long-term business plans and annual budgets? <i>(Give dates of governing body meetings where the minutes record these matters having been discussed, approved and/or followed up.)</i> 	IDP, including strategic vision, mission and plan – identifying a clear development path for the institution through its long-term business plans and long term budgets, has been approved by the BOG in its first meeting held on 22 nd June 2013. <i>(Source of evidence: http://www.ceknp.ac.in/img/teqip/tevents.html)</i>	
<ul style="list-style-type: none"> • Has the Governing Body ensured the establishment and monitoring of proper, effective and efficient systems of control and accountability to ensure financial sustainability? <i>(Give dates of governing body meetings where the minutes record these matters having been discussed, approved and/or followed up at the systems level.)</i> 	Institute Development Plan (IDP) ensures the establishment and monitoring of proper, effective and efficient systems of control and accountability to ensure financial sustainability. This is clearly mentioned in the 4.14 section of the IDP titled : Action plan for sustainability project. This has been approved by the BOG in its first meeting held on 22 nd June 2013. (Source of evidence: IDP and the Institute website: http://www.ceknp.ac.in/img/teqip/tevents.html)	
<ul style="list-style-type: none"> ▪ Is the Governing Body monitoring institutional performance and quality assurance arrangements? 	During the last three years, a total number of 8 BOG meetings were held at an interval of four months. In each of these BOG meetings, all the academic and	

<p><i>(Give dates of governing body meetings where the minutes record these matters having been discussed, approved and/or followed up at the systems level.)</i></p>	<p>Departmental activities are discussed. The dates of the BOG meetings are the following: 1st Meeting: 22nd June 2013 2nd Meeting: 30th Oct 2013 3rd Meeting: 18th Dec 2013 4th Meeting: 27th May 2014 5th Meeting: 16th Dec 2014 6th Meeting: 4th May 2015 7th Meeting: 16th Nov 2015 8th Meeting: 12th April 2016 <i>(Source of Evidence: Minutes of the BOG meetings from 2013 to 2016)</i></p>
<p>▪ Has the Governing Body put in place suitable arrangements for monitoring the head of the institution's performance? <i>(Give dates of governing body meetings where the minutes record these matters having been discussed, approved and/or followed up.)</i></p>	<p>As it is no concrete arrangement has been made for monitoring the performance of the Head of the Institution. However, while discussing and evaluating the overall academic and Departmental activities, the performance of the Head of the Institute is reflected in it. The BOG is planning to form separate committees to evaluate the performance of various activities in point scale. <i>(Source of Evidence: Discussion with the Principal and the Minutes of the BOG meetings from 2013 to 2016)</i></p>
<p>EVALUATION GRADE FOR PRIMARY ACCOUNTABILITIES USING THE 3-POINT GRADING SCALE AND GRADE DESCRIPTORS IN ANNEX 4(1) FOR ALL GOVERNANCE SECTIONS</p>	

1

B. OPENNESS & TRANSPARANCY IN THE OPERATION OF GOVERNING BODIES		
<ul style="list-style-type: none"> • Does the Governing Body publish an annual report on institutional performance? <i>(Give the publication date and type of publication of the most recent annual report, if there is one)</i> 	NO	
<ul style="list-style-type: none"> • Does the Governing Body maintain, and publicly disclose, a register of interests of members of its governing body? <i>(Given that a formal register is not yet normal practice in colleges, provide evidence of any published information on governing body members' financial and commercial interests)</i> 	All the minutes of the BOG meetings are uploaded onto the Institute website reflecting the information on governing body members' financial and commercial interests. (Source of evidence: IDP and the Institute website: http://www.ceknp.ac.in/img/teqip/tevents.html)	
<ul style="list-style-type: none"> ▪ Is the Governing Body conducted in an open a manner, and does it provide as much information as possible to students, faculty, the general public and potential employers on all aspects of institutional activity related to academic performance, finance and management? <i>(Say whether the governing minutes are published on the institution website, and note any other steps that the governing body takes to communicate with its stakeholders on its work as a Board)</i> 	All the minutes of the BOG meetings are uploaded onto the Institute website. Major decisions concerning the Faculty, Students and Staff are notified to the concerned bodies informally which are also communicated to the PTA executive meetings held quarterly. (Source of evidence: IDP and the Institute website: http://www.ceknp.ac.in/img/teqip/tevents.html)	
GRADE FOR OPENNESS & TRANSPARENCY IN THE OPERATION OF GOVERNING BODIES		1
C. KEY ATTRIBUTES OF GOVERNING BODIES		
<ul style="list-style-type: none"> ▪ Are the size, skills, competences and experiences of the Governing Body, such that it is able to carry out its primary accountabilities effectively and efficiently, and ensure the confidence of its stakeholders and constituents? <i>(Specify the range of skills and experience that the members of the governing body, and especially the external members, have)</i> 	BoG has been constituted as per the guidelines of regulating bodies by the Government from the panel suggested by the Institute. The BoG members are as follows: <ol style="list-style-type: none"> 1. Prof .V.P.N Nampoori,(Chairman), Professor of Emeritus, International School of Photonics, CUSAT, Internationally recognised in Photonics, More than 40 years of experience in teaching, research and administration. 2. Dr. Suresh Kumar.P, (Member), Director, IHRD, Twenty Seven years 	

	<p>of experience in teaching, research and administration</p> <ol style="list-style-type: none"> 3. Dr. V P Devassia, (Member), Additional Director IHRD, Thirty years of experience in industry, teaching, research and administration 4. Dr. Sam Thomas, Professor, School of Management Studies, CUSAT (Member, University Nominee), Twenty years of teaching, research in Management 5. Mr. M Sherif, Additional Secretary., Higher Education, Government of Kerala (State Govt Nominee) 6. Mr. James Joseph, Joint. Secretary. Finance, Government of Kerala (State Govt Nominee) 7. Dr. Hari V S, Principal, Member Secretary, Twenty One years of experience in teaching, research and administration 8. Dr. AjilKumar.A, HOD, ME, Institutional Member, Twenty Two years of experience in teaching, research and administration 9. Prof. Manoj Ray D, HOD CS, Institutional Member, Twenty One years of experience in teaching, research and administration <p>The size, skills and experiences of BoG is such that it is able to carry out its accountabilities effectively and efficiently. The members actively participate in all the meetings and give proper advices and suggestions.</p> <p><i>(Source of Evidence: Government order posting BoG members and their experience which are uploaded on to the institute web site.)</i></p>
<p>▪ Are the recruitment processes and procedures for governing body members rigorous and transparent? <i>(Specify how governing body members are selected, and whether that process is transparent)</i></p>	<p>Names are suggested by the Institute and pass on to the State Government through the Director, IHRD. Final list of BOG is finalised by the Government Order.</p> <p><i>(Source of Evidence: Discussion with the Principal and the TEQIP Coordinator and the physical verification of IHRD letters)</i></p>
<p>▪ Does the Governing Body have actively involved independent members and is the institution free from direct political interference to ensure academic freedom and focus on long term educational objectives? <i>(Give examples, where possible, of the role of external</i></p>	<p>It is free from all political interferences. BOG members from the state government were instrumental in obtaining sanctions from the central ministries for the foreign delegates for the international conference held in the institute on 8th and 9th July 2016.</p> <p><i>(Source of Evidence: Discussion with the Principal and the TEQIP Coordinator)</i></p>

<i>members in improving the performance of the institution)</i>	
<ul style="list-style-type: none"> ▪ Are the role and responsibilities of the Chair of the institution and the Member Secretary serving the governing body clearly stated? <i>(If yes, specify the document where these roles are defined)</i> 	<p>Yes. As per the guidelines of the NPIU. <i>(Source of Evidence: NPIU guidelines)</i></p>
<ul style="list-style-type: none"> ▪ Does the Governing Body meet regularly? Is there clear evidence that members of the governing body attend regularly and participate actively? <i>(State the number of meetings in the last year, and the average number of those Board members present and those members absent at those meetings)</i> 	<p>Yes. It meets every four months. Three BOG meetings were held last year, during 2015-16. On an average, there are 9 members are present and one member is absent. <i>(Source of Evidence: Physical verification of the Minutes of the BOG meetings)</i></p>
GRADE FOR KEY ATTRIBUTES OF GOVERNING BODIES	
1	
D. EFFECTIVENESS AND PERFORMANCE REVIEW OF GOVERNING BODIES	
<ul style="list-style-type: none"> ▪ Does the Governing Body keep their effectiveness under regular review and in reviewing its performance, reflect on the performance of the institution as a whole in meeting its long-term strategic objectives and its short-term indicators of performance/success? <i>(If yes, give the date(s) of governing body meetings where the minutes show that such a review has been discussed)</i> 	<p>In each BOG meeting (dates are specified in section 2.1.1 A) a self appraisal of the performance of the Governing Body is held. In 3rd BOG meeting, particularly, the assessment was made in a scale of 1,2,3. <i>(Source of Evidence: Physical verification of the Minutes of the BOG meetings)</i></p>
<ul style="list-style-type: none"> ▪ Does the Governing Body ensure that new members are properly inducted, and existing members receive opportunities for further development as deemed necessary? <i>(If yes, give examples of how these two tasks are carried out)</i> 	<p>Yes. A new member from the industry was proposed by the existing BOG. <i>(Source of Evidence: Physical verification of the Minutes of the BOG meetings)</i></p>
GRADE FOR EFFECTIVENESS AND PERFORMANCE REVIEW OF GOVERNING BODIES	
1	
E. REGULATORY COMPLIANCE	

<p>▪ Does the Governing ensure regulatory compliance* and, subject to this, take all final decisions on fundamental matters of the institution. <i>(If yes, give the date(s) of governing body meetings where the minutes show that regulatory compliance has been discussed)</i></p>	<p>Yes. It is discussed in all the BOG meetings: 1st Meeting: 22nd June 2013 2nd Meeting: 30th Oct 2013 3rd Meeting: 18th Dec 2013 4th Meeting: 27th May 2014 5th Meeting: 16th Dec 2014 6th Meeting: 4th May 2015 7th Meeting: 16th Nov 2015 8th Meeting: 12th April 2016 <i>(Source of Evidence: Minutes of the BOG meetings from 2013 to 2016)</i></p>	
<p>▪ Does the regulatory compliance include demonstrating compliance with the ‘not-for-profit’ purpose of education institutions? <i>(If yes, give evidence that the governing body has been directly involved)</i></p>	<p>The Institute is Registered as a non-profit organisation. <i>(Source of Evidence: Minutes of the BOG meetings from 2013 to 2016)</i></p>	
<p>▪ Has there been accreditation and/or external quality assurance by a national or professional body? If so, give name, current status of accreditation etc <i>(Provide lists of all courses which have already been accredited, all courses where an application has been made, and all courses where no such application has yet been made)</i></p>	<p>NO. <i>(Source of Evidence: Discussion with the Principal and the TEQIP Coordinator)</i></p>	
GRADE FOR REGULATORY COMPLIANCE		1
OVERALL EVALUATION GRADE FOR GOVERNANCE 2.1.1 A-E USING THE 3-POINT GRADING SCALE AND GRADE DESCRIPTORS IN ANNEX 4(1)		1

PERFORMANCE AUDIT FORM (2.2)
COMPONENT 2: IMPROVING SYSTEM MANAGEMENT

NAME OF PERFORMANCE AUDITOR: Dr. SOUNAK KUMAR CHOUDHURY

DATES OF PERFORMANCE AUDIT: 6 – 8 August 2016

NAME OF INSTITUTION WITH LOCATION: College of Engineering, Karunagappaly, Kollam, Kerala

TABLE 2.2: PROJECT MANAGEMENT, MONITORING AND EVALUATION

MONITORING AND PROJECT OUTPUT/OUTCOME PARAMENTERS	SUPPORTING EVIDENCE (NOTE: GRADES MUST BE SUPPORTED BY SOUND EVIDENCE OF ACHIEVEMENT OF THE INSTITUTIONAL DEVELOPMENT PROPOSAL GOALS AND TARGETS)
<p>A. Effectiveness of mentoring, reviews, surveys and audits conducted, including:</p> <ul style="list-style-type: none"> ▪ Increase in the achievement of the institutions goals and targets set out in the Institutional Development Proposal 	<ul style="list-style-type: none"> • Objectives of establishment and development of laboratories are achieved within the limited resources of TEQIP-II funding. Target set for international journal publications is partially achieved. • Research proposals have been submitted amounting Rs181.12 lakhs for external funding. • Placement rate has been slightly improved. • Targets of programmes with industries have been achieved to an extent. • Transition rate of students from first year to second year is improved. • Target of faculty with M Tech qualification is achieved. <p>However, the shortage of regular faculty still continues. <i>(Source of Evidence: Discussion with the Principal and the TEQIP Coordinator and physical verification)</i></p>

<p>B. Effective project management and monitoring, including:</p> <ul style="list-style-type: none"> ▪ Precise and reliable information/ data through web based MIS available to stakeholders at all time 	<ul style="list-style-type: none"> • Web based Academic System Software has been developed. All the stakeholders are given username so that they can verify the data. • Financial operation is done through standalone MIS. • All the data regarding TEQIP is published in the Institute web site <p><i>(Source of Evidence: Discussion with the Principal and the TEQIP Coordinator and physical verification)</i></p>
<p>C. Effectiveness of faculty evaluation by students, including:</p> <ul style="list-style-type: none"> ▪ Percentage/ increase in percentage of faculty evaluated by students in one or more subjects ▪ Are results of evaluation properly used for teacher improvement? <p>If yes, is the procedure adopted for teacher improvement including counseling appropriate and effective?</p>	<p>Faculty evaluation is done by students for each subject each semester. The feedback is analysed and the concerned faculty member is made aware about deficiencies and counselled by the HOD and Principal for improvement. Further improvement in teaching is done through the subject domain training or seminars attended by the concerned Faculty Member(s).</p> <p><i>(Source of Evidence: Discussion with the Principal and the TEQIP Coordinator and physical verification)</i></p>
<p>OVERALL EVALUATION GRADE FOR 2.2</p> <p>USING THE 3-POINT GRADING SCALE AND GRADE DESCRIPTORS IN ANNEX 4(1)</p>	

