

**TECHNICAL EDUCATION QUALITY IMPROVEMENT  
PROGRAMME Phase II Sub Component 1.1**



**12<sup>th</sup> MEETING OF  
THE BOARD OF GOVERNORS**

**DETAILED AGENDA NOTES**

**Date: 29-07-2017**

**Time: 10.00 am**

**Venue: College of Engineering Karunagappally**

**COLLEGE OF ENGINEERING KARUNAGAPPALLY  
THODIYOOR P.O., KOLLAM-690523, KERALA**

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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 12<sup>th</sup> meeting of the BoG is being convened on 29<sup>th</sup> of July, 2017.

The agenda items are given below.

## Agenda Items

Silent Prayer

### Part 1-Procedural

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#### **Part 4- Any other item with the permission of the chair**

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## **Part 1**

### **Procedural Items**

#### **1.1 Confirmation of the Minutes of the 11<sup>th</sup> Meeting of the Board of Governors held on 06-03-2017 at CE Karunagappally**

The Minutes of the 11<sup>th</sup> Meeting of Board of Governors of TEQIP Phase II of CE Karunagappally held on 06-03-17 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 11<sup>th</sup> Meeting of the Board of Governors held on 06-03-2017 at CE Karunagappally

The decisions taken by the BOG as recorded in the Minutes of the 11<sup>th</sup> Meeting of the Board of Governors of the TEQIP Phase II held on 06-03-2017 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 11 <sup>th</sup> BOG	Decision Taken	Action Taken
1.1	The BoG confirmed the approved minutes of the 10 <sup>th</sup> Meeting	For Information
1.2	Took note of the action taken report and approved	For Information
2.1	BoG ratified the payment of Rs. <b>2,19,203/-</b> towards the payment of five completed procurement packages and approved the price revisions.	No action needed
2.2	The BoG took note of the progress in procurement of Distilled Water Plant	The package has been cancelled
2.3	The BoG took note and ratified the expenditure incurred for attending various Faculty and Staff Development Programmes for Rs.10,89,831	No action needed
2.4	The BoG decided to reimburse the amount after proper evaluation of the progress work of Mr.Raju M, Assistant Professor in EEE wh had submitted a request for the reimbursement of fee for his fourth year part time PhD programme	The fee is not reimbursed since no paper has been published
2.5	The BOG approved for reimbursement of the expenditure incurred for presenting a paper in a National Conference to Dr. Gopakumar C, Assistant Professor in EC	The amount has been paid
2.6	The BOG approved the proposals for the outstation programmes for the month of March	Faculty attended training programmes at various institutes like IITs and NITs
2.7	The BoG approved for conducting a Colloquium on Research in Computing Innovations	The Colloquium was planned to conduct if payment of Accreditation fee for PG

		programmes would be denied. Since the payment of Accreditation fee was made, there was no fund left out to conduct the Colloquium
2.8	The BoG took note and ratified the expenditure of Rs.2,51,760/- and the other four programmes conducted under IIC.	No action needed
2.9	The BOG approved the action plan under IIC cell for the month of March	Conducted 28 IIC programmes
2.10	The BOG took note and ratified the payment towards conducting Soft Skill Training and asked to settle the other programmes conducted immediately. Also decided to conduct an expert talk on Applied Mathematics for both students and faculty	Settled all the programmes  Hon'ble Chairman conducted a talk on Applied Mathematics
2.11	The BOG approved the action plan for the soft skill training programme planned for the month of March	Conducted soft skill training programmes for all UG and PG classes (for 10 Classes) No action needed
2.12	The BOG approved the plan for the placement drive	The idea was dropped
2.13	The BOG approved the Vision and Mission statements	No action needed
2.14	The BOG took note and ratified the payment under IOC head	No action needed
3.1	The BOG took note of the expenditure under various heads	No action needed
3.2	The BOG took note of the survey report and congratulated the institution for the good satisfaction index score	No action needed

## **Part 2**

### **Discussion, Ratification and Approval**



## 2.1 Faculty Development Programme attended outstation by faculty

2.1 Details of faculty attended out station training and the expenditure involved are described below

Training Attended - Faculty						
Sl. No	Name Of Faculty	Title	Date	Institution/ Organization Name	Advance Amount	Expenditure
1	Remya R S Sabeena K Jyothi R L	Theory of Computational and complexity Theory	6/3/17 to 10/3/17	MFS, Cochin	35000 each	36000 37270 37270
2	Arya Chandran S Binu V P Hariharan R L Niyas S K Leena B R Shamna S S Shani Raj Subeena H Swetha Saira Appose	Big data Analytics and cloud computing	13/3/17 to 17/3/17	MFS, Cochin	35000 each	36825 37640 36825 36825 36825 36825 37270 36825 36825
3	Dr. Ajilkumar A Deepa T R Haseena P Y Jyothi R L Meera Murali Premakumari K R Reji Thankachan Renu K K Sabeena k Smitha P Sylish S V	Quality Enhancement Initiatives in Engg. Educational Institution	27/2/17 to 3/3/17	CE Chenganoor	35000 each	37330 37200 37200 37200 36481 37330 37330 37330 37200 37330 37330

4	Remya R S Libi A Haseena P Y	Research Methodology	20-24 March 17	MNIT Jaipur	20000 each	24939 22947 22947
5	Shiny C Deepa T R Geetha S Revikumar Thampi V R Seena Mathew Meera Murali Aagi A S Sheena S Nowshad	Technology Innovation and Entrepreneurship	20 - 24 March 2017	MFS Ernakulam	35000 each	37270 37110 37240 37270 36845 36845 36845 36845
6	Dr Gpakumar C	National Conference	6-8 Sept 2016	Rajagiri School of Engg. and Technology, Kochi,	----	7500
<b>Total</b>						<b>1227089</b>

**Action sought:** BOG may kindly take note and ratify the expenditure incurred for attending various Faculty Development Programmes attended by the faculty post the last BoG meeting.

## 2.2 Staff Development Programmes attended outstation by Staff

Details of staff attended out station training and expenditure involved are described below

<b><u>Seminar/ Workshop/ Conference/ Training - Attended - Staff</u></b>						
<b>Sl. No</b>	<b>Name Of Faculty</b>	<b>Title</b>	<b>Date</b>	<b>Institution /OrganizationName</b>	<b>Adv. Amount</b>	<b>Expenditure (Rs)</b>
1	Vidya J Dr. Anitha D S Sandhya Murali P Sheebamol K K Manoj K Mathew Suresh kumar G	Performance improvement for Institutional development	7 March 17 to 10 March 17	ESCI, Hyderabad	24000 each	26364 26470 26364 26364 26364 26364

	Leena S Anil Kumar V					26364 26364
2	Anilkumar A	Theory of Computational and complexity Theory	6 March 17 to 10 March 17	MFS, Cochin	35000	37450
3	Anilkumar A Dr. Shaji L	Quality Enhancement Initiatives in Engg. Educational Institution	27 Feb 17 to 3 March 17	CE Chenganoor	35000 35000	37330 37330
<b>Total</b>						<b>323128</b>

**Action Sought:** It is requested that the 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.

### 2.3 Staff Development Programmes conducted by Staff

Details of in house training conducted for staff members and the expenditure involved are described below

<b>Training Conducted</b>							
Sl. No	Name Of Coordinator	Title	Date	Number of participants		Revenue generated	Expenditure
				Inside	Outside		
1	Sheeba mol K	Performance and quality improvement for administrative staff	25-28 March 17	43	7	1000	63,529
<b>Total</b>							<b>63,529</b>

**Action sought:** BOG may kindly take note and ratify the expenditure incurred for conducting a Staff Development Programme post the last BoG meeting.

## 2.4 R and D Programmes conducted

The R and D programmes conducted and the related expenditure after the last BoG meeting are given below

<b>R &amp; D Programmes conducted</b>						
<b>Sl. No</b>	<b>Name Of the Coordinator</b>	<b>Title of Program</b>	<b>Date</b>	<b>Name of Expert Faculty</b>	<b>Number of participants</b>	<b>Expenditure</b>
1	Dr. Smitha P	Expert talk on “How to do Research “	17/3/17	Prof. E Gopinathan	Faculty-17 PG Students-59	8,350
2	Dr. Smitha P	RGC Meeting	18/3/17	---	---	37,561
3	Dr. Geetha S	Expert talk on Applied mathematics for research	23/3/17	Prof. V P N Nampoori	Faculty-31 PG Students 39	11,136
<b>Total</b>						<b>57,047</b>

**RGC Meeting:** The fifth RGC meeting was conducted on 18/3/2017 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 progress of the eight proposals submitted by the faculty who had availed seed money from TEQIP has been discussed in the meeting The proposals submitted to the funding agencies are as given below.

<b>S. No</b>	<b>Name of PI</b>	<b>Name of Proposal</b>	<b>Fund requested from External Agency (lakhs)</b>	<b>Name of External Funding Agency</b>
1	DrHari V S	Development of Visualizer for k-spaceMRI Data and the Implementation of Quadratic System for Periphery Detection, De-Noising and Brain Segment Volume Detection	42.57	DeitY

2	Deepa A K	Image processing Techniques for Breast Image Analysis Using Mammograms and MRI Images	25.35	KSCSTE
3	Smitha P	Development of Automated System for IHC Scoring and Nuclear Grading of breast cancer	38.49	DBT
4	Jyothi R L	Hand written character recognition of current and ancient Malayalam fonts	11.07	SERB
5	Remya R S	Automated detection of Acute Lymphatic Leukaemia	16.31	KSCSTE
6	Shajy L	Analysis of chromatin texture for the estimation of malignancy associated changes	29.95	KSCSTE
7	Jyothi R L	Offline Hand-Written Character Recognition System to Convert Grantha Script on Ancient Palmleaves to Malayalam Characters	11.07	TDIL
8	Remya R S	Automated video forgery detection	13.57	SERB
Total			188.38/-	

The minutes of the fifth RGC meeting is given as Annexure 2.

**Achievement:** Out of the eight proposals submitted, the proposal submitted by Smt Remya R S, Automated detection of Acute Lymphatic Leukaemia is accepted by KSCSTE for a grant of Rs 16.31 Lakhs.

**Action sought:** BOG may kindly take note and ratify the expenditure incurred for R and D activities post the last BoG meeting.

## 2.5 Management Capacity Enhancement programme attended

The details of Management Capacity Enhancement programme attended by a faculty and the related expenditure are given below

IMCE						
Sl. No	Name of Faculty	Title of the Program	Date	Institution/ Organization Name	Advance Amount	Expenditure

1	Raju M	Softskill for Interpersonal effectiveness: Attitudes and Skill enhancement	6/3/17 – 9/3/17	IIMK, Kozhikode	65000	67,472
<b>Total</b>						<b>67,472</b>

**Action sought:** It is requested that BOG may kindly take note and ratify the expenditure incurred for Management Capacity Enhancement programme attended by a faculty post the last BoG meeting

## 2.6 Ratification of IIC Activities conducted/settled post the last BoG meeting

The IIC activities conducted by different departments are as given in the following Table.

<b>IIC activities conducted by different departments</b>								
<b>Sl No</b>	<b>Branch</b>	<b>Name of Program</b>	<b>Type of Program</b>	<b>Industry Name/ Institution Name</b>	<b>Date</b>	<b>No. of Days</b>	<b>No. of Student Participants</b>	<b>Expenditure (Rs)</b>
1	CSE	Internet Programming - Php	Expert Talk	Tender wood Solution, Bangalore, 2D CVC, Abana, Cochin	1-3 March 2017	3	46	51,039
2	EEE	PLC and Scada	Workshop	Pantech Chennai	16 – 18 March 2017	3	50	34,570
3	ECE	Workshop on MATLAB	Workshop	Opzet Solns PVT. Ltd, Ernakulam	16 March 2017	1	40	8,693
4	ECE	Workshop on Internet of things	Workshop	Neo Green Labs, cochin	4 March 2017	1	30	12,761
5	CSE	Introduction to free and open software	Expert Talk	AFL IT Academy, Chennai, Accel IT academy,	14-18 March 2017	5	34	47,220

				Thrissur				
6	CSE	Introduction to web Application development	Expert Tutoring	Seaview Support, Technopark, TVM, Softtex, TVM	10 -11 March 17	2	38	21,360
7	EEE	Simulation software in industry perspective	Workshop	OPZET Solns, Ernakulam, Epsilon Labs, Ekln	6, 8 Feb 2017	2	48	25,455
8	CSE	Laptop and mobile phone servicing	Workshop	P C Engineers, Kottayam	21 March 17	1	38	14,066
<b>Industrial Visit and Internship</b>								
9	CSE	Industrial Visit -B. Tech S4 CSE	Industrial Visit	UL Cyberpark, Kozhikode	11 March 2017	1	Stud -34 Staff -2	18,988
10	EEE	Industrial Visit – S4 EEE	Industrial Visit	Pallivassal Hydro. Ele. Project Dam & Mattupetty Dam	18 Feb 2017	1	Stud -40 Staff -3	30,653
11	CSE	Industrial Visit – S2CSE	Industrial Visit	Sengulam power house & Mattupetty Dam	18 Feb 2017	1	Stud -39 Staff -3	29,194
12	EEE	Industrial Visit – S4 EEE	Industrial Visit	Kudankulam Nuclear Power plant	19 Feb 2016	1	Stud -47 Staff -2	19,515
13	EEE	Industrial Visit – S8 EEE	Industrial Visit	Kuttiyadi hydro electric power plant	24 Mar 2017	1	Stud -45 Staff -2	28,215
14	ECE	Industrial Visit – S2 ECE	Industrial Visit	Pallivassal Hydro. Ele.Power station	4 Mar 17	1	Stud -32 Staff -2	19,590
15	CSE	Industrial Visit -B. Tech S6 CSE/IT	Industrial Visit	UL Cyberpark, Kozhikode	17 March 2017	1	Stud -45 Staff -2	24,426