2

DATA AUDIT FORMS

NAME OF THE DATA AUDITOR: Dr.Smitha Dharan

DATES OF DATA AUDIT: 3rd August 2016

NAME OF INSTITUTION WITH LOCATION: College of Engineering, Karunagappaly, Kollam, Kerala

DATA AUDIT FORM (1)

No.	Particulars	Value	Institutional Source of Data
1.	<i>Information in respect to Bachelors programs in engineering/technology</i>		
	(a) Number of UG programs conducted during the following academic year		AICTE recognition letter
	(i) 2011 – 12	4	
	(ii) 2012 – 13	4	
	(iii) 2013 – 14	4	
	(iv) 2014-2015	4	
	(v) 2015-2016	3	
	(b) Total number of UG students during the following academic year		College Admission Register in Academic Section (AS)
	• 2011 – 12	548	
	• 2012 – 13	606	
	• 2013 – 14	646	
	• 2014-15	675	
	• 2015-16	592	
	(c) Total number of women students in UG programs during the following academic year		College Admission Register Academic Section
	(i) 2011 – 12	332	
	(ii) 2012 – 13	283	
	(iii) 2013 – 14	360	
	(iv) 2014-15	383	
	(v) 2015-16	322	
	(d) Total number of SC students in UG programs during the following academic		College Admission Register in AS
	(i) 2011 – 12	29	
	(ii) 2012 – 13	32	
	(iii) 2013 – 14	43	
	(iv) 2014-15	39	
	(v) 2015-16	36	

(e) Total number of ST students in UG programs during the following academic year		
(i) 2011-12	2	College Admission Register in AS
(ii) 2012 – 13	2	
(iii) 2013 – 14	1	
(iv) 2014-15	1	
(v) 2015-16	0	
(f) Total number of OBC students in UG programs during the following academic year		
(i) 2011 – 12	257	Admission Register in AS
(ii) 2012 – 13	281	
(iii) 2013 – 14	355	
(iv) 2014-15	378	
(v) 2015-16	299	
(g) Percentage of final year UG students during the following academic years placed through campus interviews		
(i) 2011 - 12	Nil	Copy of offer letter conveyed though e-mail
(ii) 2012 - 13	5.08% (6/118)	
(iii) 2013 - 14	7.69% (9/117)	
(iv) 2014-15	16.6%	
(v) 2015-16	17.5%	
(h) Percentage of final year UG students during the following academic years that passed out with 75% or more aggregate marks		
(i) 2011 - 12	19.35% (24/124)	Result file from college office (AS)
(ii) 2012 - 13	18.33% (22/120)	
(iii) 2013 - 14	13.67% (16/117)	
(iv) 2014-15	14.63% (18/123)	
(v) 2015-16	17% (32/188)	
(i)(i) Percentage of all 1 st year students [as at 1(b)(i)] during 2011-12 that passed all courses fully and successfully got admitted to 2 nd year in the 2012-13 academic year	38.55% (69/179)	Result file from college office(AS)

(ii) Percentage of <u>all</u> 1 st year students [as at 1(b)(ii)] during 2012-13 that passed all courses fully and successfully got admitted to 2 nd year in the 2013-14 academic year	34.46% (61/177)	
(iii) Percentage of <u>all</u> 1 st year students [as at 1(b)(ii)] during 2013-14 that passed all courses fully and successfully got admitted to 2 nd year in the 2014-15 academic year	34.5%	
(iv) Percentage of <u>all</u> 1 st year students [as at 1(b)(ii)] during 2014-15 that passed all courses fully and successfully got admitted to 2 nd year in the 2015-16 academic year	54.5%	
(j)(i) Percentage of 1 st year women students [as at 1(c)(i)] during 2011-12 that passed all courses fully and successfully got admitted to 2 nd year in the 2012-13 academic year	42.86% (48/112)	Result file from office(AS)
(j)(ii)Percentage of 1 st year women students [as at 1(c)(ii)] during 2012-13 that passed all courses fully and successfully got admitted to 2 nd year in the 2013-14 academic year	43.33% (39/90)	
(j)(iii)Percentage of 1 st year women students [as at 1(c)(ii)] during 2013-14 that passed all courses fully and successfully got admitted to 2 nd year in the 2014-15 academic year	40.79%(31/76)	
(j)(iv)Percentage of 1 st year women students [as at 1(c)(ii)] during 2014-15 that passed all courses fully and successfully got admitted to 2 nd year in the 2015-16 academic year	63.38%(45/71)	
(k)(i) Percentage of 1 st year SC students [as at 1(d)(i)] during 2011-12 that passed all courses fully and successfully got admitted to 2 nd year in the 2012-13	10% (1/10)	Result file from office(AS)
(k)(ii) Percentage of 1 st year SC students [as at 1(d)(ii)] during 2012-13 that passed all courses fully and successfully got admitted to 2 nd year in the 2013-14	0 /10	
(k)(iii) Percentage of 1 st year SC students [as at 1(d)(ii)] during 2013-14 that passed all courses fully and successfully got admitted to 2 nd year in the 2014-15	0	
(k)(iv) Percentage of 1 st year SC students [as at 1(d)(ii)] during 2014-15 that passed all courses fully and successfully got admitted to 2 nd year in the 2015-16	20%	
(l)(i)Percentage of 1 st year ST students [as at 1(e)(i)] during 2011-12 that passed all courses fully and successfully got admitted to 2 nd year in the 2012-13 academic year	0/1	Result file from office(AS)

(l) (ii) Percentage of 1 st year ST students [as at 1(e)(ii)] during 2012-13 that passed all courses fully and successfully got admitted to 2 nd year in the 2013-14 academic year	NA	
(l) (iii) Percentage of 1 st year ST students [as at 1(e)(ii)] during 2013-14 that passed all courses fully and successfully got admitted to 2 nd year in the 2014-15 academic year	NA	
(l) (iv) Percentage of 1 st year ST students [as at 1(e)(ii)] during 2014-15 that passed all courses fully and successfully got admitted to 2 nd year in the 2015-16 academic year	NA	
(m) (i) Percentage of 1 st year OBC students [as at 1(f)(i)] during 2011-12 that passed all courses fully and successfully got admitted to 2 nd year in the 2012-13	35.9% (37/103)	Result file from office(AS)
(m) (ii) Percentage of 1 st year OBC students [as at 1(f)(ii)] during 2012-13 that passed all courses fully and successfully got admitted to 2 nd year in the 2013-14	37.36% (34/91)	
(m) (iii) Percentage of 1 st year OBC students [as at 1(f)(ii)] during 2013-14 that passed all courses fully and successfully got admitted to 2 nd year in the 2014-15	36.4(28/77)	
(m) (iv) Percentage of 1 st year OBC students [as at 1(f)(ii)] during 2014-15 that passed all courses fully and successfully got admitted to 2 nd year in the 2015-16	50.7%	

DATA AUDIT FORM (2)

2.	<i>Information in respect to Masters programs in engineering/technology</i>		
	(a) Number of full-time Masters programs during the following academic year		AICTE Recognition letter
	(i) 2011-12	1	
	(ii) 2012 – 13	2	
	(iii) 2013 - 14	2	
	(iv) 2014-15	2	
	(v) 2015-16	2	
	(b) Number of part-time and sandwich (Joint) Masters programs during the following academic year		NA
	(i) 2011-12	0	

(ii)	2012 – 13	0	College Admission Register in AS
(iii)	2013 - 14	0	
(iv)	2014-15	0	
(v)	2015-16	0	
(c) Total number of students enrolled for all Masters programs during the following academic year			
(i)	2011-12	18	
(ii)	2012 – 13	66	
(iii)	2013 - 14	96	
(iv)	2014-15	96	
(v)	2015-16	78	

(d) Number of faculty in-house enrolled for Masters programs during Following academic year			
(i)	2011-12	Nil	
(ii)	2012 – 13	Nil	
(iii)	2013 - 14	Nil	
(iv)	2014-15	Nil	
(v)	2015-16	Nil	
(e) Number of students enrolled for all Masters programs during the following academic year with scholarship			Gate score card Inf from AICTE portal
(i)	2011-12	13	
(ii)	2012 – 13	12	
(iii)	2013 – 14	17	
(iv)	2014-15	3	
(v)	2015-16	4	
(f) Number of students enrolled for all Masters programs during the following academic year with TEQIP assistantship			

(i)	2011-12	Nil	
(ii)	2012 – 13	Nil	
(iii)	2013 – 14	46	TEQIP file No: T/13/CEK/TRA
(iv)	2014-15	62	
(v)	2015-16	63	
(g) Total number of women students in all Masters programs during the following academic year			College Admission Register in AS
(i)	2011-12	15	
(ii)	2012 – 13	58	
(iii)	2013 – 14	88	
(iv)	2014-15	88	
(v)	2015-16	69	
(h) Total number of SC students in all Masters programs during the following academic year			College Admission Register in AS
(i)	2011-12	1	
(ii)	2012 – 13	6	
(iii)	2013 – 14	9	
(iv)	2014-15	7	
(v)	2015-16	4	
(i) Total number of ST students in all Masters programs during the following academic year			College Admission Register in AS
(i)	2011-12	0	

(ii)	2012 – 13	0	
(iii)	2013 – 14	0	
(iv)	2014-15	0	
(v)	2015-16	0	
(j)	Total number of OBC students in all Masters programs during the following academic year		
(i)	2011-12	9	College Admission Register in AS
(ii)	2012 – 13	34	
(iii)	2013 – 14	61	
(iv)	2014-15	67	
(v)	2015-16	46	
(k)	Percentage of final year Masters students during the following academic year placed through campus interviews		
(i)	2011-12	NA	Copy of offer letter
(ii)	2012 – 13	Nil	
(iii)	2013 – 14	Nil	
(iv)	2014-15	10.87%	
(v)	2015-16	14.70%	
(l)	Percentage of final year Masters students during the following that passed out with 75% or more aggregate marks		
(i)	2011-12	NA	
(ii)	2012 – 13	NA	
(iii)	2013 – 14	94.4% (17/18)	Result File from College office in AS
(iv)	2014-15	63.04% (29/46)	
(v)	2015-16	67.4%	

DATA AUDIT FORM (3)

3.	<i>Information in respect to Doctoral programs</i>		
	(a)(i) Number of Doctoral candidates on roll up to March 31, 2011	Nil	NA
	(ii) Number of Doctoral candidates on roll up to March 31, 2012	Nil	
	(iii).Number of Doctoral candidates on roll up to March 31, 2013	Nil	
	(iv).Number of Doctoral candidates on roll up to March 31, 2014	Nil	
	(v).Number of Doctoral candidates on roll up to March 31, 2015	Nil	
	(vi).Number of Doctoral candidates on roll up to March 31, 2016	Nil	
	(b) Number of in-house faculty enrolled for Doctoral programs during the following academic year		
	(i) 2011-12	Nil	NA
	(ii) 2012 – 13	Nil	
	(iii) 2013 – 14	Nil	
	(iv) 2014-15	Nil	
	(v) 2015-16	Nil	
	(c) Number of students enrolled for Doctoral programs during the following academic year with scholarship(other than TEQIP)		
	(i) 2011-12	Nil	NA
	(ii) 2012 – 13	Nil	
	(iii) 2013 – 14	Nil	
	(iv) 2014-15	Nil	
	(v) 2015-16	Nil	
	(d) Number of students enrolled for Doctoral programs during the following academic year with TEQIP assistantship		
	(i) 2011-12	Nil	
	(ii) 2012 – 13	Nil	

	(iii) 2013 – 14	Nil	NA
	(iv) 2014-15	Nil	
	(v) 2015-16	Nil	

DATA AUDIT FORM (4)

4.	<i>Information in respect to Faculty</i>		
	(a) Total number of regular full-time faculty excluding adjunct and emeritus faculty during the following academic year		Copy of Attendance Register
	(i) 2011-12	27	
	(ii) 2012 – 13	28	
	(iii) 2013 – 14	33	
	(iv) 2014-15	33	
	(v) 2015-16	32	
	(b) Total number of regular full-time faculty in engineering disciplines excluding adjunct and emeritus faculty during the following academic year		Copy of Attendance Register
	(i) 2011-12	22	
	(ii) 2012 – 13	23	
	(iii) 2013 – 14	28	
	(iv) 2014-15	28	
	(v) 2015-16	27	
	(c) Number of regular full-time faculty in engineering disciplines with Masters degree as their highest qualification excluding adjunct and emeritus faculty during the following academic year		List of staff with qualification attested by Principal
	(i) 2011-12	14	
	(ii) 2012 – 13	17	
	(iii) 2013 – 14	21	

(iv)	2014-15	21	
(v)	2015-16	21	
(d) Number of regular full-time faculty in engineering disciplines with Doctoral degree as their highest qualification excluding adjunct and emeritus faculty during the following academic year		3	List of staff with qualification attested by Principal
(i)	2011-12	1	
(ii)	2012 – 13	1	
(iii)	2013 – 14	3	
(iv)	2014-15	3	
(v)	2015-16	3	
(e) Number of regular full-time faculty in engineering disciplines with Bachelors degree as their highest qualification faculty during the following academic year			
(i)	2011-12	7	
(ii)	2012 – 13	5	
(iii)	2013 – 14	4	
(iv)	2014-15	4	
(v)	2015-16	3	
(f) (i) Number of faculty with Bachelors degree which are enrolled in-house for Masters programs in parent institution during academic year 2011-12: (i) Engineering teachers: (ii) Applied Science teachers: (iii) Other teachers:		Nil NA	-----