16	EEE	Industrial Visit -B. Tech S2 EEE	Industrial Visit	Pallivassal Hydro. Ele.Power station	18 Feb 2017	1	Stud -42 Staff -2	28,116
17	EEE	Industrial Visit -B. Tech S6 EEE	Industrial Visit	Kuttiyadi Power Plant	17 March 2017	1	Stud -45 Staff -3	27,456
18	EEE	Industrial Training - S6 EEE	Industrial Training	Malankara small hydro power station	24 -29 June 2016	6	4	3,060
19	EEE	Internship - Btech S2 EEE	Internship	KEL Kundara	25-30 June 2016	6	5	1,845
20	EEE	Internship - Btech S2 EEE	Internship	KEL Kundara	21-26 July 2016	5	1	369
21	EEE	Internship - Btech S2 EEE	Internship	KEL Kundara	18-22 July 2016	5	4	1,476
22	EEE	Internship - Btech S2 EEE	Internship	IRE Chavara	25-29 July 2016	5	5	1,475
23	EEE	Internship - Btech S2 EEE	Internship	IRE Chavara	19-23 July 2016	5	4	1,180
24	EEE	Internship - Btech S2 EEE	Internship	IRE Chavara	20-24 July 2016	5	5	1,475
25	EEE	Internship - S8 EEE	Internship	Kudamkulam nuclear power plant	23 -27 May 2016	5	9	13701
26	EEE	Internship – S8 EEE	Internship	Kakkad power station	26 -30 Dec 16	5	9	3,402
27	CSE	Internship – S4 CSE	Internship	White Oval, Tec., Technopa rk TVM,	18 – 28 June 16	11	8	3,910
				IRE Chavara	20 – 24 June 16	5	15	4,331
				KELTRON Kozhikode	21 June – 7 July 16	17	1	1,128



				KELTRON Kannur	20 – 26 June 16	6	2	1,760
				AIPCT Cochin	11 – 25 June 16	14	2	1,722
<b>Total</b>								<b>4,82,151</b>

**Action sought:** The BoG may kindly take note and ratify the expenditure of Rs. **4,82,151/-** for the programmes conducted under IIIC

## 2.7 Ratification of accreditation fee paid for two PG Programmes

The institution has remitted the fees for NBA accreditation as per the requirements of TEQIP-II for the two PG Programmes that are eligible to apply for accreditation. The details of the fee paid are given below. The copy of the fee receipt is given as Annexure 3

Sl No	Name of PG Programme	Department	Amount paid (Rs)
1	M.Tech in Signal Processing	Electronics and Communication Engineering	5,75,000
2	M.Tech in Image Processing	Computer Science and Engineering	2,30,000
<b>Total</b>			<b>8,05,000</b>

**Action sought:** The BoG may kindly take note and ratify the expenditure of Rs. **8,05,000** for the accreditation fee paid for two PG Programmes programmes

## 2.8 Ratification of programmes conducted under students support

### Soft Skill Training Programme conducted

Soft Skill Training programmes were conducted for all the batches of students. The details of the programmes conducted and the expenditure details are given below.

<b>Programmes conducted</b>
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Sl No	Class	Name of the Programme	Number of days	Date	Expenditure
1	S6 BTech CS and IT	Getting ready for placement	5	3,4,5,10,11 Feb 2017	51,656
2	S6 BTech EEE	Getting ready for placement	5	3,4,5,10,11 Feb 17	53,882
3	S6 BTech ECE	Getting ready for placement	5	3,4,5,10,11 Feb 17	55,461
4	Final year B Tech EEE, EC, CS	Aptitude test Training	4	20, 21, 25, 26 Feb 2017	1,29,555
5	M Tech First Year CS and EC	Aptitude test Training	4	20, 21, 25, 26 Feb 2017	90,367
6	S6 BTech CSE	Motivation and counselling	2	26 , 27 Feb 2017	12,840
7	First year BTech EEE	Motivation and counselling	2	17, 18 Feb 17	22,,574
8	BTtech S8 CSE	Soft skill training	2	22 March 17- 23 March 17	20,200
9	BTech S4 CS	Soft skill training	2	22 March 17- 23 March 17	20,140
10	BTech S6 EEE	Project oriented training programme	3	20,22,27 Feb 2017	40,010
<b>Total</b>					<b>4,96,685</b>

**Action sought:** The BoG may kindly take note and ratify the expenditure of Rs. 4,96,685 for the Soft Skill Training Programme conducted under students support.

## 2.9 Expenditure incurred under IOC-Ratification

The expenditure incurred under IOC post the last BOG meeting is Rs. **3,41,899/-**. This amount is due to Salaries of TEQIP staff, Consumables purchased for TEQIP cell and other departments, and Operation and Maintenance charges. The details are given in the table below.

Table: Expenditure incurred under IOC

Sl. No	Item	Amount (Rs)
1	Salary for TEQIP Staff	2,43,659
2	Consumables	
	(a) Purchase of toner cartridge	1,600
	(b) Purchase of First aid items for Mechanical workshop	998
	(c) Purchase of wooden pieces for for Mechanical workshop	10,018
	(d) Battery Water	3,200
3	Operation and Maintenance	
	(a) BOG 11	31,082
	(b) Repairing charge - AC	4,800
	c) Post Procurement Review Meeting	46,542
<b>Total</b>		<b>3,41,899</b>

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

## **Part 3**

### **Reports**

### 3.1 Summary of Expenditure as on 27 July 2017

The summary of expenditure as on 27.07.2017 is as below.

**Total Fund Received: Rs.1000 Lakhs,**

**Interest accrued: Rs 16.17 Lakhs**

Sr.No .	Expenditure Name	Expenditure Upto 28 <sup>th</sup> Feb 2017 (Rs in Lakhs)	Expenditure From 1 March 2017 – 27 <sup>th</sup> July 2017 (Rs in Lakhs)	Cumulative Expenditure upto 27 <sup>th</sup> July 2017 (Rs in Lakhs)
1	Procurement	557.79	0	557.79
2	Providing Assistantships for Increased enrolment in existing and new PG Programmes in Engineering Disciplines	135.74	5.15	140.89
3	Enhancement of Research and Development and Institutional Consultancy Activities	20.86	0.57	21.43
4	Faculty and staff development for improved competence based on Training Needs Analysis(TNA)	157.19	16.14	173.33
5	Enhanced Interaction with Industry	11.68	4.73	16.41
6	Institutional Management Capacity enhancement	6.65	0.67	7.32
7	Implementation of Institutional reforms	8.99	8.05	17.04
8	Academic support for weak students	15.59	4.84	20.43
9	Incremental Operating Cost	56.38	4.05	60.43
<b>Total</b>		<b>970.87</b>	<b>44.2</b>	<b>1015.07</b>

The detailed expenditure status is as given in the Table below.

Category of expenditure (Head of expenditure)	Sub-Activity	Cumulative Exp. Up to 27.07.2017	Committed Exp. for the remaining period upto (31.07.2017)	Total cumulative expenditure upto 31.07.2017
(1)	(2)	(3)	(4)	(5 = 3 + 4)
Procurement	Expenditure on ICT enabled learning, related softwares & hardware.	0.00		0.00
	Expenditure on New laboratory for new PG programs	3.49		3.49
	Expenditure on New laboratory for existing PG programs	64.26		64.26
	Expenditure on Existing laboratories modernized/Strengthened	233.20		233.20
	Expenditure on Library i.e. books, e-books, journals, e-journals course specific softwares	52.65		52.65
	Expenditure on membership of online journals & consortium	0.00		0.00
	Expenditure on digitally/virtually accessible courses/subjects	0.00		0.00
	Expenditure on Modernising Classrooms	12.97		12.97
	Expenditure on Procurement of Equipments etc. for Institutes/ TEQIP unit.	143.35		143.35
	Expenditure on Civil Work	47.86		47.86
	Others. (Specify if Material)	0.00		0.00
<b>Total</b>		<b>557.79</b>	<b>0.00</b>	<b>557.79</b>
Assistantships	Expenditure on Masters students enrolled with TEQIP teaching assistantship	140.89	0.0	140.89
	Expenditure on PhD Students enrolled with TEQIP research assistantship	0.00		0.00
	Others. (Specify if Material)	0.00		0.00
<b>Total</b>		<b>140.89</b>	<b>0.0</b>	<b>140.89</b>
R&D	Expenditure incurred on Research projects taken by UG/ PG students	0.00		0.00
	Expenditure incurred on research publications in engineering in refereed journals	0.34		0.34
	Expenditure on Organising Conferences for R & D Topics	13.81		13.81
	Expenditure on Patenting of Research Products	0.00		0.00
	Others. (Specify if Material)	7.27		7.27

<b>Total</b>		<b>21.43</b>	<b>0.00</b>	<b>21.43</b>
FSD	Expenditure on Faculty with B Tech enrolled for M Tech against total B Tech faculty	2.52		2.52
	Expenditure on Faculty with M Tech enrolled for PhD in engineering against total M Tech faculty	2.80		2.80
	Expenditure on faculty members attended training in subject domain	109.03		109.03
	Expenditure on faculty members attended pedagogical training	5.81		5.81
	Expenditure on organising inhouse subject area training Programs/ Workshops/ seminars / conferences / continuing education programs.	29.19		29.19
	Expenditure on participation by faculty in Seminar/ Conferences/ workshop etc.	14.41	0.0	14.41
	Expenditure on staff development	9.38		9.38
	Others. (Specify if Material)	0.19		0.19
<b>Total</b>		<b>173.33</b>	<b>0.0</b>	<b>173.33</b>
I-I-I- Cells	Expenditure on academic Programs i.e. MTech/PhD etc. with industry	0.00		0.00
	Expenditure on short term programs with industry	8.44		8.44
	Expenditure on academic networking with other institutions	0.00		0.00
	Expenditure incurred on Campus placements (UG & PG)	0.00		0.00
	Expenditure on UG Students attended industrial internship	0.72	0.0	0.72
	Others. (Specify if Material)	7.25	0	7.25
<b>Total</b>		<b>16.41</b>	<b>0</b>	<b>16.41</b>
Capacity Development	Expenditure on Sr. Officials & Sr. faculty attended management development training	6.41		6.41
	Others. (Specify if Material)	0.91		0.91
<b>Total</b>		<b>7.32</b>	<b>0.00</b>	<b>7.32</b>
Reforms	Expenditure on accreditation fee for NBA	17.04		17.04
	Expenditure incurred on Autonomous Institution status concurred by UGC	0.00		0.00
	Expenditure on Curricula revision/restructuring	0.00		0.00
	Others. (Specify if Material)	0.00		0.00
<b>Total</b>		<b>17.04</b>	<b>0.00</b>	<b>17.04</b>

Student support	Expenditure on students transition from first year to second year of UG Programs (clearing all subjects /courses of 1st year in first attempt)	3.95		3.95
	Others. (Specify if Material)	16.49	0	16.49
<b>Total</b>		<b>20.43</b>	<b>0</b>	<b>20.43</b>
<b>IOC</b>		60.43	1.1	61.53
<b>Grand Total</b>		<b>1015.07</b>	<b>1.1</b>	<b>1016.17</b>

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

### 3.2 Report on Staff Student Satisfaction Survey

NPIU and MHRD had conducted the second round of Web based Student, Faculty and Staff satisfaction survey of the implementation of TEQIP II activities in the Institutions in DEC 2016. The compiled reports of the satisfaction survey were shared with the Institutions. This report contains the Student, Faculty and Staff's satisfaction level of the institute and that is compared with State and National satisfaction indices. The detailed report sent by NPIU is attached as **Annexure 4**.

**Action Sought:** BOG may kindly take note of the report

### 3.3 Approval of Project Completion report

SPFU asked the TEQIP institutions to submit the TEQIP project completion report in the prescribed format after ratifying all the expenditure incurred while implementing the project by the BoG. A draft report in the prescribed format is attached as Annexure 5.

**Action sought:** The BG is requested to kindly discuss the report and approve it.



## **Part 4**

**Any Other item with the permission of the chair**

**TECHNICAL EDUCATION QUALITY IMPROVEMENT  
PROGRAMME Phase II Sub Component 1.1**



**11<sup>th</sup> Meeting of the Board of Governors  
Minutes**

**6<sup>th</sup> March 2017, 10.00 am**

**Venue: Principal's Chamber, College of Engineering Karunagappally**

**COLLEGE OF ENGINEERING KARUNAGAPPALLY  
THODIYOOR P.O., KOLLAM-690523, KERALA**

**Phone: +91 476 2665935**

## **Minutes of Eleventh Meeting of Board of Governors**

Presided by

**Hon'ble Chairman:** Prof. V.P.N. Nampoori

**Venue:** Office of the Principal

**Date:** 6 March 2017

**Time:** 10.00 AM

### **Members Present**

1. Prof (Dr) V.P.N Nampoori, Chairman
2. Prof.(Dr). Suresh Kumar.P, Director, IHRD
3. Mr. James Joseph, Jt. Sec. Finance, Government of Kerala (State Govt Nominee)
4. Prof (Dr). Jaya V L, Principal
5. Dr. AjilKumar.A, HOD, ME, Member
6. Prof. Manoj Ray D, Member

The following members of the BOG conveyed their inability to attend the meeting.

1. Prof. (Dr) V P Devassia, Principal, Model Engineering College
2. Mr. Angelose, Joint Sec., H.Edn, Government of Kerala (State Govt Nominee)
3. Dr. S. Jayakumar, Director, SPFU (Special invitee)
4. Dr. Sam Thomas, CUSAT (University Nominee)

Also present

1. Prof. Binu V.P, HOD, Computer Science and Engineering
2. Dr. Smitha P, HOD Information Technology
3. Prof. Libi A, HOD Electrical and Electronics Engineering
4. Prof. Reji Thankachan, Academic Coordinator
5. Prof. Sylish S. V, Procurement Coordinator
6. Prof. Baiju V, III Cell Coordinator
7. Prof. Premakumari K.R, EAP Coordinator
8. Dr. Shajy L, Finance Coordinator

## **Agenda Summary**

### **Part 1-Procedural**

<b>Sl. No</b>	<b>Items</b>
1.1	Confirming the Minutes of the 10 <sup>th</sup> Meeting of the Board of Governors held on 04-02-2017 at College of Engineering Karunagappally
1.2	Report on the action taken/action pending on the pertinent decisions in the Minutes of the 10 <sup>th</sup> Meeting of the Board of Governors held on 04-02-2017 at College of Engineering Karunagappally

### **Part 2-Ratifications and Approvals**

<b>Sl. No</b>	<b>Items</b>
2.1	Expenditure incurred for procurement of goods/civil works and price revisions of various completed packages
2.2	Procurement in Progress
2.3	Faculty and Staff Development Programme/Workshop/Seminar attended outstation by faculty
2.4	Approval of Reimbursement of fee for PhD/MTech and Journal Publication
2.5	Reimbursement of expenditure in attending National Conference
2.6	Approval of the action plan for inhouse/outstation programmes for faculty and staff for the month of March
2.7	Approval for Colloquium on Research in Computing Innovations
2.8	Ratification of IIIC Activities conducted/settled post the last BoG meeting
2.9	Approval of action plan of IIIC activities for March
2.10	Ratification of programmes conducted under students support
2.11	Action Plan for the Programmes Under students support for the month of March
2.12	Approval for Conducting Campus Placement under TEQIP
2.13	Approval for Vision and Mission of the Institution and different departments
2.14	Expenditure incurred under IOC-Ratification

### **Part 3-Reports**

<b>Sl. No</b>	<b>Items</b>
3.1	Summary of Expenditure as on 28 February 2017
3.2	Report on Staff Student Satisfaction Survey

The Meeting started at 10.00.AM under the presidency of the Hon'ble Chairman with a silent prayer followed by welcome address by the Principal.