	(f) (ii) Number of faculty with Bachelors degree which are enrolled in-house for Masters programs in parent institution during academic year 2012-13: (i) Engineering teachers: (ii) Applied Science teachers: (iii) Other teachers:	Nil NA	-----
	(f) (iii) Number of faculty with Bachelors degree which are enrolled in-house for Masters programs in parent institution during academic year 2013-14: (i) Engineering teachers: (ii) Applied Science teachers: (iii) Other teachers:	Nil NA	-----
	(f) (iv) Number of faculty with Bachelors degree which are enrolled in-house for Masters programs in parent institution during academic year 2014-15: (i) Engineering teachers: (ii) Applied Science teachers: (iii) Other teachers:	Nil NA	-----
	(f) (v) Number of faculty with Bachelors degree which are enrolled in-house for Masters programs in parent institution during academic year 2015-16: (i) Engineering teachers: (ii) Applied Science teachers: (iii) Other teachers:	Nil NA	-----
	(g) (i) Number of faculty with Bachelors degree which are enrolled in-house for Masters programs at other institutions during academic year 2011-12: (i) Engineering teachers: (ii) Applied Science teachers: (iii) Other teachers:	2 NA	Certificates
	(ii) Number of faculty with Bachelors degree which are enrolled in-house for Masters programs at other institutions during academic year 2012-13: (i) Engineering teachers: • Applied Science teachers: (iii) Other teachers:	Nil NA	-----
	(iii) Number of faculty with Bachelors degree which are enrolled in-house for Masters programs at other institutions during academic year 2013-14: (i) Engineering teachers: (ii) Applied Science teachers: (iii) Other teachers:	1 NA	Order deputing to MTech

(iv) Number of faculty with Bachelors degree which are enrolled in-house for Masters programs at other institutions during academic year 2014-15: (i) Engineering teachers: (ii). Applied Science teachers: (iii) Other teachers:	2 NA	Order deputing to MTech
(v) Number of faculty with Bachelors degree which are enrolled in-house for Masters programs at other institutions during academic year 2015-16: (i) Engineering teachers: (ii). Applied Science teachers: (iii) Other teachers:	3 NA	Order deputing to MTech
(h) (i) Number of faculty with Masters degree which are enrolled in-house for PhD programs in parent institution during academic year 2011-12: (i) Engineering teachers: (ii) Applied Science teachers: (iii) Other teachers:	Nil NA	-----
(ii) Number of faculty with Masters degree which are enrolled in-house for PhD programs in parent institution during academic year 2012-13: (i) Engineering teachers: (ii). Applied Science teachers: (iii) Other teachers:	Nil NA	-----
(iii) Number of faculty with Masters degree which are enrolled in-house for PhD programs in parent institution during academic year 2013-14: (i) Engineering teachers: (ii). Applied Science teachers: (iii) Other teachers:	Nil NA	-----
(iv) Number of faculty with Masters degree which are enrolled in-house for PhD programs in parent institution during academic year 2014-15: (i) Engineering teachers: (ii). Applied Science teachers: (iii) Other teachers:	Nil NA	-----
(v) Number of faculty with Masters degree which are enrolled in-house for PhD programs in parent institution during academic year 2015-16: (i) Engineering teachers: (ii). Applied Science teachers: (iii) Other teachers:	Nil NA	-----

(i) (i) Number of faculty with Masters degree which are enrolled in-house for PhD programs at other institutions during academic year 2011-12: (i) Engineering teachers: (ii) Applied Science teachers: (iii) Other teachers:	1 NA	Fee Receipt
(ii) Number of faculty with Masters degree which are enrolled in-house for PhD programs at other institutions during academic year 2012-13: (i) Engineering teachers: (ii).Applied Science teachers: (iii) Other teachers:	Nil NA	-----
Number of faculty with Masters degree which are enrolled in-house for PhD programs at other institutions during academic year 2013-14: (i) Engineering teachers: (ii).Applied Science teachers: (iii) Other teachers:	1 NA	Order deputing to PhD
Number of faculty with Masters degree which are enrolled in-house for PhD programs at other institutions during academic year 2014-15: (i) Engineering teachers: (ii).Applied Science teachers: (iii) Other teachers:	Nil NA	Nil
Number of faculty with Masters degree which are enrolled in-house for PhD programs at other institutions during academic year 2015-16: (i) Engineering teachers: (ii).Applied Science teachers: (iii) Other teachers:	9 NA	Nil
(j) Number of faculty that have attended a professional training program of 5 or more days duration during the following academic year		Copy of Certificate of participation
(i) 2011-12	4	
(ii) 2012 – 13	4	
(iii) 2013 – 14	44	
(iv) 2014-15	34	

(v)	2015-16	56	
(k) Number of all faculty (irrespective of specialization) that have attended the Basic Module of pedagogy training during the following academic year			Copy of Certificate of participation
(i)	2011-12	1	
(ii)	2012 – 13	Nil	
(iii)	2013 – 14	4	
(iv)	2014-15	10	
(v)	2015-16	33	
(l) Number of all faculty (irrespective of specialization) that have attended both the Basic and Advanced Modules of pedagogy training during the following academic year			-----
(i)	2011-12	Nil	
(ii)	2012 – 13	Nil	
(iii)	2013 - 14	Nil	
(iv)	2014-15	Nil	
(v)	2015-16	Nil	
(m) Number of faculty appraised by students during the following academic year			Appraisal report
(i)	2011-12	****	
(ii)	2012 – 13	*****	
(iii)	2013 - 14	45	
(iv)	2014-15	45	
(v)	2015-16	56	

DATA AUDIT FORM (5)

5.	<i>Information in respect to Accreditation of Programs</i>			
	(a) Number of UG programs accredited for the following year			
	(i)	2011-12	Nil	-----
	(ii)	2012 – 13	Nil	
	(iii)	2013 - 14	Nil	
	(iv)	2014-15	Nil	
	(v)	2015-16	Nil	
	(b) Number of UG programs for which accreditation applied for the following year			
	(i)	2011-12	Nil	-----
	(ii)	2012 – 13	Nil	-----
	(iii)	2013 - 14	2	Receipt for registration fee
	(iv)	2014-15	Nil	
	(v)	2015-16	2	Receipt for registration fee
	(c) Number of PG programs for the following year accredited			
	(i)	2011-12	Nil	
	(ii)	2012 – 13	Nil	
	(iii)	2013 - 14	Nil	
	(iv)	2014-15	Nil	
	(v)	2015-16	Nil	

	(d) Number of PG programs for which accreditation the following year applied for		-----
	(i) 2011-12	Nil	
	(ii) 2012 – 13	Nil	
	(iii) 2013 - 14	Nil	
	(iv) 2014-15	Nil	
	(v) 2015-16	Nil	
DATA AUDIT FORM (6)			
6.	<i>Information in respect to research and patents</i>		
	(a) Number of research publications in Indian referred journals during the following academic year		
	(i) 2011-12	Nil	-----
	(ii) 2012 – 13	Nil	
	(iii) 2013 - 14	Nil	
	(iv) 2014-15	Nil	
	(v) 2015-16	Nil	
	(b) Number of research publications in International refereed journals during the following academic year		
	(i) 2011-12	1	Copy of published papers

	(ii) 2012 – 13	5	
	(iii) 2013 - 14	5	
	(iv) 2014-15	9	
	(v) 2015-16	13	
	(c) Number of research publications co-authored with faculty/ researchers/		
	(i) 2011-12	0	Copy of published papers
	(ii) 2012– 13	3	
	(iii) 2013 - 14	5	
	(iv) 2014-15	8	
	(v) 2015-16	6	
	(d) Number of patents in engineering related areas obtained during the following academic year		
	(i) 2011-12	Nil	-----
	(ii) 201 – 13	Nil	
	(iii) 2013 - 14	Nil	
	(iv) 2014-15	Nil	
	(v) 2015-16	Nil	
	(e) Number of patents in engineering related areas filed during the following academic year		
	(i) 2011-12	Nil	-----
	(ii) 2012 – 13	Nil	

	(iii) 2013 - 14	Nil	
	(iv) 2014-15	Nil	
	(v) 2015-16	Nil	
	(f) Number of sponsored research project completed during the following academic year		
	(i) 2011-12	Nil	-----
	(ii) 2012 – 13	Nil	
	(iii) 2013 - 14	Nil	
	(iv) 2014-15	Nil	
	(v) 2015-16	Nil	
	(g) Number of MOUs signed for collaborative programs with Indian industry and R&D organizations		
	(i) 2011-12	Nil	Copy of MOUs signed
	(ii) 2012 – 13	Nil	
	(iii) 2013 - 14	5	
	(iv) 2014-15	Nil	
	(v) 2015-16	1	
	(h) Number of MOUs signed for collaborative programs with International academic institutions and R&D organizations		

	(i) 2011-12	Nil	-----
	(ii) 2012 – 13	Nil	
	(iii) 2013 - 14	Nil	
	(iv) 2014-15	Nil	
	(v) 2015-16	Nil	

DATA AUDIT FORM (7)

7.	<i>Information in respect to Finances</i>		
	(a) Amount received as block grant during the following academic year (Rs. In Lakhs)		
		NIL	
	(i) 2011-12		
	(ii) 2012 – 13	Nil	
	(iii) 2013 - 14	Nil	
	(iv) 2014-15	Nil	
	(v) 2015-16	Nil	
	(b) IRG ¹ from students' tuition fee and other charges during the following academic year (Rs. In Lakhs)		
	(i) 2011-12	225.08	Receipt and expenditure statement
	(ii) 2012 – 13	313.06	
	(iii) 2013 - 14	342.59	

(iv)	2014-15	398.85	
(v)	2015-16	318.72	
(c) IRG from externally funded R&D projects and consultancies during the following academic year (Rs. In Lakhs)			
(i)	2011-12	Nil	
(ii)	2012 – 13	Nil	
(iii)	2013 - 14	Nil	
(iv)	2014-15	Nil	
(v)	2015-16	Nil	
(d) Total IRG during the following academic year (Rs. in Lakhs)		Nil	
(i)	2011-12	225.08	Receipt and expenditure statement
(ii)	2012 – 13	313.06	
(iii)	2013 - 14	342.59	
(iv)	2014-15	398.85	
(v)	2015-16	318.72	
(e) Total annual recurring expenditure during the following academic year (Rs. In Lakhs)			
(i)	2011-12	250.10	
(ii)	2012 – 13	267.29	
(iii)	2013 - 14	310.19	
(iv)	2014-15	436.6	
(v)	2015-16	431.5	

	(f) (i) Amount available in Corpus Fund on March 31, 2012		Bank Statement
	(ii). Amount available in Corpus Fund on March 31, 2013		
	(iii).Amount available in Corpus Fund on Feb 28, 2014	Nil	
	(iv).Amount available in Corpus Fund on September 16, 2014	11,643.50	
	(v).Amount available in Corpus Fund on July 28, 2016	3,84,695	
	(g) (i) Amount available in Faculty Development Fund on March 31, 2012	Nil	
	(ii).Amount available in Faculty Development Fund on March 31, 2013	Nil	
	(iii).Amount available in Faculty Development Fund on March 31, 2014	34,070	
	(iv) Amount available in Faculty Development Fund on September 16, 2014	12,217.50	
	(v) Amount available in Faculty Development Fund on July, 28, 2016	3,85,321	
	(h)(i) Amount available in Equipment Replacement Fund on March 31, 2012	Nil	
	(ii)Amount available in Equipment Replacement Fund on March 31, 2013	Nil	
	(iii)Amount available in Equipment Replacement Fund on March 31, 2014		
	(iv)Amount available in Equipment Replacement Fund on September 16, 2014	11,643.50	
	(v)Amount available in Equipment Replacement Fund on July 28, 2016	384695	
	(i) (i) Amount available in Maintenance Fund on March 31, 2012	Nil	
	(ii)Amount available in Maintenance Fund on March 31, 2013	Nil	
	(iii)Amount available in Maintenance Fund on March 31, 2014		
	(iv)Amount available in Maintenance Fund on September 16, 2014	11,643.50	
	(v)Amount available in Maintenance Fund on July 28, 2016	384695	

DATA AUDIT FORM (8)

8.	<i>With respect to Institutional Governance/ Management</i>		
8.	(a) Number of BoG meeting held during the following academic year (with minutes on the web)		
	(i) 2011-12	Nil	

	(ii) 2012 – 13	Nil	
	(iii) 2013 - 14	3	
	(iv) 2014-15	2	
	(v) 2015-16	3	
	(b) Number of institutional functionaries (Deans, HoDs, senior faculty and senior officials) that have undergone Management Capacity Enhancement training		
	(i) 2011-12	Nil	
	(ii) 2012 – 13	Nil	
	(iii) 2013 - 14	7	
	(iv) 2014-15	Nil	
	(v) 2015-16	6	

¹ IRG is the total revenue of the institution in a year, whether retained or not

PERFORMANCE AND DATA AUDIT FEEDBACK

(FEEDBACK TO THE INSTITUTION, STATE PROJECT FACILITATION UNITS,
THE NATIONAL PROJECT IMPLEMENTATION UNIT/AND RELEVANT MENTOR)

NAME OF PERFORMANCE AUDITOR: Dr. SOUNAK KUMAR CHOUDHURY

DATES OF PERFORMANCE AUDIT: 6 – 8 August 2016

NAME OF INSTITUTION WITH LOCATION: College of Engineering, Karunagappaly, Kollam, Kerala

KEY POINTS FEED BACK BY THE PERFORMANCE AUDITOR TO THE INSTITUTION AT THE END OF THE VISIT - AGAINST THE SEVEN ASPECTS OF EVALUATION

- Overall, the fund received by the Institute from the TEQIP-II over the last three years has been utilised well for the development of the academic program and the overall functioning of the Institute.
- There is a shortage of Faculty as well as staff in the Institute. Hence, recruitment of the Faculty and Staff for the Institute should be planned at the earliest.
- Library facilities of the Institute should be enhanced with Library Automation in place and proper issuing of books to the students. Library should subscribe more number of e-journals.
- Students Placement should be properly taken care of with a separate cell, a dedicated personal and more contacts with the relevant industries.
- Laboratory space should be expanded and the laboratory equipment and machines should be upgraded.
- Faculty should be encouraged to take up Research, sponsored or consultancy projects. There should be more publications in the peer-reviewed International Journals.
- Overall, the Institute should introduce more B.Tech. and M.Tech. programs.

KEY IMPROVEMENTS NOTICED ON SHORTCOMINGS REPORTED DURING EARLIER PERFORMANCE AUDITS

2nd Performance audit of the College of Engineering, Karunagappaly, Kerala was performed on 16th to 18th September 2014. This is the last performance audit prior to the Final Round of Performance Audit. With respect to the 2nd Performance Audit, the following key improvements have been noticed

- 6 Regular Faculty Members were transferred from IHRD Engineering Colleges
- Transition of students from 1st year to 2nd year has been increased by 16%

- Publications by the Faculty Members in peer-reviewed International Journals have gone up from 10 to 16, which is the increase of 60%
- More Faculty Members (from 12% mentioned in the last performance audit report to 100% presently) have attended and benefitted from the Pedagogy Training courses.
- Increase in the students placement by about 3.83%

BRIEF STATEMENTS ON CONTINUING SHORTCOMINGS, AND REASONS:

Continuing shortcomings of the Institute are:

- Faculty and Staff shortage
- Space crunch
- Lack of sufficient infrastructure

While Faculty and Staff shortage is due to delay in the putting up of advertisement since it needs certain bureaucratic procedure to go through related to permission from the IHRD, space crunch and lack of infrastructure are due to shortage of funds. The Institute is heavily dependent on the fees collected from the students and a top up from the IHRD and the state government. It has been found out that in this situation, the TEQIP funding came very handy for the Institute and major developments have taken place during the last three years since the Institute was inducted to the TEQIP-II program.

RECOMMENDATIONS FOR MENTORS

It is no more applicable. However, in case it is relevant, recommendations to Mentors remain the same as mentioned above in the “Key points feedback by the performance auditor to the Institution...” paragraph.

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME-II (TEQIP-II)

**INSTITUTION RESPONSE FORMS (1)
COLLEGE OF ENGINEERING KARUNAGAPPALLY
THODIYOOR P.O., KOLLAM, KERALA-690523**

(To be sent from the Head of the Institution to the performance Auditor, 2 weeks before an audit visit)

PROJECT IMPLEMENTATION		
No.	INSTITUTIONAL MONITORING AND PROJECT OUTPUT/OUTCOMES	RESPONSES
1.1	Briefly describe the actions taken for obtaining Autonomous Institution status, and the status of your applications as made.	1. Applied to the University (CUSAT) for forwarding the application to the UGC for autonomous status 2. University has forwarded the application to UGC and is under process at UGC. 3. Applied for accreditation for two UG programmes in Electronics & Communication and Computer Science and Engineering. 4. SAR is uploaded in October 2015
1.2	If your institution is already an Autonomous Institution, briefly state actions taken for the following:	Institution is financially autonomous and partially academic autonomous.
	1. Value addition to courses as per market demand	B.Tech Curriculum is framed by CUSAT and Kerala Technological University (KTU) and revised in every four years as per market demand. Last revision was in 2012 and 2016 in CUSAT and KTU respectively. For M.Tech, since the syllabus is prepared cluster wise the institution has a major role in the syllabus revision
	2. Improvements introduced in student evaluation	Staff Advisor system and peer group are in place. 2 series tests per semester, additional class test papers. Continuous evaluation in Labs.
	3. Addition of electives	Freedom to choose electives

	4. Carrying out teacher evaluation by students	Teacher evaluation conducted regularly
	5. Starting of new PG programs, as planned	Since the existing courses are not accredited, AICTE do not accept proposal for new programmes. Other formalities including the permission from the Director of IHRD has been obtained to start two new PG programmes as planned.
	6. For enhancing qualification, deputing to other institutions and/or admitting within the institution those teachers that have a Bachelors degree only	In the beginning of the project 4 faculty were there with BTech degree. Now, three of them completed MTech and joined the institution and one more is deputed for PG last year. Within the institute, one seat in each PG Programme is reserved for faculty from IHRD Institutions
	7. Conducting continuing education and/or skill enhancement programs for industry	Nil
	8. Inviting experts from industry and eminent institutions for special lectures	Already 15 programs were conducted and more is planned.
1.3	The amount of financial powers assigned / delegated to the following. If no delegations has been done so far, state the proposed action for each level with the corresponding timeline:	Yes
	1. Governing Body	Above 50 Lakhs
	2. Head of Institution for: (a) single purchase of equipment, and (b) recurrent expenditure	50 Lakhs
	3. Dean	As per existing staff pattern, no post of Dean at College of Engineering Karunagappally
	4. Heads of Department	1 Lakh

1.4	Progress in starting new PG programs, as proposed	Since the existing courses are not accredited, AICTE do not accept proposal for new programmes. Other formalities including the permission from the Director of IHRD has been obtained to start two new PG programmes, MTech in Embedded Systems and VLSI Design and Computer Information Science as planned.
1.5	Actions taken to fill up seats in the existing PG programs	<p>1. The allotment of students to the MTech programmes is done by the Director of Technical Education through a centralised allotment process. If any seat is vacant after the final allotment, spot admission is done by the institution to fill up the vacancy.</p> <p>2. Assistantship for an amount Rs 8000 per month is given to non GATE students</p>
1.6	Actions taken to reduce vacancies in faculty positions	<ol style="list-style-type: none"> 1. Contract Faculty are appointed against the vacancies. 2. Transfer from other IHRD Engg Colleges has been affected. Seven faculty members (One Associate Professor and six Assistant Professors) were transferred to CE Karunagappally during the project period. 3. Applications were invited to appoint Professors.
1.7	Status of faculty appointed on regular basis, and proposed actions to fill up all faculty positions on regular basis	<p>Number of regular faculty: 33</p> <p>Proposed Action plan to fill up faculty positions:</p> <ol style="list-style-type: none"> 3. It has been decided in the Principals' meeting of IHRD to recruit new regular faculty members in the cadre of Assistant Professors after getting permission from Govt. 4. Through general transfer from various IHRD Engineering Colleges. 5. Applications were invited to appoint Professors.

1.8	Progress in getting pedagogical training in both the modules	It was informed that the institute does not have to organize pedagogical training as the SPFU will organize the same. The SPFU in collaboration with IIT Madras organise pedagogical training on a regular basis. Almost 100% of faculty including guest faculty attended such training at IIT Madras.
1.9	New Activities (since project start or the last performance audit) undertaken for enhancing interaction with industry	<ul style="list-style-type: none"> • Signed MoU with 6 companies • Conducted 2 short term programs for staff and 2 for students • Conducted 15 expert lectures • 17 Expert tutoring • 21 Industrial visits • 190 students undergone Internship
1.10	Generation, retention and utilization of the non-tuition fee revenue generated through various activities	<p>Generation: Through FDPs, workshops, seminars, conferences etc. An amount of Rs. 15,39,406 has been generated so far.</p> <p>Retention: The amount is retained within the institute</p> <p>Utilization: The amount shall be utilized after the project period</p>
2.1	Progress in instituting practice of teacher evaluation by students	Two teacher evaluations per semester are being conducted.
2.2	Current percentage of teachers evaluated by students in one subjects taught	100
2.3	Current percentage of teachers evaluated by students in more than one subjects taught	100
2.4	State the incentives being offered to the faculty for participation in consultancy assignments, R&D, and continuing education programs conducted by the institution for industry	Seed money for 8 project proposals have been given to faculty members and they have submitted final proposals for a total amount of Rs170 lakhs to various funding agencies. Since the proposals are under processing and no funding has been sanctioned yet, no incentives being offered.

3.1	Are the 4 funds established?	Yes.
3.2	If yes, what is the amount in each fund?	The amount received is deposited equally in all the four funds Maintenance fund: Rs.3,84,695.50 Corpus fund: Rs.3,84,695.50 Faculty Development Fund: Rs.3,85,321.50 Equipment replacement fund: Rs. 3,84,695.50
3.3	Is the contribution to each fund as per the requirement in the PIP?	Yes.
3.4	State the quantum of financial powers delegated to: (a) Governing Body; (b) Head of Institution; (c) Deans, and (d) Heads of Departments	A) Governing Body: Above 50 Lakhs B) Head of the Institution: Up to 50 Lakhs C) Dean: As per existing staff pattern, no post of Dean at CE Karunagappally. D) HoD: 1 Lakh
3.5	If less than those recommended in the PIP, state the reasons for the shortfall, and actions planned to comply with the project recommendations.	NA
4.1	Number of ongoing sponsored projects from industry	Seed money for 8 project proposals have been given to faculty members and they have submitted final proposals for a total amount of Rs181.12 lakhs to various funding agencies.
4.2	Number of industry awarded consultancy assignments completed	NIL
4.3	Number of ongoing industry awarded consultancy assignments	NIL
4.4	Number of organizations and industries with whom MOUs have been signed for joint R&D	6 MoUs.
5.1	List the UG programs accredited on date by name	Two eligible UG programmes applied for accreditation.

5.2	<ul style="list-style-type: none"> State program-wise action taken to get accredited the eligible UG program that are yet to be accredited. 	<u>For CSE and ECE Programs:</u> <ul style="list-style-type: none"> Fee for Accreditation has been paid. SAR is submitted in Oct 2015 Faculty positions will be filled soon by promotion and transfer Applications are invited to appoint Professors. For increasing the built up area, construction is progressing under NABARD scheme, construction of second floor of main building with institution fund is finished and the building with PTA fund is also competed.
	<ul style="list-style-type: none"> Describe difficulties faced, if any. 	<ul style="list-style-type: none"> Shortage of Professor/Associate Professor/Assistant Professor. The vacancies will be filled shortly.
5.3	List the PG programs accredited on date by name	The two PG programmes are eligible PG for accreditation.
5.4	<ul style="list-style-type: none"> State program-wise action taken to get accredited the eligible PG program that are yet to be accredited. 	<u>For Image Processing and Signal Processing Programs</u> <ul style="list-style-type: none"> Fee for Accreditation will be paid in the month of Aug 2016 SAR will be submitted in Sept 2016 Senior Faculty positions will be filled soon by promotion and transfer
	<ul style="list-style-type: none"> Describe difficulties faced, if any. 	Few new posts are not created in staff pattern
6.1	Give the number of papers published in national refereed journals from the date of joining the Project.	Nil
6.2	Give the number of papers published in Foreign refereed journals from the date of joining the Project.	32
6.3	<ul style="list-style-type: none"> Number of patents filed since joining the Project List the titles of patents filed since joining the Project along with names of contributors. 	Nil
6.4	<ul style="list-style-type: none"> Number of patents obtained since joining the Project List the titles of the patents obtained since joining the Project along with the names of contributors 	Nil

7.1	Actions being taken for identifying weak students	<ul style="list-style-type: none"> • Diagnostic test is conducted for identifying weak students in the first year. Bridge classes are conducted for those students whose performance in diagnostic test is poor. • For supplementary examination, the students those who were failed in their University examination have been identified • Students who scored less than 50% marks in their first series test have been identified and remedial classes are conducted for those students in the related subjects.
7.2	Number of students that have benefited from remedial teaching since joining the Project	516 General Category Students , 45 SC Students
7.3	Number of students that have benefited from specialized soft skills and professional skills training programs conducted since joining the Project	872 (19 programmes)
7.4	Status of establishment and functioning of Finishing School	Finishing school has been established and conducted 9 soft skill development training programs.

INSTITUTIONAL ACADEMIC GRID (2)
(Engineering disciplines)
COLLEGE OF ENGINEERING KARUNAGAPPALLY
Table-1 (a) : CONSOLIDATED STATEMENT

S.No.		PRE-TEQIP (2012-13)			POST-TEQIP (2015-16)		
		1	NO. OF DEPARTMENTS	4			4
2	LEVELS OF PROGRAMMES (NOS.) (Number of Programmes)	B.TECH	M.TECH	PhD	B.TECH	M.TECH	PhD
		4	2	Nil	3	2	Nil
3	COLLABORATION WITH INDUSTRY (MoUs SIGNED)	Nil			6		

Table-1 (b): DETAILS OF STUDENT ENROLMENT

S.No.	NAME OF THE DEPARTMENT		PRE-TEQIP (2012-13)			POST-TEQIP (2015-16)			INCREASE IN PERCENTAGE
			B.TECH	M.TECH	PhD	B.TECH	M.TECH	PhD	
		NO. OF FRESH STUDENTS ADMITTED IN 1st SEMSTER	178	48	NA	113	31	NA	
1	Electronics and Communication Engineering		54	24	NA	35	19	NA	
2	Computer Sceince and Engineering		54	24	NA	39	12	NA	

3	Electrical and Electronics Engineering		53	NA	NA	39	NA	NA	
4	Information Technology		17	NA	NA	Nil	NA	NA	

Table-1 (c) : FACULTY DETAILS

S.No.	NAME OF THE DEPARTMENT		PRE-TEQIP (2012-13)			POST-TEQIP 2015-16			INCREASE IN PERCENTAGE
			B.TECH	M.TECH	PhD	B.TECH	M.TECH	PhD	
1.	Electronics and Communication Engineering	NO. OF FACULTY HAVING HIGHEST QUALIFICATION							
		Regular	2	7	0	0	8	2	
		Contract	3	4	0	0	5	0	
		Total	5	11	0	0	13	2	
2.	Computer Science and Engineering	Regular	3	5	0	1	8	0	
		Contract	6	1	0	0	6	0	
		Total	9	6	0	1	14	0	
3.	Information Technology	Regular	0	0	0	0	0	0	
		Contract	2	2	0	0	3	0	
		Total	2	2	0	0	3	0	
4.	Electrical and Electronics Engineering	Regular	0	2	0	0	3	0	
		Contract	2	0	0	0	7	0	
		Total	2	2	0	0	10	0	
5.	General Engg and	Regular	1(Mech	2(Mech	1(Mech)	0	M.Tech-4	1(Maths)	

	Applied Science))	1(Maths)		PG-4	1(Mech)	
		Contract	2(Mech) 1(Civil)	4(PG) 1(PG)	1(TCS)	0	PG-1 1(TCS) 1(Civil)	0	
		Total	4	7	3	0	11	2	

Table-1 (d) : COLLABORATION WITH INDUSTRY

S.No.	NAME OF THE DEPARTMENT	NAME OF THE INDUSTRY WITH WHOM MOU SIGNED	
		PRE-TEQIP (2012-13)	POST-TEQIP (2015-16)
1.	Electronics and Communication Engg	Nil	1. Early Bird Security Solutions 2. Zynware Software Solutions 3. Texas instruments (to be signed) 4. NEST (to be signed)
2.	Electrical & Electronics Engg		5. United Electrical Industries Limited (to be signed)
3.	Computer Science/IT		6. Seaview Support System Pvt. Ltd 7. Soften Digital Pvt Ltd 8. Regional Cancer Centre (Institution) 9. ICT Academy Kerala (Institution)

Table-2 : SUMMARY SHEET FOR ACADEMIC GRID

Name of NPIU Official : Dr. Ajilkumar

Name of Institute: College of Engineering Karunagappally, Kollam, Kerala.