Principal Dr Jaya V L welcomed all the members and special invitees. A brief report was made by the Principal on the various activities related to TEQIP and development in the college as the impact of these activities. She also provided a brief report about the agenda of the meeting.

The BoG congratulated the Institution, for securing top position among IHRD colleges and fifth position among 19 TEQIP project institutions in the review conducted by SPFU on 17<sup>th</sup> Feb 2017, as reported by IHRD Director.

## **Part 1 Procedural Items**

### **1.1 Confirmation of the Minutes of the 10<sup>th</sup> Meeting of the Board of Governors held on 04-02-2017 at CE Karunagappally**

The Minutes of the 10<sup>th</sup> Meeting of Board of Governors of TEQIP Phase II of CE Karunagappally held on 04-02-17 was sent to the Chairman for his approval and upon his approval copies were circulated among the other members of the BoG. Based on the discussions, the Board of Governors confirmed the approved minutes of the BOG meeting held on 04-02-17.

### **1.2 Report on the action taken/action pending on the pertinent decisions in the Minutes of the 10<sup>th</sup> Meeting of the Board of Governors held on 04-02-2017 at CE Karunagappally**

The following are the pertinent decisions taken and actions taken by CE Karunagappally post the BoG meeting held on 04-02-2017

**Table 1.1**

<b>Item No in Minutes of the 10<sup>th</sup> BOG</b>	<b>Decision Taken</b>	<b>Action Taken</b>
1.1	The BoG confirmed the approved minutes of the 9 <sup>th</sup> Meeting	For Information
1.2	Took note of the action taken report and approved	For Information
2.1	BoG ratified the payment of Rs.1,23,000/- towards the payment of one completed procurement package and approved the price revisions and took note of the procurement in progress	No action needed  Five more packages have been completed
2.2	The BOG took note and ratified the expenditure in conducting the Faculty Development Programmes	No action needed
2.3	The BOG took note and ratified the expenditure in conducting the Staff Development Programme for Rs.67,639	No action needed
2.4	The BOG took note and ratified the expenditure incurred for attending various Faculty Development and Staff Development Programmes	No action needed
2.5	The BOG took note and ratified the payment of reimbursement of tuition fee for M.Tech programme	For Information
2.6	The BoG approved for reimbursement of IEEE fee, Rs.16080 to 5 faculty members .	The payment has been done
2.7	The BOG approved the proposals for the outstation programmes for the next two months	Faculty attended training programmes at various institutes like IITs and NITs
2.8	The BoG noted and ratified the expenditure for IIIC activities conducted in the Institution. Also approved the IIIC plan for the next two months.	No action needed  Conducted 10 IIIC programmes
2.9	The BOG took note and ratified the payment towards the remuneration paid to the resource persons for the remedial and other programmes under EAP	No action needed
2.10	The BOG approved the action plan for remedial classes and the soft skill training programme planned for the next two months.	Conducted soft skill training programmes for all UG and PG classes (for 14 Classes)
2.11	The BOG may took note and ratified the payment under IOC head	No action needed

2.12	The BOG pointed out to relook into the proposed Vision and Mission statements	The Vision and Mission statements are revised
2.13	The BoG decided to address the issue of purchasing display boards to the SPFU Director and proceed to procure the same under IOC	The purchase has been started
2.14	The BoG ratified the revised remuneration and the arrears paid to the MIS Officer	No action needed
3.1	The BOG took note of the expenditure under various heads	No action needed
3.2	The BoG took note of the results of BTech and MTech students	No action needed
3.3	The BOG took note of the report on accreditation.	No action needed
3.4	The BOG took note of the internal audit report	No action needed
4.1	BoG took note of the status of four funds	No action needed
4.2	BoG approved the action plan of outstation training programme of CS Department	13 Faculty attended outstation training programmes
4.3	The BoG approved the plan to attend the SDP at ESCI	8 staff members registered for the programme
4.4	The BoG approved the IIC action plan of CS Dept	3 IIC programmes were conducted
4.5	The BoG took note of the action plan for the remaining two months and approved it. The BoG also ratified and approved the allocations made in different heads of expenditure	The action Plan has been followed

**Decision:** The BOG members analyzed and approved the actions taken by the College based upon the decisions made in the BOG meeting held on 04-02-2017

## 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 tenth BOG meeting are detailed below

Table 2.1. Details of Completed Packages Post the 10<sup>th</sup> BOG meeting

Sl. No	Package No.	Package Name	Mode of purchase	Firm	Estimated Amount (Rs)	Actual Amount (Rs)	% Variation
1	TEQIP-II/KL/KL1G 18/216	Digital Multimeter	Direct Contract	Netwatch Systems, Pala Kottayam	50,000	49922	0.16
2	TEQIP-II/KL/KL1G 18/217	Ultraviolet exposing unit for PCB	Direct Contract	Netcom Infosys Ernakulam	25,000	24000	4
3	TEQIP-II/KL/KL1G 18/218	Digital clamp power meter with storage	Direct Contract	Netwatch Systems Pala Kottayam	25,000	31201	-24.8
4	TEQIP-II/KL/KL1G 18/220	Dumpy level	Direct Contract	Facet Technologies Thiruvananthapuram	25,000	23625	5.5
5	TEQIP-II/KL/KL1G 18/180	Electrical works in Library, office & EEE computer Lab	Shopping	Monys Electricals Contractors, Karunagappally	79,000	90455	-14.5
<b>Total</b>						<b>219203</b>	

**Discussion:** BOG members enquired about the price variation seen in the packages TEQIP/11/KL/KL1G18/218 and TEQIP/11/KL/KL1G18/180. The Procurement Coordinator, Mr. Sylish said that for the package TEQIP/11/KL/KL1G18/218, the estimated cost was finalised after contacting different firms and verifying the rate available in the web site of different firms. But when quotation was received, the rate was found to be higher. The package TEQIP/11/KL/KL1G18/180 is a civil work package and the rate quoted was 14.5% more than the estimated cost which was the lowest rate quoted.

**Decision:** BoG ratified the payment of Rs. **2,19,203/-** towards the payment of five completed procurement packages and approved the price revisions.

#### 2.2 Procurement in progress

The details of packages in progress are given below

Table 2.2 Packages in progress



Sl. No	Package No.	Package Name	Mode of purchase	Estimated Amount (Rs)	Status
1	TEQIP-II/KL/KL1G18/219	Distilled Water Plant	Shopping	60000	Initiated

**Decision:** The BOG took note of the procurement in progress.

### 2.3 Faculty and Staff Development Programme/Workshop/Seminar attended outstation by faculty

**2.3.1** Details of faculty attended out station training and the expenditure involved are described below

Training Attended - Faculty						
Sl. No	Name Of Faculty	Title	Date	Institution/ Organization Name	Advance Amount	Expenditure
1	C V Anilkumar Leena B R Shamna S S Niyas S K Seena Mathew Radhika R Chandran	FDP on Semiconductor Devices from Micro to Nano	30 Jan-3Feb 2017	Model Engineering college, Thrikkakara	35000 each	38050 36970 36970 36900 36970 36970
2	Binu V P Shani Raj	Introduction to Cryptography	27 Jan 2017 31 Jan 2017	IIT Kharaghpur	-	22469 21681
3	Dr. Smitha P Dr. Shajy L	Fundamantal Algorithms : Design and Analysis	09 Feb 2017 13 Feb 2017	IIT Kharaghpur	15000 each	20957 15243
4	Haseena P Y Manu Madhavan Shamna S S Leena B R Geetha S	Road map to Research in Electrical and electronics and computing	13 Feb 2017 17 Feb 2017	CE Poonjar	35000 each	37472 37061 37061 37061 37472

5	Aagi S					35000
	Deepa T R					35000
	Dr. Hari V S					35000
	Raju M	An insight into DSP	06 Feb 2017	CE Kottarakkara	35000 each	35736
	Reji Thankachan		10 Feb 2017			35000
	Shani Raj					35000
	Shiny C					35000
	Dr. C Gopakumar					35000
6	Arya Chandran S	Internet of Things	20-24 Feb 2017	MFS Kochi	35000 each	36825
	Binu V P					37640
	Deepthi P K					36825
	Hariharan R L					36825
	Niyas S K					36825
	Subeena H					36825
	Swetha Saira Appose					36825
7	Shani Raj					37240
	Raju M	Power Quality challenges with RE integration in	23-24 Feb 2017	CPRI Bangalore	10000	16020
<b>Total</b>						<b>10,81,893</b>

**Decision:** The BOG took note and ratified the expenditure incurred for attending various Faculty Development Programmes by the faculty post the last BoG meeting as per rules. The BoG directed the institution to ensure that all faculty and staff attend programmes equally rather than sending some faculty and staff frequently.

### 2.3.2 Staff Development Programmes attended outstation by Staff

Details of staff attended out station training and expenditure involved are described below

<b><u>Seminar/ Workshop/ Conference/ Training - Attended - Staff</u></b>						
<b>Sl. No</b>	<b>Name Of Faculty</b>	<b>Title</b>	<b>Date</b>	<b>Institution/ OrganizationName</b>	<b>Advance Amount</b>	<b>Expenditure (Rs)</b>

1	Abinlal D Nithin K V	Hands on experience in Laptop chip level	20 Feb 2017 – 22 Feb 2017	CE Cherthala		3969  3969
<b>Total</b>						<b>7938</b>
1	Vidya J Dr. Anitha D S Sandhya Murali P Sheebamol K K Manoj K Mathew Suresh kumar G Leena S Anil Kumar V	Performance improvement for Institutional development	7 -10 March 2017	ESCI, Hyderabad	24000 each	Not Settled. (course under progress)

**Decision:** The BOG took note and approved the expenditure incurred for attending various Staff Development Programmes by the staff post the last BoG meeting as per rules.

#### **2.4 Approval of Reimbursement of fee for PhD/MTech programme.**

Mr.Raju M, Assistant Professor in EEE submitted a request for the reimbursement of fee for his fourth year part time PhD programme for the year Jan-Dec 2017 he is undergoing at Karpagam University for an amount of Rs. 29,000/-.

**Discussion:** BoG discussed the request submitted by Mr.Raju M, Assistant Professor in EEE for the reimbursement of fee for his fourth year part time PhD programme. Respected BoG member Mr. James Joseph enquired about the credibility of Karpagam University. Dr Suresh Kumar P insisted the need for evaluating the progress of work before reimbursing the amount. He also said that Mr. Raju should obtain PhD from the same University by completing his work since he had availed the tuition fee reimbursement for the last three years The Hon'ble Chairman Prof.V.P.N.Nampoori suggested to collect the details of publications by Mr.Raju and reimburse the fee.

**Decision:** The BoG decided to reimburse the amount after proper evaluation of the progress of work.

#### **2.5 Reimbursement of expenditure in attending National Conference**

Dr. Gopakumar C, Assistant Professor in EC has submitted a request for reimbursing the expenditure incurred, Rs 7500, for presenting the paper “A Novel J Slot Antenna for UWB Wi Media”, in the National Conference, ICACC 2016 held during 6-8 Sept 2016 at Rajagiri School of Engineering and Technology, Kochi, (Published in Science Direct)

**Decision:** The BOG approved for reimbursement of the expenditure as per rules.

## 2.6 Approval of the action plan for inhouse/outstation programmes for faculty and staff for the month of March

The action plan of inhouse/outstation training programmes planned for the current month is shown in the following Table. The list is prepared based on the courses declared by various institutions.

Sl No	Name of Course	Inhouse/ Outstation Programme	Number of Faculty/ Staff	Name of Institution	Date	Expected Expenditure (Rs)
1	Quality enhancement initiatives in engineering educational institutions	Outstation	13	CE Chengannur	27Feb-3March	4,84,000
2	Theory of Computation and Complexity Theory	Outstation	4	Model Engg College	6-10 March	1,48,000
3	Performance Improvement for Institutional Development	Outstation	8	ESCI	7-10 March	1,97,600
4	Low power devices	Outstation	6	MFS Kochi	13-17 March	2,19,000
	Computer Servicing and Maintenance	Inhouse	-	In house SDP	20-23 March	60,000
5	Time Management and Interpersonal Relationship	Inhouse	-	In house SDP	25,27,28 March	50,000
6	Technology, Innovation & Entrepreneurship	Outstation	8	Model Engg College	20-24 March	2,92,000
<b>Total</b>						<b>14,50,600</b>

**Decision:** The BOG approved the proposals for the inhouse/outstation programmes for the current month.

## 2.7 Approval for Colloquium on Research in Computing Innovations

The Department of Computer Science and Engineering has submitted a proposal to conduct a Colloquium on Research in Computing Innovations during 24-25 March 2017. The objective of this colloquium is to provide a platform for interaction and knowledge exchange between eminent researchers, faculty, research scholars, post graduate students and engineers working in various areas of Computer Science and Engineering. The programme also aims to give an exposure to the trends, issues and challenges in the different areas of Computer Science and Engineering and to orient young researchers to take up effective research in these areas. Eminent Faculty and Researchers from various nationally reputed institutes such as IIT Khargpur, IIT Delhi, IIT Guwahati, IIT Mumbai, IIT Bhuvanesar, MNIT Jaipur etc will deliver the research topics and participate in the interactions. It is expected that 100 participants will participate in the Colloquium. The approximate expenditure expected is Rs. 4,00,000. The BoG was requested to approve the Colloquium.

**Discussion:** BOG members discussed the plan and appreciated the efforts. They discussed about the topics and venue of Research Colloquium. TEQIP coordinator explained that different areas in Computer Science in general and Image Processing in particular will be discussed in the Colloquium. Expected expenditure is about 4 lakhs and the venue is outside college at Karunagappally.

**Decision:** The BoG approved for the Colloquium.

## 2.8 Ratification of IIC Activities conducted/settled post the last BoG meeting

The IIC activities conducted by different departments are as given in the following Table.

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 Student Participants	Expenditure (Rs)
1	CSE	Web development using JSP	Expert Tutoring	TECH- Support, Chennai AFL IT, Chennai Accel Frontline, Calicut	8-9 Feb 2017	2	48	27275
2	ECE	Advanced Technology solution Tips provided to customers in IT industries	Expert Talk	TCS, Ernakulam	5 Feb 2017	1	46	5750

3	ECE	Internet of Things	Workshop	Early Bird Security System and Automation Ltd. , TVM	7 Feb 2017	1	42	13336
4	ECE, EEE	Micro controller	Workshop	Neo Green Labs, Cochin	4 Feb 2017	1	30	12620
5	S8 ECE	Industrial Visit to Lower Periyar power house, Karimanal	Industrial Visit	Lower Periyar power house, Karimanal	18 Feb 2017	1	43(Stud) 2 (Staff)	30185
6	S6 ECE	Industrial Visit to FCRI	Industrial Visit	Kanjicode, Palakkad	12 Mar ch 2016	1	42(Stud) 2 (Staff)	37502
7	ECE	SFO, Kochi	Industrial Visit	SFO, Kochi	25 Feb 2017	1	11 (Faculty)	20516
8	S8 CSE, IT	Industrial Visit to Cyber Park, Kozhicode	Industrial Visit	Cyber Park, Kozhicode	17 Feb 2017	1	38(Stud) 2 (Staff)	37705
9	S6 ECE	ITI limited , Palakkad	Industrial Visit	ITI limited , Palakkad	18 Feb 2017	1	41(Stud) 2 (Staff)	35394
10	ECE	Keltron, AIR Tvm, RTTC, KMML	Internship	RTTC, Tvm KMML, Chavara KELTRON, Calicut AIR, TVM	May - June 2016	-	Btech S6 ECE (45 (Students)	31477
<b>Total</b>								<b>251760</b>
<b>IIC activities conducted but not settled</b>								
	CSE	Internet Programming - Php	Expert Talk	Tender wood Solution, Bangalore, Wedo Wood soln, Cochin	1,2,3 Mar ch 2017	3	46	Advan ce 30,000
	EEE	Project oriented training	Project oriented training	Ofzet, Ernakulam	20,2 2,27 Feb 2017	3	48	Not settled

	EEE	PLC and Scada	Workshop	Pantech Chennai	Feb 2017	2	45	Advance 15,000
	EEE	Simulation software in industry perspective	Training	Technocity, Ernakulam	6, 8 Feb 2017	2	48	Advance 25,000 (Not settled)

**Discussion:** Dr. Suresh Kumar P asked about the lodging and boarding charges paid to the students and clarified as 250 per day as per the BoG decision taken early. For industrial visit, only one day is permitted with Rs.50 for refreshment and additional amount for bus fare. The BoG discussed about the Industrial visit by faculty to NeST Kochi. The Hon'ble Chairman Prof.V.P.N. Nampoori mentioned about the reputation of Photonics lab at CUSAT, which is considered as the best Photonics lab in Asia. He said the need for visiting such places as part of Industrial Visit to generate interest among students and faculty.

**Decision:** The BoG took note and ratified the expenditure of Rs.2,51,760/- and the other four programmes conducted under IIIC.

## 2.9. Approval of action plan of IIIC activities for March

The modified proposal of IIIC activities planned for the current month by the Electrical department is given in the following Table.

**Table : IIIC for the month of March 2017- CS Dept**

Sl No	Name of Lecture	Expert/Industry involved	No of days	Proposed days	Target UG/ PG	No of students	Expected Expense
1	Web Designing	Seaview Support System Pvt. Ltd. Technopark	3	Feb-17	UG	50	30,000
2	Image processing Using PYTHON	Softtex digital private limited Technopark	2	Mar-17	UG	50	20,000
3	Big Data Analytics with Hadoop	Technopark	1	Mar-17	UG	50	10,000
<b>Total</b>							<b>60,000</b>

### **IIIC Programs planned by Electrical & Electronics department during February – March 2017 (Committed)**

No	Activity	Name of Expert/Field	Institution	Month /Year	Expenditure (Rs)
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1	STTP in collaboration with Industry	Transformer Testing & Protection	TELK	Mar 2017	20000
2	Expert lecture	Renewable Energy	ANERT	Mar 2017	6500
3	Expert lecture	Energy Auditing	Energy Management Cell	Mar 2017	6500
4	Expert lecture	Switch Gear & Protection	KSEB	Mar 2017	6500
5	2 days Workshop	Design Estimation & Costing	Electrical Inspectorate	Mar 2017	20000
6	Internship		Different Industries	June 2016	25000
7	Industrial Visit	IV to Lower Periyar power house, Karimanal	Lower Periyar power house, Karimanal	Feb 17	30000
<b>Total</b>					<b>114500</b>

#### **EC Dept: Industry Institute Interaction Activities planned**

<b>Sl . No</b>	<b>Name of Programme</b>	<b>Program Type</b>	<b>Class</b>	<b>Industry Name / Instn Name</b>	<b>Date (mm-yy)</b>	<b>No of Days</b>	<b>Expenditure(Approx)Rs</b>
1	workshop on "PCB Making"	workshop	S4EC	SFO Technology, Kochi	Mar-17	1	10,000
2	Workshop on "Laptop and Mobile servicing"	workshop	S6EC	PC Engineers Kottayam	Mar-17	1	10,000
3	Expert Talk on "Cellular Communication"	Expert Lecture	S2EC	BSNL	Mar-17	1	5,000
4	Expert Talk on "Entrepreneurship Development"	Expert Lecture	S8EC	Mr.Adarsh V K, Union Bank of India	Mar-17	1	5,000
5	Lower Periyar power house, Karimanal	Industrial Visit	S2EC	Lower Periyar power house, Karimanal	4 March 17	1	30000



<b>Total (Rs)</b>							<b>60,000</b>

**Decision:** The BOG approved the action plan under IIIC cell for the current month.

## **2.10 Ratification of programmes conducted under students support**

### **Soft Skill Training Programme conducted**

Soft Skill Training programmes were conducted for all the batches of students. The details of the programmes conducted and the expenditure details are given below.

<b>Programmes conducted and settled</b>					
<b>Sl. No.</b>	<b>Year &amp; Branch</b>	<b>Programme</b>	<b>No. of Days</b>	<b>Date</b>	<b>Expenditure (Rs)</b>
1	S4 BTech EEE, ECE and CS/ IT	Soft skill training	4	15/2/2017 to 18/2/2017	123719
2	S2 BTech EEE, ECE and CS/ IT	Orientation Programme for placement	4	15/2/2017 to 18/2/2017	100380
<b>Total</b>					<b>2,24,099</b>
<b>Programmes conducted and to be settled</b>					
1	S6 BTech CS and IT	Getting ready for placement	5	3,4,5,10,11 Feb 2017	Advance 40,000
2	S6 BTech EEE	Getting ready for placement	5	3,4,5,10,11 Feb 17	Advance 45,000
3	S6 BTech ECE	Getting ready for placement	5	3,4,5,10,11 Feb 17	Advance 45,000
4	Final year BTech EEE, EC, CS	Aptitude test Training	4	20, 21, 25, 26 Feb 2017	Expected-Rs 110000
5	MTech First Year CS and EC	Aptitude test Training	4	20, 21, 25, 26 Feb 2017	Expected-Rs 25000
6	MTech Second Year CS and EC	Aptitude test Training	4	20, 21, 25, 26 Feb	Expected-Rs 25000

				2017	
<b>Total to be settled</b>					<b>290000</b>

**Discussin:** TEQIP coordinator informed that soft skill training programs were conducted for all the PG & UG students and an amount of Rs.2.24 lakhs was spent and about Rs.2.9 lakhs to be settled under this head. Mr James Joseph enquired about the response of students for this programme. He emphasized the need for developing professionalism and learning culture in campus. He insisted the need of 'Role Models' among faculty so as to propagate the message among students. Principal Dr Jaya V L accepted the suggestions and assured to provide better environment and training for 1<sup>st</sup> year students so as develop a proper thinking and working culture among them. Respected members stressed the need for giving test to assess the students before giving bridge courses so that students will also get an opportunity to evaluate themselves. They also stressed the need for group learning, dividing students into groups of evenly distributed sections.

The Hon'ble Chairman Prof.V.P.N.Nampoori opined that along with uplifting the weak students ample opportunities must be provided to bright students to express their potential. Prof.V.P.N.Nampoori proposed to have an orientation class on Applied Mathematics for both students and faculty.

**Decision:** The BOG took note and ratified the payment towards conducting Soft Skill Training and asked to settle the other programmes conducted immediately.

Also decided to conduct an expert talk on Applied Mathematics for both students and faculty

## **2.11 Action Plan for the Programmes Under students support for the month of March**

The action plan for soft skill training and remedial classes are given in the following sub-sections.

### **2.11.1 Soft Skill Training Programmes for the current month**

The softskill training programmes planned for the current month is as given below:

Sl No	Title of the programme	Target group	No of Days	Proposed dates	Estimated Expenditure (Rs)
1	Aptitude training	BTech Third Year CS/IT, EE, EC	3	March 2017	90000
2	Aptitude training	BTech Final Year CS/IT, EE, EC	3	March 2017	90000
3	Aptitude training	BTech Second Year CS,EC & EE	2	March 2017	75000
4	Aptitude training	B-tech First Year CS,EC & EE	2	March 2017	75000
5	Soft skill Training	MTech First &	3	March 2017	70000

		Second Year CS,EC			
<b>Total</b>					<b>400000</b>

### 2.11.2 Remedial Classes Planned for the current month

<b>REMEDIAL CLASSES PLANNED -MARCH 2017 CS DEPT</b>			
<b>Semester</b>	<b>Subject</b>	<b>Hours</b>	<b>Expected expenditure in Rs</b>
IVCS	Mathematics	4	2400
IVCS	Operating System	4	2400
IVCS	Object oriented Design and Programming	4	2400
IVCS	Computer Organisation and Architecture	4	2400
IICS	C programming	4	2400
IICS	Enginnering Graphics	4	2400
IICS	Basics Electronics	4	2400
IICS	Differential Equations	4	2400
	<b>TOTAL</b>	<b>32</b>	<b>19,200</b>
<b>Remedial Classes Planned for EEE Department</b>			
<b>Semester</b>	<b>Subject</b>	<b>Hrs</b>	<b>Amount</b>
IVEE	Probability Distribution ,Transforms & Numerical Methods	4	2400
IVEE	Synchronous & Induction Machines	4	2400
IVEE	Digital Electronics & Logic Design	4	2400
IVEE	Material Science	3	1800
IVEE	Measurements & Instrumentation	3	1800
II EE	Differential Equations	4	2400
II EE	Engineering Mechanics	4	2400
II EE	Basics of Electronics Engg	4	2400
II EE	Engg Physics	4	2400
	<b>TOTAL</b>	<b>34</b>	<b>20,400</b>

<b>Remedial Classes Planned for EC Department</b>			
<b>Semester</b>	<b>Subject</b>	<b>Hrs</b>	<b>Amount</b>
II EC	Differential Equations	4	2400
II EC	Engineering Graphics	4	2400
II EC	Basics of Mechanical Engineering	4	2400
II EC	Basics of Electrical Engineering	4	2400
IVEC	Probability and Random Process	4	2400
IVEC	Signals & Systems	4	2400
IVEC	Analog Integrated Circuits	4	2400
IVEC	Analog Communication	4	2400
IVEC	Computer Organization	4	2400
	<b>TOTAL</b>	<b>36</b>	<b>21,600</b>

**Decision:** The BOG approved the action plan for remedial classes and the soft skill training programme planned for the current month.

## **2.12 Approval for Conducting Campus Placement under TEQIP**

Radview Technologies wish to conduct a campus placement drive at CE Karunagappally in the month of March. They are looking for suitable candidates in the posts of Associate Software and Embedded Engineers in their Thiruvananthapuram, Kochi, Kozhikode and Bangalore offices. As per PIP of TEQIP, expenditure towards inviting industry for campus interviews and hospitality during campus interviews can be met from TEQIP. It is expected that an amount of Rs 20000 will be required to meet the expenses.

**Discussion:** The BoG enquired about the participants allowed and their eligibility. The Placement coordinator Mr Baiju V explained about the eligibility conditions. The BoG suggested to include students from nearby IHRD colleges for the drive.

**Decision:** The BOG approved the plan for the placement drive

## **2.13 Approval for Vision and Mission of the Institution and different departments.**

The draft of revised Institutional and Departmental (EC, CS and EEE) vision and mission statements were presented in the last BOG meeting. Based on the discussions and suggestions from various stake holders the statements are further revised.

### **Institution**

#### **Vision**

Aspire to be an institution of professional excellence to fulfill the technological needs of the society.

### **Mission**

- Provide education through resourceful programmes that are stimulus to the current and emerging needs of the society.
- Promote innovative teaching and learning to achieve academic excellence in engineering and technology.
- Create an environment conducive for innovative research in cutting edge technologies.
- Equip the students with professionalism, ethical values and social obligations.

## **Department of Computer Science**

### **Vision**

Be a centre of professional excellence for nurturing technically competent and socially committed Computer Engineers.

### **Mission**

- Enlighten the individuals with the advancements in computing through innovative teaching learning methodologies.
- Motivate the students for creative interaction with industry and for the active involvement in co-curricular and extracurricular activities.
- Impart research culture among faculty and students for the advancement of state-of-the-art technologies in computer science and related disciplines.
- Inculcate ethics and social values in individuals to transform them into responsible citizen

## **Department of Electronics and Communication**

### **Vision**

Transforming individuals into professionally excellent and socially responsible Electronics Engineers through value based education.