Sub-component:1.1

Category of Institute: Government

	Strategy/Activities	Indicators	Institutional Baseline (Pre-TEQIP) in 2012-13	Proposed Target for 2 years 31 st Dec 2014		Proposed Budget Estimate		Status due to input of TEQIP as on date of final round of performance auditing		Outcome against Goals (TEQIP)	Remarks	
				Physical (No.*/%age)	Institutional	TEQIP	Institutional	TEQIP	Physical (No.*/%age)			Financial (Rs. Lakh)
					(No.*/%age)	(No.*/%age)						
A.0	Goal : Improve Quality of Education in Selected Institutions											
A.1	Student											
A.1.1	Improvement in Students Knowledge and Skills - Diagnostic test - Remedial teaching - E-enabled learning - Research projects at UG levels - Assistantship	Share (percentage) of female students against total engineering students in all years									More than 50% are girls students in UG and very high in PG courses	
		<ul style="list-style-type: none"> • Undergraduates • Postgraduates 	54.8 % 87.9 %	60 % 60 %	60 % 60 %			54.16% 89.74 %				
A.1.2		Students transition rate (percentage) from first year to second year of UG programs (clearing all subjects/ courses of 1 st year in first attempt)	28.2 %	50%	50 %	2	10	54.5%	3.05	Target achieved		
A.1.3		Average scores (%/CGPA) at passing-out										
		<ul style="list-style-type: none"> • Undergraduates • Postgraduates 	69.57% 9.11 CGPA	70% 9.00	70% 9.00			Not Calculated				

	Strategy/Activities	Indicators	Institutional Baseline (Pre-TEQIP) in 2012-13	Proposed Target for 2 years 31 st Dec 2014		Proposed Budget Estimate		Status due to input of TEQIP as on date of final round of performance auditing		Outcome against Goals (TEQIP)	Remarks	
				Physical (No.*/%age)	Institutional	TEQIP	Institutional	TEQIP	Physical (No.*/%age)			Financial (Rs. Lakh)
					(No.*/%age)	(No.*/%age)						
A.1.4		No. of students enrolled in MTech programs	48	96	96	10	40	78	60.48	Planned for starting 2 New PG programmes		
A.1.5		No. of students registered in PhD programs in engineering	Institution is not a Research centre	NA	NA	NA	NA	NA	NA			
A.1.6		No. of Masters students enrolled with TEQIP teaching assistantship	Nil	60	60		3.6/month	63	60.48 per year	Improved		
A.1.7		No. of PhD students enrolled with TEQIP research assistantship	Institution is not a Research centre	NA	NA	NA	NA	NA	NA			
A.1.8		No. of Research projects taken by UG students	Nil		5		2	1	0.05			
A.1.9		Any other										
A.2	Faculty											
A.2.1	Capacity Development of Faculty - Recruitment of faculty - Subject domain training - Qualification upgradation - Pedagogical Training	Percentage of faculty positions filled-in (as per AICTE/MHRD required Teacher-Student ratio): • Regular • Regular + Contract	51.9% 96.3%	70 % 100 %	70 % 100 %	10 /month		55.17 % 94.91%		Improved	Transfer of faculty from other engg colleges	

	Strategy/Activities	Indicators	Institutional Baseline (Pre-TEQIP) in 2012-13	Proposed Target for 2 years 31 st Dec 2014		Proposed Budget Estimate		Status due to input of TEQIP as on date of final round of performance auditing		Outcome against Goals (TEQIP)	Remarks	
				Physical (No.*/%age)	Institutional	TEQIP	Institutional	TEQIP	Physical (No.*/%age)			Financial (Rs. Lakh)
					(No.*/%age)	(No.*/%age)						
											effected.	
A.2.2	<ul style="list-style-type: none"> - E-enabled training - Management development training - Continuing Education Programme 	Percentage of Faculty with BTech enrolled for MTech against total BTech faculty	33.33%	50 %	50 %	10	2	100 %	1.1	Improved		
A.2.3		Percentage of Faculty with MTech enrolled for PhD in engineering against total MTech faculty	18.75%	20 %	20 %	12	1	42.85 %	3.4	Improved		
A.2.4		Percentage of regular faculty with Masters degree in engineering against total engineering faculty	73.91 %	80 %	80 %	10	2	96.21 %	--	Improved		
A.2.5		Percentage of regular faculty with PhD degree in engineering against total engineering faculty	4.35 %	20 %	20 %	25	2	11.11 %	--	Improved		
A.2.6		Number of faculty members attended training in subject domain	7	54	54	10	10	100%	34.71	All faculty attended programmes including in house programmes	The expenditure shown is for out station programmes only	
A.2.7		Number of faculty members attended management	Nil	15	15	5	5	7	2.34			

	Strategy/Activities	Indicators	Institutional Baseline (Pre-TEQIP) in 2012-13	Proposed Target for 2 years 31 st Dec 2014		Proposed Budget Estimate		Status due to input of TEQIP as on date of final round of performance auditing		Outcome against Goals (TEQIP)	Remarks	
				Physical (No.*/%age)	Institutional	TEQIP	Institutional	TEQIP	Physical (No.*/%age)			Financial (Rs. Lakh)
					(No.*/%age)	(No.*/%age)						
		development training										
A.2.8		Number of faculty members attended pedagogical training	Nil	15	15	5	5	48 Nos.	4.62		Almost all the faculty including guest faculty attended pedagogical training	
A.2.9		Any other										
A.3	Institutional Reforms											
A.3.1	of reforms - Academic reforms - Non-academic reforms - Enhance interaction with industry	Percentage of NBA accredited UG & PG programs including Applied-For cases, against total eligible programs	0	66.67 %	66.67 %	2	10	Accreditation fee paid for CS and EC	8.99		SAR prepared and uploaded in Oct 2015	
A.3.2		Autonomous institution status concurred by UGC	Non Autonomous	NA	NA	1	2	Applied to the University for forwarding application for autonomous status to the UGC. University has forwarded the application to UGC and is under process at UGC.				
A.3.3		No. of academic programs i.e. MTech/PhD etc. with industry	NIL	NA	NA	NA	NA	NIL				
A.3.4		No. of short term programs with	NIL	5	30	1	8	Conducted 2 short term	6.14	Conducted 56	The settlement	

	Strategy/Activities	Indicators	Institutional Baseline (Pre-TEQIP) in 2012-13	Proposed Target for 2 years 31 st Dec 2014		Proposed Budget Estimate		Status due to input of TEQIP as on date of final round of performance auditing		Outcome against Goals (TEQIP)	Remarks	
				Physical (No.*/%age)	Institutional	TEQIP	Institutional	TEQIP	Physical (No.*/%age)			Financial (Rs. Lakh)
					(No.*/%age)	(No.*/%age)						
		industry						programme for students, 15 expert lectures, 18 Expert tutoring, 21Industrial visits, 190 students undergone Internship,		programmes	of Few internship has not been done	
A.3.5		Academic networking with other institutions (No.)	NIL		2		3	1(QEEE)	1.5		With IIT Madras	
A.3.6		ICT enabled learning (No. of programs/ courses)	NIL		2		6	NPTEL				
A.3.7		Curricula revised/restructured (No.)	Curriculum is framed by CUSAT and KTU and revised in every four year as per market demand. Last revision was in 2012 by CUSAT and 2016 by KTU.									
A.3.8		Total IRG	313 Lakhs					318.72 Lakhs				
A.3.9		Percentage revenue from externally funded R&D projects and consultancies in total revenue	NIL									
A.3.10		IRG as percentage of annual recurring expenditure	117.09%	100%				135.38%*				

	Strategy/Activities	Indicators	Institutional Baseline (Pre-TEQIP) in 2012-13	Proposed Target for 2 years 31 st Dec 2014		Proposed Budget Estimate		Status due to input of TEQIP as on date of final round of performance auditing		Outcome against Goals (TEQIP)	Remarks	
				Physical (No.*/%age)	Institutional	TEQIP	Institutional	TEQIP	Physical (No.*/%age)			Financial (Rs. Lakh)
					(No.*/%age)	(No.*/%age)						
A.3.1 1		Any other										
B.0	Enhance Access to Knowledge Resources											
B.1	Improvement in Teaching, Training and Learning facilities - New PG programmes - Updation of learning resources - Equipment details - Modernization of Labs and class rooms	Laboratories: • New laboratory (Nos.) for new PG programs	NIL	4	10	60	NIL	3.49				
		Laboratories: • New laboratory (Nos.) for existing PG programs	NIL	5	20	72	5	64.26	Improved			
		Laboratories: • Existing laboratory (Nos.) modernized	2	10	10	50	185	7	210.7	Improved	Procurement progressing	
B.2	Library • Books (print) (Nos.)		7898	1000	4500	5	25	14998	37.71	Improved		
		Library • e-books (Nos.)	NIL	200		5	NIL					
		Library • Journals (print) (Nos.)	18	10	25	0	0.75	10				
		Library • e-journals (Nos.)	3	6	6	11	11	3	13.4			
		Library • Course specific software (Nos.)	NIL									

	Strategy/Activities	Indicators	Institutional Baseline (Pre-TEQIP) in 2012-13	Proposed Target for 2 years 31 st Dec 2014		Proposed Budget Estimate		Status due to input of TEQIP as on date of final round of performance auditing		Outcome against Goals (TEQIP)	Remarks	
				Physical (No.*/%age)	Institutional	TEQIP	Institutional	TEQIP	Physical (No.*/%age)			Financial (Rs. Lakh)
					(No.*/%age)	(No.*/%age)						
B.3		Membership of online journals/consortia (No.)										
B.4		No. of digitally/virtually accessible courses/subjects										
B.5		Any other	12 MAGAZINE					12 MAGAZINE				
C.0	Enhancement of Research & Development Activities											
C.1	Promoting R&D culture in the Institution - Modern R&D equipment - Conferences / Workshops organized	No. of Research publications in refereed journals: • Indian journals • Foreign journals	0 11	10 8	10 8	0	1.5	0 32		Improved		
C.2	- Conferences / Workshops attended	No. of Books Publication	Nil					(2 about to publish)				
C.3		No. of Patents obtained/ filed	Nil					Nil				
C.4		Any other										
D.0	Improve Employability of Graduates											
D.1	Improving competencies of graduates - Industrial	Campus placement percentage: • Undergraduates • Postgraduates	5.04 %	40	40	2	6	20 %	2			

	Strategy/Activities	Indicators	Institutional Baseline (Pre-TEQIP) in 2012-13	Proposed Target for 2 years 31 st Dec 2014		Proposed Budget Estimate		Status due to input of TEQIP as on date of final round of performance auditing		Outcome against Goals (TEQIP)	Remarks	
				Physical (No.*/%age)	Institutional	TEQIP	Institutional	TEQIP	Physical (No.*/%age)			Financial (Rs. Lakh)
					(No.*/%age)	(No.*/%age)						
	collaboration		NA	50	50	1	2	15.63%				
D.2	- Finishing School - Industrial training	Average annual salary (Rs. Lakh) of: • Undergraduates • Postgraduates	2.5 /year NA		3.5/year			3.2/year 3,5/year				
D.3		Share of UG students attended industrial internship (percentage)	Nil	5	100	-	5	190 Students			Amount not settled	
D.4		Any other										

Table-3 : Institutional Project Budget*

TEQIP funds received (Instalment) : 1st / 2nd / 3rd / 4th
 1stInstalment : Amount Rs.100 Lakhs Date : 18/04/2013
 2ndInstalment : Amount Rs.150 Lakhs Date : 12/10/2013
 3rdInstalment : AmountRs.50Lakhs Date: 07/01/2014
 4thInstalment: Amount Rs.150 Lakhs Date: 06/08/2014
 5thInstalment: Amount Rs.50 Lakhs Date: 23/10/2014
 6thInstalment: Amount Rs.40 Lakhs Date: 06/03/2015
 7thInstalment: Amount Rs.110 Lakhs Date: 27/05/2015
 8thInstalment: Amount Rs.50 Lakhs Date: 09/10/2015
 9thInstalment: Amount Rs.200 Lakhs Date: 09/10/2015

Total funds received : Rs.900 Lakhs

S. No	Activities	Project Life Allocation (Lakhs)	Expenditure in Financial year	
			2012-13 (Pre TEQIP)	2016-17 (As on 31 st July.16)) Lakhs
1	Improvements for teaching, training and learning facilities through:	550	The first Instalment was released on 18/04/2013 (Financial Year 2013-14)	524.77
	(i) Starting new PG programmes	3.49		3.49
	(i) Modernization and strengthening of laboratories ⁺	264.8		259.70
	(ii) Establishment of new laboratories for existing UG and PG programmes and for new PG programmes	89.9		84.72
	(iii) Modernization of classrooms ⁺	10.4		4.90
	(iv) Updation of Learning Resources			
	(v) Procurement of furniture	28.8		24.86
	(vi) Establishment/Upgradation of Central and Departmental Computer Centers ⁺	40.11		36.22
	(vii) Modernization/improvements of supporting departments ⁺	15.3		12.89
	(viii) Modernization and strengthening of libraries and increasing access to knowledge resources	47.2		51.03
	(ix) Minor Civil Works	50	46.96	
2	Providing Teaching and Research Assistantships to increase enrolment in existing and new PG programmes in Engineering disciplines	70		109.99
3	Enhancement of R&D and institutional consultancy activities	30		13.17
4	Faculty and Staff Development (including faculty qualification upgradation, pedagogical training, and organising/participation of faculty in workshops, seminars and conferences) for improved competence	120		97.07
5	Enhanced Interaction with Industry	45		6.54
6	Institutional Management Capacity enhancement	30		6.10

7	Implementation of institutional academic reforms	20		8.99
8	Academic support for weak students	45		12.03
9	Incremental Operating Cost	90		43.15
TOTAL		100		821.80

Not applicable (NA) can be mentioned as appropriate.