### **Mission**

- Offer quality undergraduate, graduate & research oriented programmes in Electronics and Communication Engineering.
- Provide modern facilities in a productive environment to students and faculty for continuous improvement.
- Encourage faculty and students to carry out innovative research.
- Motivate the students for active participation in industry, co-curricular and extracurricular activities.
- Inculcate ethics and social values in students to transform them into responsible citizen

## Department Vision and Mission(EEE)

### Vision

Transform individuals to professionally excellent and socially committed Electrical Engineers.

### Mission

- Facilitate quality engineering education to equip young individuals to meet the latest challenges in industry.
- Provide technological assistance and services to meet the growing needs of society.
- Develop and Propagate best energy management practices .
- Provide modern facilities in a conducive environment to students and faculty for continuous improvement.
- Motivate the students for active participation in co-curricular and extracurricular activities.

**Discussion:** Members insisted the need to oblige to the wordings in mission in action too. They stressed that social obligations can be ensured by preparing strategic methods for rain water harvesting, waste disposal, power shortages, water shortage etc.

**Decision:** The BOG approved the Vision and Mission statements.

## 2.14 Expenditure incurred under IOC-Ratification

The expenditure incurred under IOC post the tenth BOG meeting is Rs. **4,99,355/-**. This amount is due to Salaries of TEQIP staff, Consumables purchased for TEQIP cell and other departments, and Operation and Maintenance charges. The details are given in the table below.

Table: Expenditure incurred under IOC

Sl. No	Item	Amount(Rs)
1	Salary and for TEQIP Staff	65485
2	Consumables	
	(a) Stationery - Box File	49993
	(b) Display Board for Accreditation- CS	49778
	(c) Display Board for Accreditation - EC	49778
	(d) Stationery – TEQIP office	07441
	(e) Consumables EE Workshop	24587
3	Operation and Maintenance	
	(a) BOG 10	45953
	(b) AMC – Laptop i5	75000
	(c) AMC – Laptop i7	60000
	(d) AMC – Photostat Machine (Canon) - Library	35100
	(e) TA for pre-closure meeting	20160
<b>Total</b>		<b>499355</b>

**Decision:** The BOG took note and ratified the payment

## Part 3 Reports

### 3.1 Summary of Expenditure as on 28 February 2017

The summary of expenditure as on 28.02.2017 is as below.

**Total Fund Received: Rs.1000 Lakhs,**

**Interest accrued: Rs 15.24 Lakhs**

Sr.No .	Expenditure Name	Expenditure Upto 31 <sup>st</sup> Jan 2017 (Rs in Lakhs)	Expenditure From 1 Feb 2017 – 28 <sup>th</sup> Feb 2017 (Rs in Lakhs)	Cumulative Expenditure upto 28 <sup>th</sup> Feb 2017 (Rs in Lakhs)
1	Procurement	555.60	2.19	557.79
2	Providing Assistantships for Increased enrolment in existing and new PG Programmes in Engineering Disciplines	131.66	4.08	135.74
3	Enhancement of Research and Development and Institutional Consultancy Activities	20.86	0.00	20.86
4	Faculty and staff development for improved competence based on Training Needs Analysis(TNA)	146.29	10.90	157.19
5	Enhanced Interaction with Industry	9.17	2.51	11.68
6	Institutional Management Capacity enhancement	6.65	0	6.65
7	Implementation of Institutional reforms	8.99	0	8.99
8	Academic support for weak students	13.35	2.24	15.59
9	Incremental Operating Cost	51.39	4.99	56.38
<b>Total</b>		<b>943.96</b>	<b>26.91</b>	<b>970.87</b>

**Decision:** The BOG took note of the expenditure under various heads.

### **3.2 Report on Staff Student Satisfaction Survey**

NPIU and MHRD had conducted the first round of Web based Student, Faculty and Staff satisfaction survey of the implementation of TEQIP II activities in the Institutions in Aug-Sep 2016. The compiled reports of the satisfaction survey were shared with the Institutions. This report contains the Student, Faculty and Staff's satisfaction level of the institute and that is compared with State and National satisfaction indices. The survey report was submitted to the BoG for discussion.

**Decision:** The BOG took note of the survey report and congratulated the institution for the good satisfaction index score.

The meeting came to an end at 12.30 pm

**Dr.V P N Nampoori**  
**Chairman**

**Dr.Jaya V L**  
**Principal**



**Minutes of the Fifth Research Guidance Committee for TEQIP II at College of Engineering Karunagappally, Karunagappally, Kollam, Kerala Conducted on 18/03/2017 at 10:00 AM in Principal's room under the chairmanship of Senior Research Advisor Prof. E.Gopinathan**

No: CEK/TEQIP/RPC/05/2014.

18-03-2017

**Agenda**

Silent Prayer

Welcome address by the Principal.

**1.1 Confirming the Minutes of the Fourth Meeting of the Research Guidance Committee held on 30-01-2016 at College of Engineering Karunagappally.**

The Minutes of the fourth Meeting of the Research Guidance Committee held on 30-01-2016 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 status of the proposals.

S. No	Name of PI	Name of Proposal	Fund requested from External Agency (lakhs)	Name of External Funding Agency
1	DrHari V S	Development of Visualizer for k-spaceMRI Data and the Implementation of Quadratic System for Periphery Detection, De-Noising and Brain Segment Volume Detection	42.57	DeitY
2	Deepa A K	Image processing Techniques for Breast Image Analysis Using Mammograms and MRI Images	25.35	KSCSTE

3	Smitha P	Development of Automated System for IHC Scoring and Nuclear Grading of breast cancer	38.49	DBT
4	Jyothi R L	Hand written character recognition of current and ancient Malayalam fonts	11.07	SERB
5	Remya R S	Automated detection of Acute LymphaticLeukaemia	16.31	KSCSTE
6	Shajy L	Analysis of chromatin texture for the estimation of malignancy associated changes	29.95	KSCSTE
7	Jyothi R L	Offline Hand-Written Character Recognition System to Convert Grantha Script on Ancient Palmleaves to Malayalam Characters	11.07	TDIL
8	Remya R S	Automated video forgery detection	13.57	SERB
Total			188.38/-	

### 1.3 Ratification of decision to settle the expenditure of the International Conference conducted on July 8th to 10th 2016.

“INTERNATIONAL CONFERENCE ON COMPUTING COMMUNICATION AND SIGNAL PROCESSING” (ICCCSP-2016) was conducted on 8th and 9th of July 2016, in The Beach Hotel, Kollam, jointly organized by Department of Electronics and Communication Engineering and Department of Computer Science and Engineering of College Of Engineering, Karunagappally under TEQIP II. More than 200 papers were received from all over India. The final report regarding the International Conference on Computing Communication and Signal Processing is also attached as **Annexure II**.

### 1.4 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) Java V L, 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. Dr Smitha P, R&D Coordinator, Member and Principal Investigator
7. Prof. Binu V.P, HOD CSE, Member
8. Dr Hari V S, HOD ECE, Member and Principal Investigator
9. DrShajy L, Principal Investigator
10. Smt. Deepa A K, Principal Investigator
11. Smt. Jyothi R L, Principal Investigator

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

1. Smt. Libi A, HOD EEE, Member
2. Smt. Remya R S, Principal Investigator

The Meeting started at 10.00.AM under the presidency of the Hon'ble Chairman with a silent prayer followed by welcome address by DrAjilkumar A. He also briefed about the fifth place in the TEQIP II final review meeting (status) of the institution and this is achieved under the highlights of the R & D activities. He also commented that this is achieved only because of the RGC committee. He discussed the progress of R & D activities at CE Karunagappally. Chairman commented that this achievement is not because of the RGC and it is only because of the involvement of staff. Other members also supported it.

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 5: Confirming the Minutes of the Fourth Meeting of the Research Guidance Committee held on 30-01-2016 at College of Engineering Karunagappally.**

Minutes of the fourth RGC meeting held on 30.01.2016 was circulated to the RGC members for confirmation. Based on the discussions, the RGC confirmed the approved minutes of the RGC meeting held on 30.01.2016.

#### **Item No 1.2 / RGC 5: 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 members were also discussed. The committee discussed the proposals which are submitted in the following order.

1. DrHari V S: the proposal was submitted for 42.57 lakhs to DeiTy. Two stages of presentations were over but the second level presentation was a telephonic conversation and finally the proposal was not recommended for funding and also shown the copy of rejection letter. DrRajkumarChoudary suggested to resubmit the same by correcting the 3D explanation

part and the justification part. Committee members also enquired about the continuation of the work and Dr Hari accepted to continue the work with the help of two Ph.D students under him. Mr Shajahan commented that polynomial filters are the latest concept and which will be accepted. Dr Gopinathan commented that the amount requested may be high, and for the first time if the amount is less then it may be accepted. So try to reduce the amount requested to 10 to 15 lakhs and resubmit the same.

2. Deepa A K: Project proposal is for 25.35 lakhs and submitted the proposal and no review comments received yet. Dr Gopinathan commented that lot of work is happening in this area and without novelty the proposal may be rejected. Dr Rajkumar Chaoudry asked about the long delay in getting review comments. Mrs Deepa told that none of the investigators are having Ph.D may be the reason for this. So committee members suggested to add a co-PI with doctorate. Mr Shajahan commented to have latest technology other than MRI and Mammograms for the work. Dr Gopinathan suggested to include micro-calcifier identification in detail.

3. Dr Smitha P: Proposal amount is for 38.49 lakhs to DBT and two levels of evaluation is over and reviewers' comments were clarified and waiting for the result. All the committee members congratulated for completing the Ph.D and suggested to have status change in the proposal also. PI clarified that the suggestions were made immediately after getting doctorate. All committee members greeted for the acceptance of the proposal.

4. Jyothi R L: Both the proposals (Grandha Script of 11.07 lakhs to Technology Development for Indian Languages (TDIL) and Malayalam character recognition proposal of 11.07 lakhs to Science and Engineering Research Board (SERB)) are discussed. For the grandha script telephonic interview was over. The current status is enquired by the PI and got the reply that due to lack of fund could not recommend the proposal, if necessary she can submit to other funding agency or she can wait. The committee decided to wait for the funding. Second proposal was initially rejected by SERB stating that it is not coming under their scope, and is now under the consideration of SERB expert committee.

5. Shajy L: Proposal amount is for 29.95 lakhs to the KSCSTE. Initially submitted proposal was stacked for the completion of the Ph. D by the PI and after getting doctorate resubmitted. First level evaluations were over and review comments also received, corrections and justifications were provided to the funding agency for further consideration and waiting for results. The committee approved it and all the members unanimously convinced with the status and suggested as excellent one.

6. Remya R S: In her absence, she submitted a report on both the proposals (Automated video forgery detection for Rs. 13.57 lakhs to SERB and Automated detection of Acute Lymphatic Leukaemia for Rs. 16.31 lakhs to KSCSTE). Her reports states that the proposal given to SERB has been rejected after the evaluation and she is waiting for evaluation of the KSCSTE proposal. The committee members had opinion that the proposal may be rejected due to the

absence of PI's doctorate, and also suggested to have the opinion of her guide (DrGopakumar C) and make her guide as PI to resubmit the proposal. All the committee members are willing to correct the proposals in the resubmission process also.

All the members are satisfied with the R & D activity happening in this college. They expressed their satisfaction in the sincerity of the faculty and appreciated the same. They also extended their help in any regard of this process at any time.

**Item No 1.3 / RGC 5: Ratification of decision to settle the expenditure of the International Conference conducted on July 8th to 10th 2016.**

The details regarding the International Conference on Computing Communication and Signal Processing from July 8th and 9th, 2016 were discussed. The committee members and chairman unanimously appreciated the way the conference was organized as the first international conference. The chairman Dr E Gopinathan and Mr Shajahan were present at the conference days and participated in chairing the venue and chairing the keynote addresses and also noticed the way it has been organized. They were excited to appreciate the same. The expenditure statements have been verified and approved by the committee with an appreciation that in each head the spend amount is less compared to the sanctioned amount. They also congratulated DrGopakumar and its team behind the success of the international conference.

Item	Budget Amount (Rs.)	Actual Expenditure (Rs.)	Registration fee collected
Venue	4,50,000	4,49,525	124001
Printing of Brochures and Posters	50,000	47,955	
TA for resource persons	4,50,000	4,79,295	
Remuneration to resource persons	1,00,000		
Accommodation	90,000		
Transportation	50,000		
Publication of Conference	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	

<b>Total Amount</b>	<b>17,95,000</b>	<b>1380861</b>	<b>124001</b>
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**Item No 1.4 / RGC 5: Any other matter regarding improvement of Research and Development**

R & D coordinator expected the committee's help in forming the Department Advisory Board (DAB) for the departments. DAB needs industrial experts to direct each department in its important decisions, which will be conducted every six months in a year. And all the members accepted to help in this regard.