Note :- CE Karunagappally has been selected in TEQIP II in the financial year of 2012-13. But the first Instalment was released on 18/04/2013 (Financial Year 2013-14)

ANNEXURE X

NATIONAL BOARD OF ACCREDITATION

Pro-forma for Pre-Qualifiers TIER-II Institutions

PARTA- Profile of the Institute

A1. Name of the College:- College of Engineering, Karunagappally

Year of Establishment:- 2000

Location of the College:-Thodiyoor P O, Karunagappally

A2. Address:- Thodiyoor P O, Karunagappally

City:- Karunagappally

Pin Code:- 690523

STD Code:- 0476

Fax STD Code:-0476

State:- Kerala

Website:- www.ceknp.ac.in

E-mail:- princharicek@gmail.com

Phone No:- 2666160

Fax :- 2665935

A3. Head of the Institution:-

Name:- Dr Hari V S

Designation:- Principal

Status of Appointment:- Principal-in-charge

A4. Contact details of Head of the Institution:-

STD Code:-0476

Mobile:- 8547005036

Fax STD Code:- 0476

Telephone No:- 2666160

Email:princhari@gmail.com

Fax No:- 2666160

A5. Name of the Affiliating University:-

Address :- CUSAT, Kochi, Kerala

City:- Kochi

Pin Code:-

E-mail:-controlex@cusat.ac.in

STD Code:- 0484

Fax STD Code:- 0484

State:- Kerala

Website:- www.cusat.ac.in

Phone No:- 2577109

Fax:-2576623

University
Government Aided
Affiliated

Deemed University
Autonomous

A7. Ownership Status:

Central Government
Government Aided
Trust
Section 25 Company

State Government
Self financing
Society
Any Other (Please specify)

Provide Details:

A8. Students Admissions (Institute level considering all UG programs):

Item	2015-16	2014-15	2013-14	Total
Sanctioned intake	180	225	225	630
Number of students admitted	133	139	114	386
% of Students Admitted over last three assessment years (Total Admitted/Sanctioned Intake)				61.2

A9. Campus Information:-

Does the College have its own building: Yes
Sports Complex:- No
Canteen and Hostel (If any): Yes
Medical Room:- No
Computer Laboratories:- Yes
Counselling and guidance:- Yes
Placement:- Yes

**UG:-Electronics & Communication Engineering, Electrical & Electronics Engineering,
Computer Science and Engineering**

PG:-Signal Processing, Image Processing

Note: - Please mention department wise.

A11. Programs to be considered for Accreditation vide this application.

S. No.	Program Name
1	B Tech in Computer Science and Engineering
2	B Tech in Electronics and Communication Engineering

PART B- Program information as per point A11

(To be filled separately for all the programs applied for)

B1. Provide separate Information for each program applied for including shifts, if any:-

Name of the Department	Name of the programs running	Name of the program to be considered	Year of Start	Intake	Increase in intake, if any	Year of increase	AICTE Approval	Accreditation Status *
Department of Computer Science and Engineering	B.Tech. Computer Science and Engineering M.Tech. Computer Science (Image processing)	B.Tech Computer Science & Engineering	2000	45	60	2009	Approved	Applying first time

Note: Please mention **all increase intake** starting from the first increase for all programs

* **Write applicable one:**

- Applying first time
- Granted provisional accreditation for two years for the period(specify period)
- Granted accreditation for 5 years for the period (specify period)
- Not accredited (specify visit dates, year)
- Withdrawn (specify visit dates, year)
- Not eligible for accreditation
- Eligible but not applied

B2. Student Admissions (Program specific):-

Item	2015-16	2014-15	2013-14	Total
Sanctioned intake	60	60	60	180
Number of students admitted	37	43	39	119
% of Students Admitted over last three assessment years (Total Admitted/Sanctioned Intake)				66.1%

B3. Information of Faculty

B3.1. Faculty Details

S. No.	Designation/Numbers	Number of Faculty in the Department for both UG and PG	Number of Faculty for the program applied*
1.	Professor	NIL	NIL
2.	Associate Professor	2	2
3.	Assistant Professor	12	12
4.	Number of Ph. D (as per the AICTE norms)	NIL	NIL

- **At least one Professor or Associate professor should be available exclusively for the department of the program under consideration**

B3.2. Detail of Head of the Department for the program under consideration:

Name:- Binu V.P

Qualification:-

Ph. D

Others ✓ (Pursuing Ph.D.)

B.4.Student Faculty Ratio (No of Faculty as per the sanctioned intake):-

Year	Sanctioned Intake + 20% Lateral Entry, if any			N= x+y+z	Faculty (Considering the fractional load)	SFR=N/F
	II Year (x)	III Year (y)	IV Year (z)			
2015-16	72	72	72	216	10	21.6
2014-15	72	72	72	216	10	21.6
2013-14	72	72	72	216	10	21.6
Average SFR for three assessment years						21.6

F = No. of faculty = (a + b – c) for every assessment year

a: Total number of full-time regular Faculty serving fully to 2nd, 3rd and 4th year of the this program

b: Total number of full-time equivalent regular Faculty(considering fractional load) serving this program from other Program(s)

c: Total number of full time equivalent regular Faculty(considering fractional load) of this program serving other program(s)

Regular Faculty means:

- Full time on roll with prescribed pay scale. An employee on contract for a period of not less than two years AND drawing consolidated salary not less than applicable gross salary shall only be counted as a regular employee.
- Prescribed pay scales means pay scales notified by the AICTE/Central Government and implementation as prescribed by the State Government. In case State Government prescribes lesser consolidated salary for a particular cadre then same will be considered as reference while counting faculty as a regular faculty.

Compliance status to Pre-Visit Qualifiers

S.N	Pre Visit Qualifiers	Current Status	Compliance Status Complied/Not Complied
	Essential qualifiers		
1	Vision, Mission & PEOs i. Are the Vision & Mission of the Department stated in the Prospectus / Website? ii. Are the PEOs of the Program listed in the Prospectus / Website?	Yes Yes	
2	Whether approval of AICTE for the programs under consideration has been obtained for all the years including current year	Approved	
3	Whether the Institute has received Zero deficiency report from the regulatory authority, i.e., AICTE, UGC etc. for the current academic session.	yes	
4	Whether admissions in the undergraduate programs at the Institute level has been more than 50% *(average of the last three assessment years)	Yes	
5	Whether admissions in the undergraduate programs under consideration has been more than 50% ** (average of the last three assessment years)	Program 1 CSE %66.1	
6	Whether student faculty ratio in the programs under consideration is better than or equal to 1:20 (average of the last three assessment years)	Program 1 CSE: Yes	
7	Whether at least one Professor or one Associate Professor available in the respective Department	Yes	
8	Whether number of		

	available Ph.Ds in the department exceeds 10% of the required number of faculty	No	
9	Whether the placement ratio(Placement + higher studies) is greater than 40% (average of the last three assessment years)	Yes	
10	Whether two batches have passed out in the programs under consideration	Yes	
Desirable parameters			
1	Whether department has program assessment and quality improvement committee. If so, its constitution and mandate.	Yes	
2	Whether the departments under consideration receives separately earmarked funds for i. Maintenance of Laboratory/computational facilities(recurring funds) ii. Up-gradation of laboratory/computational facilities(non-recurring funds)	Yes Yes	
3	Whether HODs possess Ph.D degrees for the programs under consideration	No	
4	Whether number of available Ph.Ds in the department exceeds 15% of the required number of faculty	No	
5	Whether admissions in the undergraduate programs under consideration has been more than 60% (average of the last three assessment years)	Yes	

*Total number of students admitted in first year minus number of students migrated to other institutions, plus the number of students migrated to this institution divided by the sanctioned intake.

**Total number of students admitted in first year in the respective program minus number of students migrated to other programs/ institutions plus the number of students migrated to this program divided by the sanctioned intake in the respective program.

Decision: If compliance status in all the cases is yes, then the institute shall be treated as eligible for furnishing the e-SAR of the programs which may be considered for accreditation as per procedure.

As far as desirable parameters are concerned, the Institutions are expected to meet these parameters also. Although institutions which are non-compliant on these parameters may be invited to prepare their SAR, it is expected that they would have taken necessary steps in this direction.

NATIONAL BOARD OF ACCREDITATION

ANNEXURE XI

Pro-forma for Pre-Qualifiers TIER-II Institutions

PARTA- Profile of the Institute

A1. Name of the College:- College of Engineering, Karunagappally

Year of Establishment:- 2000

Location of the College:-Thodiyoor P O, Karunagappally

A2. Address:- Thodiyoor P O, Karunagappally

City:- Karunagappally

Pin Code:- 690523

STD Code:- 0476

Fax STD Code:-0476

State:- Kerala

Website:- www.ceknp.ac.in

E-mail:- princharicek@gmail.com

Phone No:- 2666160

Fax :- 2665935

A3. Head of the Institution:-

Name:- Dr Hari V S

Designation:- Principal

Status of Appointment:- Principal-in-charge

A4. Contact details of Head of the Institution:-

STD Code:-0476

Mobile:- 8547005036

Fax STD Code:- 0476

Telephone No:- 2666160

Email:princharicek@gmail.com

Fax No:- 2665935

A5. Name of the Affiliating University:-

Address :- CUSAT, Kochi, Kerala

City:- Kochi

Pin Code:-

E-mail:-controlex@cusat.ac.in

STD Code:- 0484

Fax STD Code:- 0484

State:- Kerala

Website:- www.cusat.ac.in

Phone No:- 2577109

Fax:-2576623

A6. Type of the Institution:

University

Government Aided

Affiliated

Deemed University

Autonomous ✓

A7. Ownership Status:

Central Government

Government Aided

Trust

Section 25 Company

State Government ✓

Self financing

Society

Any Other (Please specify)

Provide Details:**A8. Students Admissions (Institute level considering all UG programs):**

Item	2015-16	2014-15	2013-14	Total
Sanctioned intake	180	225	225	630
Number of students admitted	114	139	133	386
% of Students Admitted over last three assessment years (Total Admitted/Sanctioned Intake)				61.2

A9. Campus Information:-**Does the College have its own building:** Yes**Sports Complex:-** No**Canteen and Hostel (If any):** Yes**Medical Room:-** No**Computer Laboratories:-** Yes**Counselling and guidance:-** Yes**Placement:-** Yes

A10. Names of programs offered by the College:-

**UG:-Electronics & Communication Engineering, Electrical & Electronics Engineering,
Computer Science Engineering**

PG:-Signal Processing, Image Processing

Note: - Please mention department wise.

A11. Programs to be considered for Accreditation vide this application.

S. No.	Program Name
1	BTech in Computer Science Engineering
2	BTech in Electronics & Communication Engineering

PART B- Program information as per point A11

(To be filled separately for all the programs applied for)

B1. Provide separate Information for each program applied for including shifts, if any:-

Name of the Department	Name of the programs running	Name of the program to be considered	Year of Start	Intake	Increase in intake, if any	Year of increase	AICTE Approval	Accreditation Status*
EC	BTech in EC	BTech in EC	2000	45	60	2009	Yes	Not Accredited
EC	MTech in SP	MTech in SP	2012	24	NA	NA	Yes	Not Accredited

Note: Please mention **all increase intake** starting from the first increase for all programs

*** Write applicable one:**

- Applying first time ✓
- Granted provisional accreditation for two years for the period (specify period)
- Granted accreditation for 5 years for the period (specify period)
- Not accredited (specify visit dates, year)
- Withdrawn (specify visit dates, year)
- Not eligible for accreditation
- Eligible but not applied

B2. Student Admissions (Program specific):-

Item	2015-16	2014-15	2013-14	Total
Sanctioned intake	60	60	60	180
Number of students admitted	36	44	37	117
% of Students Admitted over last three assessment years (Total Admitted/Sanctioned Intake)				65

B3. Information of Faculty

B3.1. Faculty Details

S. No.	Designation/Numbers	Number of Faculty in the Department for both UG and PG	Number of Faculty for the program applied*
1.	Professor	Nil	Nil
2.	Associate Professor	1	1
3.	Assistant Professor	11	9
4.	Number of Ph. D (as per the AICTE norms)	1	1

- At least one Professor or Associate professor should be available exclusively for the department of the program under consideration

B3.2. Detail of Head of the Department for the program under consideration:

Name:- C V Anil Kumar

Qualification:- MTech

Ph. D:- Nil

Others:- Nil

B.4. Student Faculty Ratio (No of Faculty as per the sanctioned intake):-

Year	Sanctioned Intake + 20% Lateral Entry, if any			N= x+y+z	Faculty (Considering the fractional load)	SFR=N/F
	II year (x)	III Year (y)	IV Year (z)			
2015-16	47	47	62	156	11	14.18
2014-15	47	62	66	175	10	17.5
2013-14	62	66	67	195	11	17.73
Average SFR for three assessment years						16.47

F = No. of faculty = (a + b - c) for every assessment year

- a:** Total number of full-time regular Faculty serving fully to 2nd, 3rd and 4th year of the this program
- b:** Total number of full-time equivalent regular Faculty(considering fractional load) serving this program from other Program(s)
- c:** Total number of full time equivalent regular Faculty(considering fractional load) of this program serving other program(s)

Regular Faculty means:

- Full time on roll with prescribed pay scale. An employee on contract for a period of not less than two years AND drawing consolidated salary not less than applicable gross salary shall only be counted as a regular employee.
- Prescribed pay scales means pay scales notified by the AICTE/Central Government and implementation as prescribed by the State Government. In case State Government prescribes lesser consolidated salary for a particular cadre then same will be considered as reference while counting faculty as a regular faculty.

Compliance status to Pre-Visit Qualifiers

S.N.	Pre Visit Qualifiers	Current Status	Compliance Status Complied/Not Complied
Essential qualifiers			
1	Vision, Mission & PEOs i. Are the Vision & Mission of the Department stated in the Prospectus / Website? ii. Are the PEOs of the Program listed in the Prospectus / Website?	Yes Yes	
2	Whether approval of AICTE for the programs under consideration has been obtained for all the years including current year	Approved	
3	Whether the Institute has received Zero deficiency report from the regulatory authority, i.e., AICTE, UGC etc. for the current academic session.	Yes	
4	Whether admissions in the undergraduate programs at the Institute level has been more than 50% * (average of the last three assessment years)	Yes	
5	Whether admissions in the undergraduate programs under consideration has been more than 50% ** (average of the last three assessment years)	BTech in ECE: 65%	
		Program 2<name>: % Admission	
		Program n<name>: % Admission	
6	Whether student faculty ratio in the programs under consideration is better than or equal to 1:20 (average of the last three assessment years)	BTech in ECE: 16.47%	
		Program 2<name>: SFR	
		Program n<name>: SFR	
7	Whether at least one Professor or one Associate Professor available in the respective Department	Yes	
8	Whether number of available Ph.Ds in the department exceeds 10% of the required number of faculty	Yes	

9	Whether the placement ratio(Placement + higher studies) is greater than 40% (average of the last three assessment years)	Yes	
10	Whether two batches have passed out in the programs under consideration	Yes	
Desirable parameters			
1	Whether department has program assessment and quality improvement committee. If so, its constitution and mandate.	Yes	
2	Whether the departments under consideration receives separately earmarked funds for i. Maintenance of Laboratory/computational facilities(recurring funds) ii. Up-gradation of laboratory/computational facilities(non-recurring funds)	Yes	
3	Whether HODs possess Ph.D degrees for the programs under consideration	No	
4	Whether number of available Ph.Ds in the department exceeds 15% of the required number of faculty	Yes	
5	Whether admissions in the undergraduate programs under consideration has been more than 60% (average of the last three assessment years)	Yes	

*Total number of students admitted in first year minus number of students migrated to other institutions, plus the number of students migrated to this institution divided by the sanctioned intake.

**Total number of students admitted in first year in the respective program minus number of students migrated to other programs/ institutions plus the number of students migrated to this program divided by the sanctioned intake in the respective program.

Decision: If compliance status in all the cases is yes, then the institute shall be treated as eligible for furnishing the e-SAR of the programs which may be considered for accreditation as per procedure.

As far as desirable parameters are concerned, the Institutions are expected to meet these parameters also. Although institutions which are non-compliant on these parameters may be invited to prepare their SAR, it is expected that they would have taken necessary steps in this direction.

ANNEXURE XII

K VENKATACHALAM AIYER & Co

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME - II

COLLEGE OF ENGINEERING KARUNAGAPALLY, KOLLAM

STATUTORY AUDIT REPORT FOR THE FY 2015-2016

Administration of TEQIP

- Principal : Dr. Hari V S
- TEQIP Co-ordinator : Dr. Ajilkumar A
- Nodal Officers :-
 1. Procurement : Mr. Sylish S V
 2. Finance : Mr. Shajy L
 3. Academic : Mr. Reji Thankachan
 4. Civil Works : Mr. Ganesh V
 5. Equity Assurance : Smt. Prema Kumari P R

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COLLEGE OF ENGINEERING KARUNAGAPALLY, KOLLAM

- MANAGEMENT LETTER
- UTILIZATION CERTIFICATE
- BALANCE SHEET
- INCOME AND EXPENDITURE ACCOUNT
- RECEIPTS AND PAYMENT ACCOUNT
- STATEMENT OF SOURCES AND APPLICATION OF FUNDS
- STATEMENT OF RECONCILIATION OF CLAIMS TO TOTAL APPLICATION OF FUNDS
- BANK RECONCILIATION STATEMENT



K. VENKATCHALAM AIYER & Co.

No. XVI/ 118K, Second Floor,
ADITHYA COMMERCIAL ARCADE
Near Axis Bank, Nagampadam,
KOTTAYAM, Kerala - 686 001

Tei • (0481) 2564794, 3201843, Fax • 2561457
Email • kvalyer@gmail.com • kottayam@kvalyer.com

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME (TEQIP II)
COLLEGE OF ENGINEERING, KARUNAGAPALLY KOLLAM
MANAGEMENT LETTER

To

The Director,
State Project Facilitation Unit Kerala,
Directorate of Technical Education,
Trivandrum

We have audited the Project financial statements of *College of Engineering, Karunagapally Kollam under TEQIP Phase II* for the year ending 31st March, 2016 and have issued our consolidated report dated 05.09.2016. The matters involving the internal accounting control structure and its operations that we consider to be material weakness in accordance with the standards referred to above have been dealt with in our audit report.

The following are the major observations identified during the course of the audit on the accounting records, systems and control:

1. During the course of audit it was observed that the FMR submitted by the institution for the year ended March 2016 doesn't tallied with the actual expenditure incurred till the end of March 2016. The details of which are as follows:

Total expense as per FMR	: RS 174.28 Lakhs
Total expense as per Books	: RS 176.70 Lakhs
Difference	: RS 2.42 Lakhs



2. During the F.Y 2013-14 the institution has given seed money of Rs: 8,00,000/- which is treated as expenditure under the head Research & Development instead of booking the same as Advance. While finalizing the accounts in the current year Rs: 2,68,345/- out of the above mentioned seed money has been received and same is now booked under Other Income.

Income booked under Other Income in Receipt & Payment and Income & Income relates to above receipt and reimbursement of the performance audit expense from SPFU amounting to Rs:1,28,439/-.

3. GENERAL OBSERVATIONS:

Sl No	OBSERVATIONS	REMARKS
I	The Institution is maintaining its accounts in cash basis.	General Procedure as per Financial Management Manual issued by MHRD.
II	The institution is not annexing the actual bus tickets and train tickets. Instead they are claiming the TA as per Kerala State Rules.	Each faculty/experts can claim their TA/DA according to their grades prescribed in relevant rules. But the same should be supported by actual bills. Taxi Bills Should be annexed in case of taxi travels .But the institute in most cases is not annexing any trip sheets for travels, instead of this they are claiming Rs.16 per km as per the Government Order.

4. During the previous financial year (FY 2014-2015) an amount of Rs: 38,516/- was disallowed and shown as ineligible amount in the audit report of that year. Out of the above mentioned amount of disallowance, an amount of Rs: 38,516/- was due to non submission of original invoices/ Supportings. During the current financial year (FY 2015-16) the institution submitted the original invoices/Supportings



K. VENKATCHALAM AIYER & Co.

No. XVI/ 118K, Second Floor,
ADITHYA COMMERCIAL ARCADE
Near Axis Bank, Nagampadam,
KOTTAYAM, Kerala - 686 001

Tel • (0481) 2564794, 3201843, Fax • 2561457
Email • kvaiyer@gmail.com • kottayam@kvaiyer.com

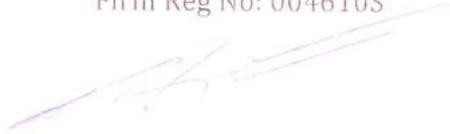
relating to the above amounts (ie, Rs: 38516/-) for our verification. Hence the above amount becomes eligible and the final disallowance for the Financial Year 2014-2015 comes to NIL.

5. Other Observations are furnished in Annexure I.

For K VENKATCHALAM AIYER & CO

Chartered Accountants

Firm Reg No: 004610S


CA M G SURESH KUMAR B.Sc,FCA,DISA(ICA)

Partner | Membership No:212795

Date : 05.09.2016

Place : KOTTAYAM

ANNEXURE-I

Expenditure on improvement in teaching, training and learning facilities

	DETAILS OF EXPENDITURE	REMARKS
I	An amount of Rs.11, 500 was incurred on 12/01/2016 for purchase of currency counter machine for the office	Rs.11, 500. incurred does not results in improvement of teaching, training or learning facilities. Rs.11,500 is not allowed.
II	The Institute has subscribed E-Journal-Science Direct for the period 1/01/2016 to 31/12/2016. However the Purchase order in this regard was issued in the month of February and actual access to the E-journal commenced in the month of March. On verification it was found that payment was made even for the month of January and February during which no access to journal was available.	Research Journal or other educational journal to be made available in appropriate time. New updates and researches should be known at the event of its occurrence.

Expenditure on support for weak students

	DETAILS OF EXPENDITURE	REMARKS
I	A soft skill training programme was conducted for 5 days on 13th Feb and 14th Feb and from 19th to 21st Feb. The total expenditure incurred for the programme was Rs.1,49,250.The honorarium and TA provided to the trainers for five days amounts to Rs.1,37,199.All the trainer who handled classes were from CL educate.	A significant amount of expenses could have been saved, had the institute availed the services of the firm "CL Educate". As per the Teqip rules when the services of the firm is availed, Maximum Rs.10,000 per day is allowed.
II	A soft skill training programme was conducted for final year B.tech students on 5 th and 6 th September,2015 and from 11/09/2015 to 13/09/2015.The total expenditure incurred for the programme was Rs.1,97,272.The honorarium and TA provided to trainers amounts to 1,54,752. All the trainers who handled the classes were from CL Educate.	As per the Teqip rules when the services of the firm is availed, Maximum Rs.10,000 per day is allowed.



K. VENKATACHALAM AIYER & Co.

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TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME (TEQIP II) UTILIZATION CERTIFICATE

COLLEGE OF ENGINEERING, KARUNAGAPALLY

a) Opening Balance as on 1st April 2015	: Rs	-
b) Funds received from		
(i) Grant received from SPFU	: Rs	3 60 00 000.00
c) Interest earned on grant available for TEQIP	: Rs	2 99 888.00
d) Other Income	: Rs	4 42 284.00
	: Rs	<u>3 67 42 172.00</u>
e) Expenditure	: Rs	1 76 69 840.00
	: Rs	<u>1 76 69 840.00</u>
Unspent Balance	: Rs	<u>1 90 72 332.00</u>

Certified that a sum of Rs. 3 60 00 000/- (Rupees Three Crores Sixty Lakhs) only was received by The College of Engineering, Karunagapally, for the financial year 2015-2016 from State Government [In addition to the Nil opening balance of as on 01.04.2015, Interest Income of Rs.2 99 888/- (Rupees Two Lakhs Ninety Nine Thousand Eight Hundred and Eighty Eight) only and Other Income of Rs. 4 42 284/- (Rupees Four Lakhs Forty Two Thousand Two Hundred and Eighty Four) only].

It is also certified that out of the above-mentioned funds of Rs. 3 67 42 172 /-(Rupees Three Crores Sixty Seven Lakhs Forty Two Thousand One Hundred and Seventy Two) only a sum of Rs. 1 76 69 840/- (Rupees One Crore Seventy Six Lakhs Sixty Nine Thousand Eight



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Hundred and forty) only has been utilized by the institution during the year for the purpose for which it was sanctioned.

We further certify that the conditions on which the grant was sanctioned have been fulfilled and where there have been any deviation from the sanctioned amount it is with prior approval of the concerned authority. We have exercised reasonable checks to see that money has been actually utilized for the purpose for which it was sanctioned.

We further state here that in our opinion out of the total expenditure of of Rs. 1 76 69 840/- (Rupees One Crore Seventy Six Lakhs Sixty Nine Thousand Eight Hundred and forty) only, during the financial year 2015-2016, a sum of Rs. 11,500/- (Rupees Eleven Thousand and Five Hundred) is ineligible expenditure.