Once again the committee congratulated for the R & D activity happening in this institution, and Principal Dr Jaya V L delivered the vote of thanks for the committee members on behalf of the college and on behalf of entire team. She also extended her willingness to share the team for the future R & D activity. The committee members also accepted the same. The committee ended at 2. PM

## Annexure 3

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

From: <[nbasupport@gmail.com](mailto:nbasupport@gmail.com)>

Date: Friday, April 21, 2017

Subject: Verification of Accreditation Fee Detail

To: [princharicek@gmail.com](mailto:princharicek@gmail.com)

The prescribed fee for the accreditation as submitted by COLLEGE OF ENGINEERING KARUNAGAPPALLY towards the application No. **2179-08/01/2017** has been verified as per the details below :

### Program details with Fee to be paid-

Discipline	Format	Level	Programme	Total Fee	First Phase Fee	Second Phase Fee
Engineering & Technology	TierII	Post Graduate	Signal Processing	500000	500000	N/A
Engineering & Technology	TierII	Post Graduate	Image Processing	200000	200000	N/A
			Total	700000	700000	N/A
			Service Tax @15.00 %	105000	105000	N/A
			Total With service tax	805000	805000	N/A

**Total Paid Amount with service tax : Rs. 805000**

**Total Paid Amount with service tax (in words) : Eight lac(s) Five Thousand Rupee(s) And Zero Paise Only.**

### Payment Details -

Payment Mode      Demand Draft  
Fee Amount        805000  
Bank Draft No     665695  
Draft Dated        31/03/2017  
Drawn on:         State Bank of Travancore, Karunagappally  
Courier Name       India Post  
Courier Tracking No. RL025893352IN  
Dispatch Date:     10/04/2017

**Transaction ID:** VR NO. 599 FEES VERIFIED MRS USHA HANDA

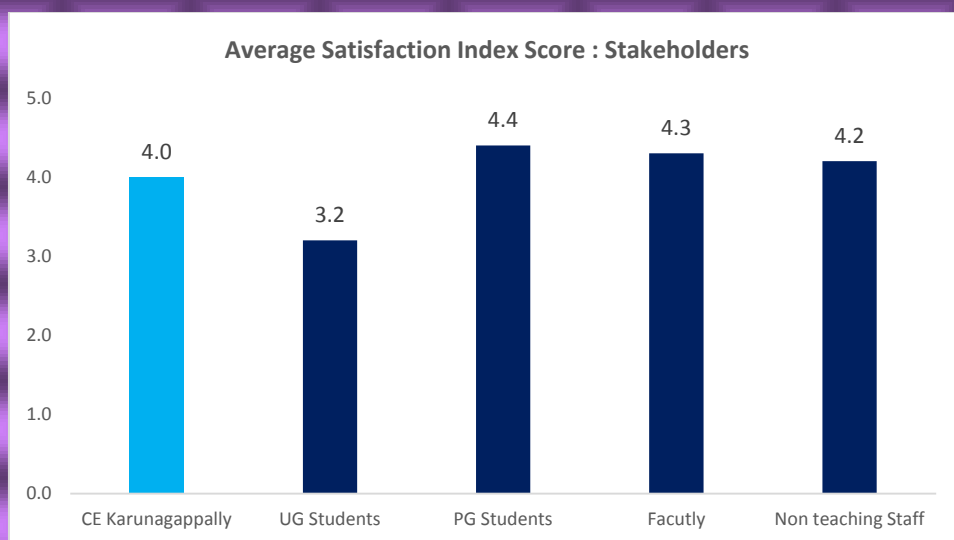
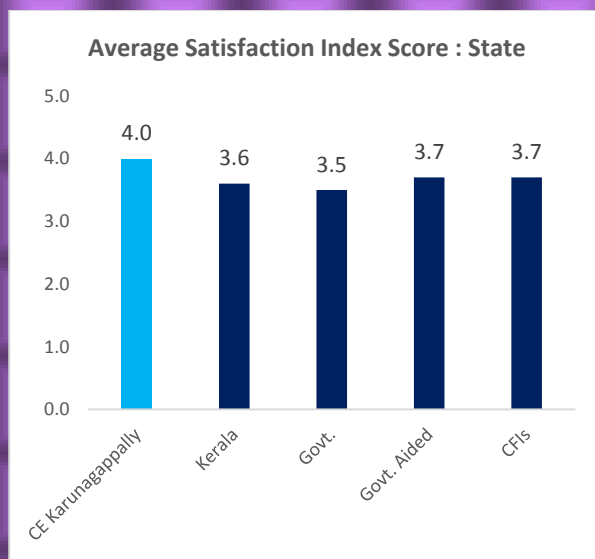
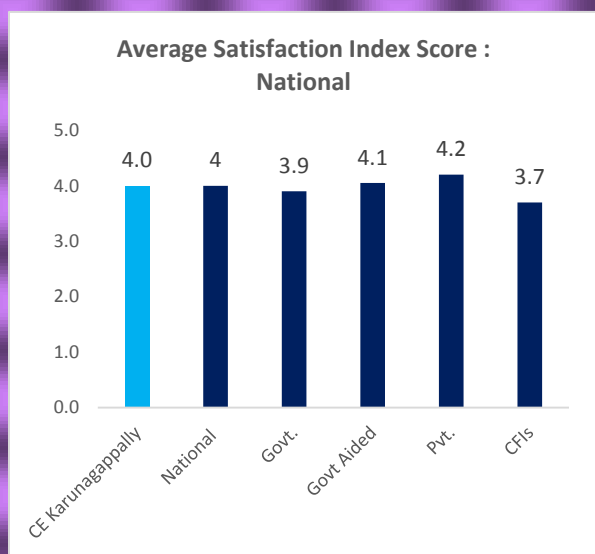
**Transaction Date:** 20-04-2017

You are now required to fill and submit the Self assessment report format for all the programs within 6 months.

Regards  
Accreditation Division  
NBA

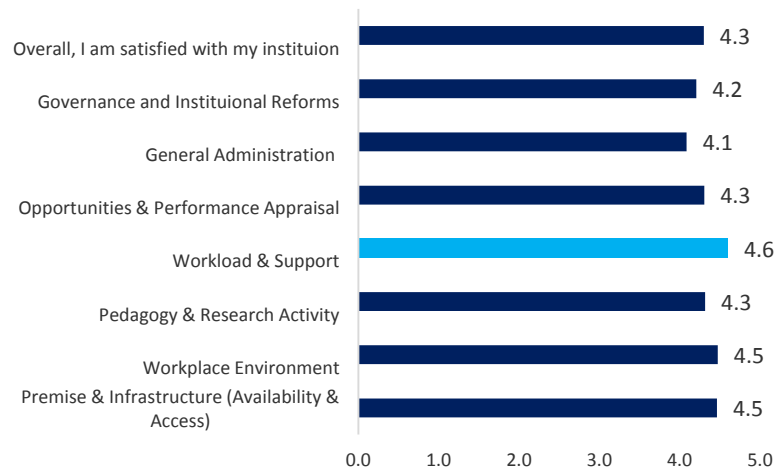
## College of Engineering, Karunagappally, Kollam- Kerala

- College of Engineering, Karunagappally's satisfaction index score (4) is equal to the national average (4) for TEQIP-II institutions.
- College of Engineering, Karunagappally's satisfaction index score (4) exceeds the state average (3.6) for TEQIP-II institutes by 8%.
- PG students at College of Engineering, Karunagappally are the most satisfied.
- UG students the least satisfied





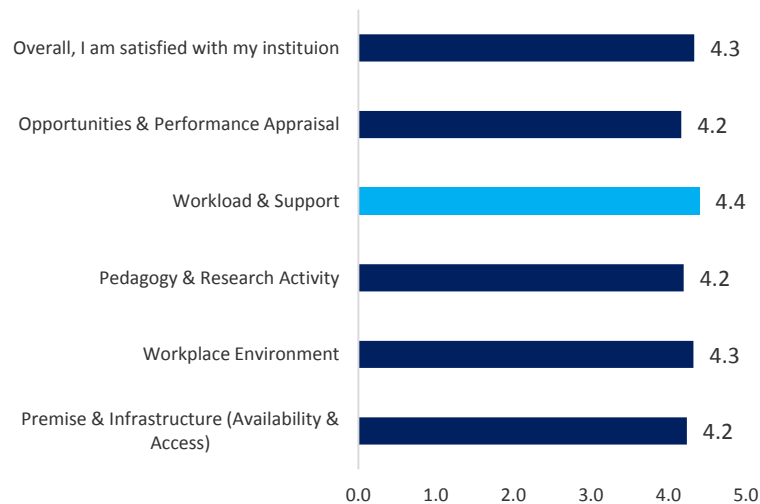
### Faculty: Task and satisfaction



Faculty were asked to rate their satisfaction level. The key findings are:

- Faculty in general are satisfied (score=4.3).
- Amongst various parameters the top scoring satisfaction goes to (i) workload and support (satisfaction score 92%).

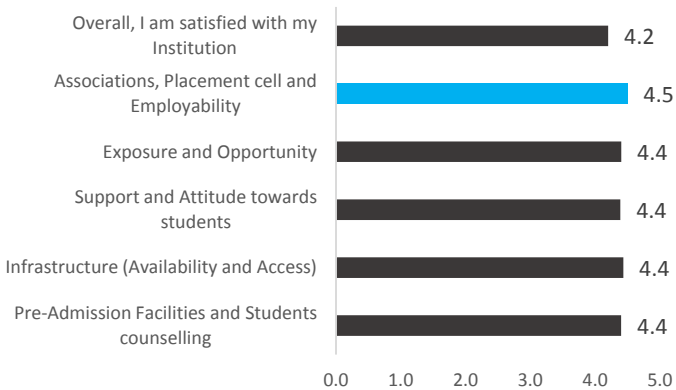
### Non-teaching staff: Task and satisfaction



Non-teaching staff were asked to rate their satisfaction level. The key findings are:

- Non-teaching staff in general are satisfied (score=4.2).
- Amongst various parameters the top scoring satisfaction goes to workload and support (satisfaction score 88%).

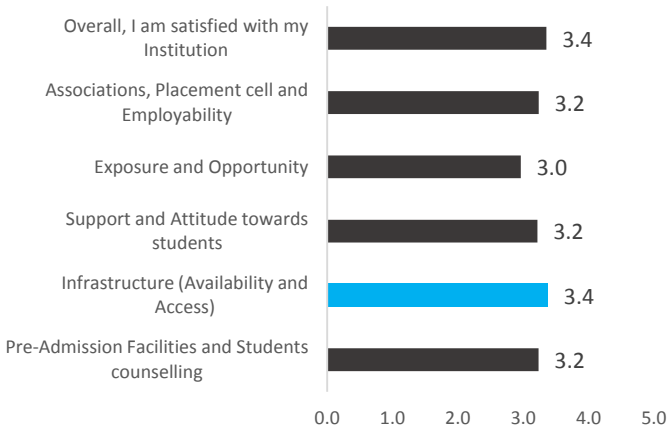
### PG students task and satisfaction



PG students were asked to rate their satisfaction level. The key findings are:

- PG students in general are satisfied (score=4.4).
- Amongst various parameters the top scoring satisfaction goes to Associations, placement cell and employability (satisfaction score 90%).

### UG students task and satisfaction



UG students were asked to rate their satisfaction level. The key findings are:

- UG students in general are neutral (score=3.2).
- Amongst various parameters the top scoring satisfaction goes to infrastructure (availability and access) (satisfaction score 68%).

**State Project Facilitation UNIT**  
**Kerala**  
**Closure Report**

**Name of the Institution :-**

**College of Engineering Karunagappally**

TEQIP II Team Members		
Sl No.	Name	Period
BOG Chairman	Prof.V.P.N.Nampoori	2013 March- Continuing
Mentor	Prof.Sudheer K.P	2013 June - Continuing
Principal	Dr.Hari V S	2013 - Sept 2016
	Dr. Jaya V L	Oct 2016 - Continuing
TEQIP co-ordinator	Dr. Ajilkumar A	2013 - Continuing
Finance Co-ordinator	Dr. Shaji L	2015- Continuing
Academic co-ordinator	Mr. Reji Thankachan	Feb 2016- Continuing
III Cell Co-ordinator	Mr. Baiju V	2013 - Continuing
Research Advisor	Prof. E.Gopinathan	June 2013 - Continuing
Research Co-ordinator	Dr.Smitha P	2013 - Continuing
EAP Co-ordinator	Prof.Premakumari K R	2013 - Continuing
Civil Works Coordinator	Mr.Ganesh	2016 June - Continuing
Monitoring and Evaluation	Mrs.Sheela R	2013 - Continuing

Summary for the Project Activities during the project life span						
(Rs. in lakhs)						
Activities	Total funds received till date	Category of expenditure (Head of expenditure)	Sub-Activity	Original Amount allotted as per PIP	Cumulative Exp. Up to 27 - 07 – 2017 (Rs in Lakhs)	Expenditure (if any) as per action plan till 31.07.2017 (Rs in Lakhs)
(1)	(2)	(3)	(4)	(5)	(6)	
Procurement of goods (equipment, furniture, books, LRs, software and minor items) and civil works for improvement in teaching, training and learning facilities	1000.00	Procurement	Expenditure on ICT enabled learning, related software & hardware.		0.00	
			Expenditure on New laboratory for new PG programs		3.49	
			Expenditure on New laboratory for existing PG programs		64.26	
			Expenditure on Existing laboratories modernized/Strengthened		233.20	
			Expenditure on Library i.e. books, e-books, journals, e-journals course specific software		52.65	
			Expenditure on membership of online journals & consortium		0.00	
			Expenditure on digitally/virtually accessible courses/subjects		0.00	
			Expenditure on Modernising Classrooms		12.97	
			Expenditure on Procurement of Equipment etc. for Institutes/ TEQIP uNIT.		143.35	
			Expenditure on Civil Work		47.86	
			Others. (Specify if any)		0.00	
		<b>Total</b>			<b>557.79</b>	

Provide Teaching and Research Assistantships to increase enrolment in existing and new PG programmes in Engineering disciplines		Assistantships	Expenditure on Masters students enrolled with TEQIP teaching assistantship		140.89	
			Expenditure on PhD Students enrolled with TEQIP research assistantship		0.00	
			Others. (Specify if Material)		0.00	
		<b>Total</b>			<b>140.89</b>	
Enhancement of R & D and institutional consultancy activities		R&D	Expenditure incurred on Research projects taken by UG/ PG students		0.00	
			Expenditure incurred on research publications in engineering in referred journals		0.34	
			Expenditure on Organising Conferences for R & D Topics		13.81	
			Expenditure on Patenting of Research Products		0.00	
			Others. (Specify if Material)		7.27	
		<b>Total</b>			<b>21.43</b>	
Faculty and staff development for improved competence		FSD	Expenditure on Faculty with B Tech enrolled for M Tech against total B Tech faculty		2.52	
			Expenditure on Faculty with M Tech enrolled for PhD in engineering against total M Tech faculty		2.80	
			Expenditure on faculty members attended training in subject domain		109.03	
			Expenditure on faculty members attended pedagogical training		5.81	
			Expenditure on organising in-house subject area training Programs/ Workshops/ seminars / conferences / continuing education programs.		29.19	

			Expenditure on participation by faculty in Seminar/ Conferences/ workshop etc.		14.41	
			Expenditure on staff development		9.38	
			Others. (Specify if Material)		0.19	
		<b>Total</b>			<b>173.33</b>	
Enhanced interaction with Industry		I-I-I- Cells	Expenditure on academic Programs i.e. MTech/PhD etc. with industry		0.00	
			Expenditure on short term programs with industry		8.44	
			Expenditure on academic networking with other institutions		0.00	
			Expenditure incurred on Campus placements (UG & PG)		0.00	
			Expenditure on UG Students attended industrial internship		0.72	
			Others. (Specify if Material)		7.25	
		<b>Total</b>			<b>16.41</b>	
Institutional Management Capacity enhancement		Capacity development	Expenditure on Sr. Officials & Sr. faculty attended management development training		6.41	
			Others. (Specify if Material)		0.91	
		<b>Total</b>			<b>7.32</b>	
Implementation of Institutional academic reforms		Reforms	Expenditure on accreditation fee for NBA		17.04	
			Expenditure incurred on Autonomous Institution status concurred by UGC		0.00	
			Expenditure on Curricula revision/restructuring		0.00	
			Others. (Specify if Material)		0.00	
		<b>Total</b>			<b>17.04</b>	

Academic support for weak students		Student support	Expenditure on students transition from first year to second year of UG Programs (clearing all subjects /courses of 1st year in first attempt)		3.95	
			Others. (Specify if Material)		16.49	
		<b>Total</b>			<b>20.43</b>	
<b>Incremental operating cost</b>		<b>IOC</b>			60.43	1.1
<b>GRAND TOTAL</b>	<b>1000</b>				<b>1015.07</b>	<b>1016.17</b>

***Year wise Expenditure details of all the sub-activities in Procurement***

<b><i>Expenditure on ICT enabled learning, related software&amp; hardware.</i></b>			
<i>Financial Year of acquirement</i>	<i>Sl. No</i>	<i>Item description</i>	<i>Amount</i>
2012-13	-	-	-
2013-14	-	-	-
2014-15	-	-	-
2015-16	-	-	-
2016-17	-	-	-
<b><i>Total</i></b>			-

<b><i>Expenditure on New laboratory for new PG programs</i></b>			
<i>Financial Year of acquirement</i>	<i>Sl. No.</i>	<i>Item description</i>	<i>Amount</i>
2012-13	-	-	-
2013-14	1	FPGA Trainer Kit	3,49,205
2014-15	-	-	-
2015-16	-	-	-
2016-17	-	-	-

<b>Total</b>	<b>3,49,205</b>
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<b>Expenditure on New laboratory for existing PG programs.</b>			
<i>Financial Year of acquirement</i>	<i>Sl No.</i>	<i>Item description</i>	<i>Amount</i>
2012-13	-	-	-
2013-14	1	HFSS Software	6,60,000
	2	Laptop Computers	9,96,975
	3	Mac System	3,01,984
	4	Mat Lab Software	9,94,438
	5	Measuring Instrument II	77,860
	6	Open Hardware	1,38,390
	7	USRP	5,10,300
	8	Work Station Computer	1,56,015
2014-15	-	-	-
2015-16	-	-	-
2016-17	-	-	-
<b>Total</b>			<b>38,35,962</b>

<b>Expenditure on Existing laboratories modernized/Strengthened</b>			
<i>Financial Year of acquirement</i>	<i>Sl. No</i>	<i>Item description</i>	<i>Amount</i>
2012-13	-	-	-
2013-14	1	Adobe Software	3,14,204
	2	Bread Board	17,862
	3	Computer Hardware & Accessories	7,43,434
	4	Digital IC Tester	33,300



	5	<i>Function Generator</i>	9,81,703
	6	<i>Hardware for Network Lab</i>	33,180
	7	<i>Measuring Instrument I</i>	1,21,012
	8	<i>N Computing System</i>	4,22,100
	9	<i>Network Simulator &amp; Trainer Kit</i>	2,13,824
	10	<i>Orcad</i>	2,62,500
	11	<i>Power Lab Kit</i>	83,130
	12	<i>Relays</i>	88,484
	13	<i>Rheostat</i>	2,39,342
	14	<i>Servo Controlled Voltage Stabilizer</i>	96,489
2014-15	1	<i>AC Machines</i>	5,32,826
	2	<i>AEE Lab Trainer Kit</i>	1,31,535
	3	<i>Carpentry General Engineering Tools</i>	1,89,950
	4	<i>DC Motor Alternator Set</i>	3,06,448
	5	<i>DC Power Supply</i>	6,96,733
	6	<i>Digital IC Trainer Kit</i>	1,17,000
	7	<i>DSP Starter Kit</i>	4,66,838
	8	<i>ETAP Software</i>	1,90,528
	9	<i>Fitting Shop Tools</i>	4,35,855
	10	<i>Hardware for Project Lab</i>	2,27,168
	11	<i>Language Laboratory Software</i>	1,15,000
	12	<i>Lan Trainer</i>	1,02,900
	13	<i>PCB Lab Equipment</i>	52,899
	14	<i>Proteus PCB Design Software</i>	3,41,250
	15	<i>PSCAD Software</i>	4,41,975
	16	<i>Rectifier Unit</i>	1,61,582
	17	<i>Soldering Iron</i>	68,357
	18	<i>Transformers</i>	1,28,695
	19	<i>Vacuum Cleaner</i>	10,280
2015-16	1	<i>3D Printer</i>	1,53,000
	2	<i>DC Machines and servo motor</i>	8,15,557

	3	Microprocessors and Microcontrollers	5,44,504
	4	Microwave Test Bench	1,86,942
	5	Portable Hardware Device	37,280
2016-17	1	Analog metre	23,759
	2	Chemistry lab Equipment	2,00,504
	3	Digital clamp Power Meter	31,201
	4	Digital Multimeter	49,922
	5	Dumpy Level	23,625
	6	Electrical Meters	43,577
	7	Furniture Desk Bench Stool	5,29,532
	8	Keil Development Tools	1,36,802
	9	Machines lab equipment	2,91,070
	10	Moderna Chair	1,22,229
	11	Physics Lab Equipment	2,08,483
	12	PLC Trainer Kit	1,63,632
	13	Public Address system	1,23,000
	14	smithy and Foundry tools	1,11,618
	15	Teachers PA System	32,400
	16	Ultraviolet Exposing Unit	24,000
<b>Total</b>			<b>1,22,21,020</b>

<b>Expenditure on Library i.e. books, e-books, journals, e-journals course specific software.</b>			
<i>Financial Year of acquirement</i>	<i>Sl. No</i>	<i>Item description</i>	<i>Amount</i>
2012-13	-	-	-
2013-14	1	E-Journals Elsevier	4,59,459
	2	IEEE-ASPP E-Journal	3,72,780
	3	Springer E journal	2,05,620
	4	Library Books CS	5,97,512

2014-15	1	CCTV Camera Surveillance	87,675
	2	Furniture Book Shelves	9,15,428
	3	Library Books EC1	7,16,800
	4	Library Books EEE	2,60,611
	5	Library Books IT	5,70,494
	6	Library Books Mechanical	75,151
2015-16	1	Books for competitive exams	1,09,066
	2	E Journal – Science Direct	5,56,756
	3	Library Books Applied Science	2,60,000
	4	Springer E Journal	2,03,837
2016-17	1	E Journal IEEE	6,27,281
	2	Library Books EC2	1,62,154
<b>Total</b>			<b>61,80,594</b>

<b>Expenditure on membership of online journals &amp; consortium.</b>			
<i>Financial Year of acquirement</i>	<i>Sl. No</i>	<i>Item description</i>	<i>Amount</i>
2012-13	-	-	-
2013-14	-	-	-
2014-15	-	-	-
2015-16	-	-	-
2016-17	-	-	-
<b>Total</b>			<b>-</b>

<b>Expenditure on digitally/virtually accessible courses/subjects.</b>
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<i>Financial Year of acquirement</i>	<i>Sl No</i>	<i>Item description</i>	<i>Amount</i>
2012-13	-	-	-
2013-14	-	-	-
2014-15	-	-	-
2015-16	-	-	-
2016-17	-	-	-
<b>Total</b>			-

<b>Expenditure on Modernising Classrooms.</b>			
<i>Financial Year of acquirement</i>	<i>Sl No</i>	<i>Item description</i>	<i>Amount</i>
2012-13	-	-	-
2013-14	-	Classroom Modernization	4,90,060
2014-15	-	-	-
2015-16	-	-	-
2016-17	-	-	-
<b>Total</b>			<b>4,90,060</b>

<b>Expenditure on Procurement of Equipment etc. for Institutes/ TEQIP UNIT.</b>			
<i>Financial Year of acquirement</i>	<i>Sl No</i>	<i>Item description</i>	<i>Amount</i>
2012-13	-	-	-
2013-14	1	Accounting Software Tally	17,900
	2	Duplicating Machine	1,51,900
	3	Fire Extinguisher	2,80,239
	4	Furniture in Seminar Hall	3,41,554

	5	Microsoft OVS	1,78,383
	6	Power Quality Analyser	4,22,000
	7	Tool Kit	14,313
2014-15	1	Air Conditioner	9,06,000
	2	Campus Networking	15,73,208
	3	Desktop Computers	94,06,608
	4	Diesel Generator Set	8,85,000
	5	Digital Storage Oscilloscope	19,78,276
	6	Equipment for Smart Class Room	5,30,738
	7	Firewall	2,26,388
	8	ID Card Printer	97,522
	9	Office Furniture	6,05,533
	10	Photostat Machine	2,04,054
	11	Printer & Scanner	2,81,142
	12	Server Computer	7,71,481
	13	UPS	27,23,383
	14	Water Dispenser	24,580
2015-16	1	Computer Table	1,23,431
	2	Currency counter	11,850
	3	Display Board	73,738
	4	Dream Spark	1,39,106
	5	Electronic private automatic branch exchange	1,94,450
	6	Unitized Substation	24,45,298
	7	Water cooler	70,500
2016-17	1	Automatic Power Factor Correction Unit	3,26,373
	2	Embedded Development Boards	1,13,497
	3	Extension of Campus Networking	3,14,561
	4	Furniture Chair Table Almirah	7,74,364
	5	High performance computing station	7,64,166
	6	Solar Driven Invertor	4,50,000
	7	Teaching Aids in Classrooms	4,71,000

<b>Total</b>	<b>2,79,17,245</b>
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<b>Expenditure on Civil Work.</b>			
<i>Financial Year of acquirement</i>	<i>Sl No</i>	<i>Item description</i>	<i>Amount</i>
2012-13	-	--	-
2013-14	1	Construction of Platform for Machines	1,78,533
	2	False Ceiling Works of Coputer Laboratories	1,87,215
	3	Refurbishment Of Various Lab	6,15,131
2014-15	1	Partition Walls & Allied Works	10,51,676
	2	Generator Room, Transformer Room & Cable Trench	3,68,425
2015-16	1	Generator Room, Transformer Room & Cable Trench	4,89,614
	2	Civilworks college Electrical Works	11,16,074
2016-17	1	Minor Civil works	6,88,592
	2	Electrical works- Library, Office, EEE	90,455
<b>Total</b>			<b>47,85,715</b>

<b>Year wise Summary of Expenditure on Procurement of goods</b>		
<i>Financial Year of acquirement</i>	<i>Sl No.</i>	<i>Amount</i>
2012-13	1	-
2013-14	1	1,23,73,039.00
2014-15	1	2,89,77,992.00
2015-16	1	75,31,003.00
2016-17	1	68,97,797.00
<b>Grand Total</b>		<b>5,57,79,831.00</b>

## 2. Year wise Expenditure details of all the sub-activities in teaching assistantship

<b>Assistantships- Expenditure on Masters students enrolled with TEQIP teaching assistantship</b>			
<i>Financial Year of acquirement</i>	<i>Sl. No</i>	<i>No of assistantships in each category</i>	<i>Amount</i>
2012-13	-	-	-
2013-14	-	51	18,12,000
2014-15	-	46	17,87,000
2015-16	-	66	57,60,000
2016-17	-	63	46,22,775
2017-18	-	21	02,16,000
<b>Total</b>			<b>1,41,97,775</b>

<b>Assistantships- Expenditure on PhD Students enrolled with TEQIP research assistantship</b>			
<i>Financial Year of acquirement</i>	<i>Sl. No</i>	<i>No of assistantships in each category</i>	<i>Amount</i>
2012-13	-	-	-
2013-14	-	-	-
2014-15	-	-	-
2015-16	-	-	-
2016-17	-	-	-
<b>Total</b>			-
<b>Assistantships- Others. (Specify if any)</b>			
<i>Financial Year of acquirement</i>	<i>Sl. No</i>	<i>No of assistantships in each category</i>	<i>Amount</i>
2012-13	-	-	-
2013-14	-	-	-
2014-15	-	-	-

2015-16	-	-	-
2016-17		-	-
<b>Total</b>			-
<b>Assistantships- Year wise Summary</b>			
<i>Financial Year of acquirement</i>	<i>Sl. No</i>	<i>Amount</i>	
2012-13	-	--	
2013-14	1	18,12,000	
2014-15	1	17,87,000	
2015-16	1	57,60,000	
2016-17	1	46,22,775	
2017-18	1	02,16,000	
<b>Grand Total</b>		<b>1,41,97,775</b>	

### **3. Year wise Expenditure details of all the sub-activities in Research and Development**

<b>Expenditure incurred on Research projects taken by UG/ PG students</b>				
<i>Financial Year of acquirement</i>	<i>Sl No.</i>	<i>Name of the Research project</i>	<i>Name of Faculty</i>	<i>Amount</i>
2012-13	-	-	-	-
2013-14	-	-	-	-
2014-15	-	-	-	-
2015-16	1	Automated detection of Alzeimers disease using QVF	Hari V S	39,967
	2	Image processing techniques for breast image analysis	Deepa A K	46,505
	3	Video tampering detection- An application to video forensics	Remya R S	98,272
	4	Automated cancer detection and grading of breast microscopy images	Smitha P	1,00,691



	5	Early lungs cancer detection through extraction and analysis of sputum cell images	Shajy L	99,087
	6	Handwritten character recognition from manuscripts written in ancient grantha scripts	Jyothi R L	40,146
	7	Detection of acute lymphocytic Leukemia	Remya R S	55,788
	8	Handwritten character recognition of various ancient and current Malayalam fonts	Jyothi R L	51,890
2016-17	-	-	-	-
<b>Total</b>				<b>5,32,346</b>

<b>Expenditure incurred on research publications in engineering in referred journals</b>				
Financial Year of acquirement	Sl. No	Name of the Research project	Name of Faculty	Amount
2012-13	-	-	-	-
2013-14	-	-	-	-
2014-15	-	-	-	-
2015-16	1	Journal Publication fee .(IJECE)	Dr. C Gopakumar	6,000
	2	Journal Publication fee. (IJAER)	Dr. Shaji L	10,100
	3	Journal Publication fee. (IJST)	Dr. Smitha P	8,550
2016-17	-	-	-	-
<b>Total</b>				<b>24,650</b>