For K VENKATACHALAM AIYER & CO

Chartered Accountants

Firm Reg No: 004610S

CA M G SURESH KUMAR B.Sc,FCA,DISA(ICA)

Partner | Membership No:212795

Date : 05.09.2016

Place : KOTTAYAM



K. VENKATCHALAM AIYER & Co.

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Reconciliation of unspent balance as per Utilization Certificate and Closing balance of Cash and Bank :

Unspent Balance as per Utilization Certificate	: Rs	1 90 72 332.00
Less : Net Current Asset Excluding Cash & Bank	: Rs	- 8 89 380.00
Less: Expenditure made out of EMD during PY	: Rs	1 60 178.00
Add : Contribution from Project Institution	: Rs	12 71 948.00
TOTAL	: Rs	<u>2 10 73 482.00</u>

Closing Balance of Cash & Bank

a. SBT A/c 67219137689	: Rs	1 94 43 431.00
b. Corpus Fund - SBT 67267652274	: Rs	3 41 761.50
c. Equipment Replacement Fund - SBT 67267652490	: Rs	3 41 761.50
d. Faculty Development Fund - SBT 67247834926	: Rs	3 42 370.50
e. Maintenance Fund - SBT 67267644693	: Rs	3 41 761.50
f. Performance Security Account - SBT 67256271132	: Rs	2 62 396.00
TOTAL	: Rs	<u>2 10 73 482.00</u>

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME (TEQIP) II
PROJECT INSTITUTIONS UNDER STATE PROJECT FACILITATION UNIT, KERALA

BALANCE SHEET AS AT 31.03.2016
COLLEGE OF ENGINEERING, KARUNAGAPALLY

SL No.	PARTICULARS	BALANCE AS AT	
		31.03.2016 (₹)	31.03.2015 (₹)
A	SOURCE OF FUNDS		
	GENERAL FUND		
	Opening balance	- 1 60 178.00	55 57 975.00
	Less : Exces of Expenditure over Income	-	57 18 153.00
	Add : Excess of Income Over Expenditure	1 90 72 332.00	-
		1 89 12 154.00	- 1 60 178.00
	Contribution from Project Institution	12 71 948.00	-
	TOTAL	2 01 84 102.00	- 1 60 178.00
B	APPLICATION OF FUNDS		
	1) Fixed Assets	-	-
	2) Work-In-Progress-Scheme work under Implementation	-	-
	3) A.Current Assets , Loans and Advances		
	a. Cash Balance	-	-
	b. Bank balance	2 10 73 482.00	6 44 802.00
	c. Deposits	-	-
	d. Advance for Capital goods	-	-
	e. Loans and Advances	-	86 600.00
		2 10 73 482.00	7 31 402.00
	B. Less: Current Liabilities		
	a. Earnest Money Deposit	8 89 380.00	8 89 180.00
	b. Performance Security	-	-
	c. Statutory Liabilities	-	2 400.00
	d. Advance by Institutions	-	-
		8 89 380.00	8 91 580.00
	Net Current Assets (A-B)	2 01 84 102.00	- 1 60 178.00
	TOTAL	2 01 84 102.00	- 1 60 178.00

For SPFU, KERALA

For K VENKATACHALAM AIYER & Co.
Chartered Accountants

Dr. S JAYAKUMAR
(Director)

GA M G SURESH KUMAR B.Sc FCA DISA(ICA)
Partner | Membership No: 212795

Date : 05.09.2016
Place : Kottayam

Shalika
FINANCE OFFICER
State Project Facilitation Unit (TEQIP)
Directorate of Technical Education
Thiruvananthapuram

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME (TEQIP) II
PROJECT INSTITUTIONS UNDER STATE PROJECT FACILITATION UNIT, KERALA

INCOME AND EXPENDITURE ACCOUNT FOR THE PERIOD ENDED 31.03.2016
COLLEGE OF ENGINEERING, KARUNAGAPALLY

EXPENDITURE	₹		INCOME	₹	
	31.03.2016	31.03.2015		31.03.2016	31.03.2015
To 1.1.1					
Improvements in teaching ,training and learning facilities :			By Grant From SPFU	3 60 00 000.00	2 90 00 000.00
1.1.1A - Equipment	47 95 656.00	2 49 31 732.00	By Interest Received	2 99 888.00	3 49 493.00
1.1.1B - Furniture	-	-	By Registration fee from external participants	45 500.00	46 570.00
1.1.1C - Books & LRs & Software	11 29 659.00	26 26 159.00			
1.1.1D - Minor Items	-	-	By Other Income	3 96 784.00	7 537.00
1.1.1E - Civil Works	16 05 688.00	14 20 101.00			
To 1.1.2					
Providing Assistantships for increased enrolment in existing and new PG programmes in Engineering disciplines.	57 60 000.00	17 87 000.00	By Excess of Expenditure over Income		57 18 153.00
To 1.1.3					
Enhancement of Research & Development and institutional consultancy activities.	1 35 932.00	36 775.00			
To 1.1.4					
Faculty and staff development for improved competence based on Training Needs Analysis.	22 20 980.00	17 10 735.00			
To 1.1.5					
Enhanced interaction with Industry	1 99 968.00	1 97 656.00			
To 1.1.6					
Institutional Management Capacity enhancement	2 29 449.00	95 571.00			

To 1.1.7	Implementation of Institutional academic reforms	-	7 86 520.00		
To 1.1.8	Academic support for weak students	4 90 644.00	2 83 451.00		
To 1.1.9	Incremental Operating Cost				
	1.1.9A - Salaries	5 94 800.00	5 27 200.00		
	1.1.9B - Consumables	55 141.00	1 72 203.00		
	1.1.9C - Operation & Maintenance	4 51 923.00	5 46 650.00		
To Excess of Income over Expenditure		1 90 72 332.00			
Total		3 67 42 172.00	3 51 21 753.00	Total	3 67 42 172.00 3 51 21 753.00

For SPFU, KERALA

Dr. S JAYAKUMAR
Dr. S JAYAKUMAR
(Director)

Date : 05.09.2016
Place : Kottayam

FINANCE OFFICER
State Project Implementation Unit (TEQIP)
Directorate of Technical Education
Thiruvananthapuram-23

Dr. S JAYAKUMAR
Dr. S JAYAKUMAR
State Project Implementation Unit (TEQIP)
Directorate of Technical Education
Thiruvananthapuram-695022

For K VENKATACHALAM AIYER & Co.
Chartered Accountants

CA M G SURESH KUMAR
CA M G SURESH KUMAR B.Sc FCA DISA(ICA)
Partner | Membership No: 212795

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME (TEQIP) II
PROJECT INSTITUTIONS UNDER STATE PROJECT FACILITATION UNIT, KERALA

RECEIPTS AND PAYMENTS ACCOUNT FOR THE PERIOD ENDED 31.03.2016
COLLEGE OF ENGINEERING, KARUNAGAPALLY

RECEIPTS	₹		PAYMENTS	₹	
	31.03.2016	31.03.2015		31.03.2016	31.03.2015
To Opening balance :					
1. Cash in Hand	-	-	By 1.1.1		
2. Balance with Banks :			Improvements in teaching, training and learning facilities :		
a. SBT A/c 67219137689	3 44 743.00	53 97 375.00	1.1.1A - Equipment	47 95 656.00	2 49 31 732.00
b. Corpus Fund	11 864.50	-	1.1.1B - Furniture	-	-
c. Equipment Replacement Fund	11 864.50	-	1.1.1C - Books & I.Rs & Software	11 29 659.00	26 26 159.00
d. Faculty Development Fund	12 450.50	-	1.1.1D - Minor Items	-	-
e. Maintenance Fund	11 864.50	-	1.1.1E - Civil Works	16 05 688.00	14 20 101.00
f. Performance Security Account	2 52 015.00	-	By 1.1.2		
To Grant Received from SPFU	3 60 00 000.00	2 90 00 000.00	Providing Assistantships for increased enrolment in existing and new PG programmes in Engineering disciplines.	57 60 000.00	17 87 000.00
To Interest Received	2 99 888.00	3 49 493.00	By 1.1.3		
To Registration Fee Collected from External participants.	45 500.00	46 570.00	Enhancement of Research & Development and institutional consultancy activities.	1 00 932.00	36 775.00
To Other Income	3 96 784.00	10 977.00	By 1.1.4		
To Earnest Money Deposit Received	40 060.00	14 26 042.00	Faculty and staff development for improved competence based on Training Needs Analysis.	21 81 380.00	16 43 435.00
To TDS Deucted	72 780.00	76 213.00	By 1.1.5		
To KVAT Collected	61 863.00	-	Enhanced interaction with Industry	1 87 968.00	1 87 656.00
To Contribution to Labour Welfare Fund Collected	16 697.00	-	By 1.1.6		
To Contribution from Project Institution	12 71 948.00	-	Institutional Management Capacity enhancement	2 29 449.00	95 571.00

			By 1.1.7	Implementation of Institutional academic reforms	-	7 86 520.00
			By 1.1.8	Academic support for weak students	4 90 644.00	2 50 451.00
			By 1.1.9	Incremental Operating Cost		
				1.1.9A - Salaries	5 94 800.00	5 27 200.00
				1.1.9B - Consumables	55 141.00	1 72 203.00
				1.1.9C - Operation & Maintenance	4 51 923.00	4 96 350.00
					-	86 600.00
			By Advance to Staff		39 860.00	5 36 862.00
			By EMD Repaid		61 863.00	3 440.00
			By VAT Paid		75 180.00	73 813.00
			By TDS Paid		16 697.00	
			By Works ContraCT Tax Paid			
			By Closing balance :			
			1. Cash in Hand			
			2. Balance with Banks :			
			a. SBT A/c 67219137689		1 94 43 431.00	3 44 743.00
			b. Corpus Fund - SBT 67267652274		3 41 761.50	11 864.50
			c. Equipment Replacement Fund - SBT 67267652490		3 41 761.50	11 864.50
			d. Faculty Development Fund - SBT 67247834926		3 42 370.50	12 450.50
			e. Maintenance Fund - SBT 67267644693		3 41 761.50	11 864.50
			f. Performance Security Account - SBT 67256271132		2 62 396.00	2 52 015.00
			Total		3 88 50 322.00	3 63 06 670.00
			Total		3 88 50 322.00	3 63 06 670.00

Note : Figures shown in Receipts and Payment account are taken after deducting the amount of expenditures met from Previous year advance.

For SPFU , KERALA

For K VENKATACHALAM AIYER & Co.
Chartered Accountants

Dr. S JAYAKUMAR
(Director)

CA M G SURESH KUMAR B.Sc FCA DISA(ICA)
Partner | Membership No: 212795

DIRECTOR

Date : 05.09.2016

Place: Kottayam

State Project
Directorate of
Thiruvananthapuram-23

State Project
Directorate of

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME (TEQIP) II

STATEMENT OF SOURCES AND APPLICATION OF FUNDS REPORTS
FOR THE YEAR ENDED 31.03.2016

COLLEGE OF ENGINEERING, KARUNAGAPALLY

(in ₹ Lakhs)

PARTICULARS	CURRENT YEAR (31.03.2016)	PREVIOUS YEAR (31.03.2015)	PROJECT TO DATE
(A) Opening Balance	6.45	53.97	
(B) Receipts			
a) Funds from Government through Budget (These will include external assistance received by Government for the project)	360.00	290.00	900.00
b) Funds received directly by Project Implementing authority through external assistances	-	-	-
c) Cost share by Private Unaided Institutions for Component 1	-	-	-
d) Interest Received	3.00	3.49	9.40
e) Other Amount Received (Net of Payments)	4.40	9.46	13.86
f) Contribution from Institution	12.72	-	12.72
g) Advance From Institutions/Expense met out of Previous Year Advance	0.87	1.61	2.47
h) Loan amount received back from SPFU	-	-	-
Total Receipts	380.99	304.56	938.45
(C) Total Sources (A+B)	387.43	358.53	938.45
(D) Expenditure			
Expenditure by Component			
A. Improving Quality of Education	176.70	351.22	725.24
B. Improving System Management	-	-	-
Total Expenditures	176.70	351.22	725.24
(E) Advance for Expenditures	-	0.87	2.47
(F) Loan to SPFU	-	-	-
Closing Balance, (C-D-E-F)	210.73	6.45	

[Signature]

DIRECTOR
State Project Implementation Unit (TEQIP)
Directorate of Technical Education
Thiruvananthapuram-695025

[Signature]

FINANCE OFFICER
State Project Implementation Unit (TEQIP)
Directorate of Technical Education
Thiruvananthapuram-695025

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME (TEQIP) II

RECONCILIATION OF CLAIMS TO TOTAL APPLICATION OF FUNDS
REPORT FOR THE YEAR ENDED 31.03.2016

COLLEGE OF ENGINEERING, KARUNAGAPALLY

(in ₹ Lakhs)

PARTICULARS	SCHEDULES	CURRENT YEAR (31.03.2016)	PREVIOUS YEAR (31.03.2015)	PROJECT TO DATE
Bank Funds Claimed During the Year	(A) I	105.95	210.50	430.04
Total Expenditure made during the year	(B) II	176.70	351.22	725.24
Less: Outstanding bills	(C) III			8.50
Ineligible expenditures	(D) IV	.12	.39	
Expenditures not claimed	(E)			
Total Eligible Expenditures Claimed [(B)-(C)-(D)-(E)]	(F)	176.58	350.83	716.74
World Bank Share @ 60 % of (F) above	(G)	105.95	210.50	430.04

Signature
DIRECTOR

State Project Implementation Unit (TEQIP)
Directorate of Technical Education
Thiruvananthapuram-695022

Signature

FINANCE OFFICER

State Project Implementation Unit (TEQIP)
Directorate of Technical Education
Thiruvananthapuram-695022

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME (TEQIP) II
PROJECT INSTITUTIONS UNDER STATE PROJECT FACILITATION UNIT, KERALA

BANK RECONCILIATION STATEMENT
COLLEGE OF ENGINEERING, KARUNAGAPALLY

Month : March 2016
Bank's Name : State Bank of Travancore
A/c Number : 67219137689

SL No.	PARTICULARS	AMOUNT (₹)	AMOUNT (₹)
A	Balance as per Bank Statement		2 00 30 107.00
B	Add: (i) Amount Deposited but not Credited by Bank (ii) Amount debited but not taken to Cash Book		
C	Sub total (A+B)		2 00 30 107.00
D	Less: (i) Cheques issued but not presented in the bank (ii) Amount credited by bank but not taken to Cash Book	5 86 676.00	
E	Balance as per Cash book (C - D)		1 94 43 431.00

LIST OF CHEQUES ISSUED BUT NOT PRESENTED IN THE BANK

CHEQUE DATE	CHEQUE NUMBER	AMOUNT (₹)	DATE OF ENCASHMENT
29.02.2016	Chq No: 211966	3 371.00	12.04.2016
23.03.2016	Chq No: 211988	21 955.00	13.04.2016
23.03.2016	Chq No: 211991	1 94 450.00	02.04.2016
29.03.2016	Chq No: 211992	6 000.00	06.04.2016
30.03.2016	Chq No: 211994	37 280.00	11.04.2016
30.03.2016	Chq No: 211994	1 86 942.00	12.04.2016
30.03.2016	Chq No: 211994	9 994.00	06.04.2016
30.03.2016	Chq No: 211997	3 378.00	17.04.2016
30.03.2016	Chq No: 211998	3 378.00	16.04.2016
30.03.2016	Chq No: 212000	7 476.00	06.04.2016
30.03.2016	Chq No: 212001	39 816.00	06.04.2016
30.03.2016	Chq No: 212003	9 651.00	06.04.2016
30.03.2016	Chq No: 212004	3 724.00	05.04.2016
30.03.2016	Chq No: 212005	2 202.00	09.05.2016
31.03.2016	Chq No: 212006	2 009.00	09.05.2016
31.03.2016	Chq No: 212008	50 250.00	15.04.2016
31.03.2016	Chq No: 212009	4 800.00	06.04.2016
		5 86 676.00	