<b>Expenditure on Organising Conferences for R &amp; D Topics</b>									
Financial Year	Sl No	Name of the Conference	Name of co-ordinator	Conference Venue	No .of Papers received	No of papers accepted	TA/DA	Honorarium	Other Expense
2012-13	-	-	-	-	-	-	-		-
2013-14	1	Conducted SRA	Smitha P	CE Karunag	-	-	16,415	11,000	9,940

		<i>Meeting</i>		<i>appally</i>					
2014-15	-	-	-	-	-	-	-		-
2015-16	1	<i>Conducted RGC Meeting</i>	<i>Smitha P</i>	<i>CE Karunag appally</i>	-	-	18,691	11,000	9,679
	2	<i>Conducted RGC Meeting (IV)</i>	<i>Smitha P</i>	<i>CE Karunag appally</i>	-	-	6,230	11,000	6,727
	3	<i>Purchase of office stationary for conducting International conference (ICCSP 2016)</i>	<i>Dr. C Gopaku mar</i>	<i>CE Karunag appally</i>	-	-	-	-	47,955
2016-17	1	<i>Payment for conducting International conference Proceedings publication</i>	<i>Dr. Gopaku mar C</i>	<i>CE Karunag appally</i>	-	-	-	-	1,14,600
	2	<i>Expenditure on International conference venue</i>	<i>Dr. Gopaku mar C</i>	<i>CE Karunag appally</i>	208	71	2,65,233	1,21,800	8,31,721
	3	<i>Expert talk on how to do research</i>	<i>Dr. Smitha P</i>	<i>CE Karunag appally</i>	-	-	1,200	5,000	2,150

	4	Conducted RGC Meeting	Dr. Smitha P	CE Karunag appally	-	-	8,750	11000	17,811
<b>Total</b>							<b>42,536</b>	<b>38,000</b>	<b>14,47,366</b>

<b>Expenditure on Patenting of Research Products</b>				
<i>Financial Year of acquirement</i>	<i>Sl. No</i>	<i>Description of Research product</i>	<i>Name of Faculty</i>	<i>Amount</i>
2012-13	-	-	-	-
2013-14	-	-	-	-
2014-15	-	-	-	-
2015-16	-	-	-	-
2016-17	-	-	-	-
<b>Total-</b>				-

<b>Expenditure on Others. (Enhancement of R &amp; D ICA)</b>						
<i>Financial Year of acquirement</i>	<i>Sl No</i>	<i>Description</i>	<i>Name of Faculty/ coordinator</i>	<i>TA/ DA</i>	<i>Honorarium</i>	<i>Other Amount</i>
2012-13	-	-	-			-
2013-14	-	-	-	-	-	-
2014-15	1	RGC Meeting	Smitha P	18576	11000	7199
2015-16	-	-	-	-	-	-
2016-17	1	Renewal of IEEE Membership fee	Raju M	-	-	3,845
	2	Renewal of IEEE Membership fee	Deepa A K	-	-	2,790
	3	Renewal of IEEE Membership fee	C V Anil Kumar	-	-	2,630

	4	Expert Talk on Applied Mathematic	Dr. V P N Nampoori	3,750	3,000	4,386
<b>Total</b>				<b>22,326</b>	<b>14,000</b>	<b>20,850</b>

**4. Year wise Expenditure details of all the sub-activities in Faculty and Staff Development**

<b>4 a. Expenditure on Faculty with B Tech enrolled for M Tech against total B Tech faculty</b>				
Financial Year of acquirement	Sl. No	Name of Faculty	Institution in which is enrolled	Amount
2012-13	-	-	-	-
2013-14	1	Anuja V Nair	SCT College of Engg, Thiruvananthapuram	35,000
2014-15	-	-	-	-
2015-16	-	-	-	-
2016-17	1	Vinod R	IIT Madras	17,399
				12,950
				31,040
				13,913
	2	Sabeena K K	CE Thiruvananthapuram	32,910
	3	Aneesha Muhammed	NIT Calicut	1,40,000
<b>Total</b>				<b>2,83,212</b>

<b>4.b Expenditure on Faculty with M Tech enrolled for PhD in engineering against total M Tech faculty</b>				
Financial Year of acquirement	Sl No	Name of Faculty	Institution in which enrolled	Amount

2012-13	-	-	-	-
2013-14	1	Hari V S – Printing charges for PHD Thesis Paper	School of Engineering Cochin University of Science and Technology	13,850
2014-15	1	Shaji L– Phd Tuition Fee	Anna University, Chennai	18,000
	2	Smitha P– Phd Tuition Fee	Anna University, Chennai	18,000
	3	Raju M– Phd Tuition Fee	Karpagam university , Coimbatore	29,000
	4	Shaji L– Phd Tuition Fee	Anna University, Chennai	15,100
	5	Smitha P– Phd Tuition Fee	Anna University, Chennai	15,100
2015-16	1	Raju M – Phd Tuition Fee	Karpagam university , Coimbatore	23,000
	2	Smitha P– Phd Tuition Fee	Anna University, Chennai	15,100
	3	Shaji L– Phd Tuition Fee	Anna University, Chennai	15,100
	4	Smitha P – Printing charges for Phd thesis work	Anna University, Chennai	12,260
	5	Shaji L– Printing charges for Phd thesis work	Anna University, Chennai	10,640
	6	Raju M – Phd Tuition Fee	Karpagam university , Coimbatore	6,000
2016-17	1	Raju M– Phd Tuition Fee	Karpagam university , Coimbatore	29,000
	2	Shani Raj – Phd Tuition Fee	Karpagam university , Coimbatore	29,000
<b>Total</b>				<b>2,49,150</b>

<b>4.c Expenditure On Faculty Members Attended Training In Subject Domain</b>							
Final	Sl No.	Description Of The Programme	Name Of Faculty/Staff	Institution In Which It Is	No Of	Amount Course Fee	Amt TA/DA)

Year				Conducted	Days		
2012 -13	-	-	-	-	-	-	-
2013 -14	1	Applications Of Linear Algebra	Remya R S Dr. Shaji L	LBS IT, Thiruvananthapuram	6	-	2,580 2,580
	2	Numerical Simulation Using Matlab	Jayadeep Kumar J	Govt. Engineering College, Barton Hill	6	-	2,580
	3	Recent Trends In Renewable Energy System	Premnath G Libi A	CE, Adoor	5	-	1,832 1,832
	4	Windows And Linux System Administration	Deepa A K Shiny C	NIT, Trichy	4	3,500 3,500	4,910 4,910
	5	STTP On Essentials Of Optimization Techniques	Dr. Ajil Kumar Jayadeep Kumar Sheela R Rethi Kumari	Govt. Engineering College, Trissur	5	5,000 5,000 5,000 5,000	7,662 6,711 6,826 6,826
	6	VLSI Design	Deepa T R Shiny C	Tkm College Of Engineering, Kollam	5	500 500	2,656 2,656
	7	Pattern Recognition	Jyothi R L	Gandhi Institute Of Technology, Kottayam	5	2,000	2,912
	8	Recent Trends In Communications And Signal Processing	Reji Thankachan Sylsh S	MNIT, Jaipur	5	2,000 2,000	18,224 18,224
	9	Oracle 11g Data Base Administration	Vinod R	ESCI, Hyderabad	5	28,090	10,836
	10	STTP On Economics And Financing Of Renewable Energy	Dr. Ajil Kumar	IIT, Delhi	4	22,472	26,480

		Technologies					
11	Network Administration: Configuring And Securing Lan And Wan	Sabeena K Jyothi R L Anilkumar A	ESCI, Hyderabad	5	22,753 22,753 22,753	13,443 13,443 7,713	
12	Testing And Commissioning Of Electrical Equipments In Power Utilities	Libi A	ESCI, Hyderabad	5	25,843	15,211	
13	Intelligent Methods Towards Computational Linguistics	Jayakrishnan A Abin P R	CE, Cherthala	6	500 500	2,348 2,348	
14	Information Delivery System For Academic And Research Institutions	Manoj Ray D Kuryachan T D	Icfoss And IIITMk, Thiruvananthapuram	3	5,000 5,000	2,415 2,806	
15	Advanced Communication Technologies	Sree S Bhagya Santhini Paul Meharuniza N Remya R S	RIT, Kottayam	3	1,000 1,000 1,000 1,000	1,648 1,648 1,648 1,928	
16	Research Issues In Data Mining	Smitha P Shajy L	Govt. College Of Engineering, TN	7	500 500	12,612 12,612	
17	Modern Display Devices Based On Nano Technology	Rethi Kumary S	CE Adoor	1	-	279	
18	Study And Maintenance Of Electrical And Electronics Lab Equipments	Vinod S	CE, Vadakkara	5	250	5,908	
19	Number Theory	Seena Jojith	LBS IT,	3	-	1,636	

		<i>And Cryptography</i>	<i>Sreelekshmi M</i> <i>Alkha Mohan</i> <i>Aiswarya S</i>	<i>Poojappura, Tkm</i>			1,636 1,636 1,636
	20	<i>Advanced Digital Signal Processing</i>	<i>Haseena P Y</i> <i>Libi A</i> <i>Aswathy S S</i> <i>Akhila L</i> <i>Remya A R</i> <i>Jeena James</i> <i>Reshmi V S</i> <i>Aryamol</i> <i>Sudhakaran</i>	<i>TKM College Of Engineering, Kollam</i>	5	500 500 500 500 500 500 500 500	2,558 2,558 2,168 2,168 2,168 2,168 2,168 2,168
	21	<i>Research Issues In Heterogeneous Wireless Networks</i>	<i>Sylish S V</i> <i>Vinod R</i>	<i>Pondicherry Engineering College</i>	5	-	8,857 8,857
	22	<i>Advanced DBMS</i>	<i>Santhini Paul</i>	<i>CE, Perumon</i>	3	2,500	1,702
	23	<i>Emerging Trends In Power Sector</i>	<i>Reshmi V S</i> <i>Vinod S</i> <i>Sabeena A</i>	<i>PRS College Of Engineering And Technology, TVM</i>	2	1,000 1,000 1,000	1,488 1,488 1,488
	24	<i>Research Document Preparation Using Latex</i>	<i>Remya R S</i>	<i>CE, Thiruvananthapuram</i>	5	-	2,690
	25	<i>Linear Algebra</i>	<i>Sheela R</i> <i>Meharuniza Nazim</i>	<i>LBS IT, Thiruvananthapuram</i>	5	-	2,910 2,036
	26	<i>Application Development Using Java</i>	<i>Sabeena K</i> <i>Anilkumar A</i>	<i>Tkm Engineering College, Kollam</i>	3	-	2,252 2,427
	27	<i>Advanced Techniques For Satellite Analysis</i>	<i>Reji Thankachan</i> <i>Deepa V S</i> <i>Dr. Hari</i>	<i>IIT, Mumbai</i>	5	-	23,601 23,884 24,015



			Sylish S				23,569
			Jyothi R L				23,434
28	Fuzzy Systems And Applications	Remya R S	NIT Thiruchirappally	1	1,000		5,119
29	Parallel Computing Using Cuda	Manoj Raj D Geetha S, Sabeena K	Govt. Engineering College, Thiruvananthapuram	3	-		2,092 2,092 2,092
30	Training On Financial Management And Efm	Libi A Dr. Shaji L	CET	1	-		1,692 1,692
31	Network On Chip	Geetha S Smitha P Remya R Shaji L	Tkm College Of Engineering, Kollam	2	-		2,024 2,024 2,024 2,024
32	Robotics and embedded systems	Deepa T R	CE Perumon	5	3,000		2,528
33	Linux Server Administration	Kuryachan T D Anilkumar A	ESCI, Hyderabad	4	22,472		6,548 6,548
34	Design And Analysis Of Algorithm	Sabeena K Jyothi R L	IIITM-K, Technopark, Thiruvananthapuram	5	1,500 1,500		2,528 2,528
35	Industrial Automating System - Programmable Logic Controllers And Scada System (Plcs)	Sabeena A Aryamol Sudhakaran	College Of Engg, Cherthala	5	500 500		2,413 2,413
36	Research Methods, Issues And Challenges	Shaji L	CE Perumon	6	5,000		2,758
37	Workshop On Open Software For	Jincy William	CE, Thalassery	5	500		1,512

		<i>Library Management Using Koha</i>					
	38	<i>Workshop On Open Source Software For Library Managementsing KOHA and Dspace</i>	<i>Jincy William</i>	<i>CE, Cherthala</i>	3	500	873
	39	<i>National Workshop On Advanced Research And Development Activities</i>	<i>Deepa A K</i> <i>Remya R S</i>	<i>ISTE, Hotel ITC Gardenia, Bangalore</i>	3	25,000 25,000	5,091 4,476
	40	<i>Data Mining Techniques</i>	<i>Shajy L</i>	<i>CE Kidangoor</i>	3	500	2,219
2014-15	1	<i>STTP On Telecommunication Networks With State - Of - The - Art Hands On Experiments</i>	<i>Sylish S V</i> <i>Vinod R</i> <i>Kuryachan T D</i>	<i>IIT Kharagpur</i>	8	10,000 10,000 10,000	24,229 22,629 14,966
	2	<i>STTP On Mobile Computing And Communication</i>	<i>Dr. C Gopakumar</i> <i>Remya R S</i> <i>Smitha P</i> <i>Libi A</i> <i>Deepa A K</i> <i>Deepa V S</i>	<i>NIT Delhi</i>	5	1,000 1,000 1,000 1,000 1,000 1,000	34,206 13,643 33,356 33,406 33,406 33,406
	3	<i>Mechatronics, Mems And Micro-Fabrication</i>	<i>C V Anil Kumar</i> <i>Jayadeep Kumar J</i>	<i>IIT Indore</i>	5	6,000 6,000	23,053 23,053
	4	<i>STTP On Recent Advances In Biomedical Engineering</i>	<i>Remya R S</i>	<i>CET</i>	6	-	2,808
	5	<i>Network Security</i>	<i>Sylish S V</i>	<i>ESCI</i>	5	22,753	17,921

		Administration	Binu V P Kuryachan T D Anilkumar A	Hyderabad		22,753 22,753 22,753	17,921 7,849 7,849
	6	STTP on Information Security	Sree S Bhagya Seena Jojith	LBS IT, Poojappura	3	-	1,636 1,636
	7	STTP On Modern Trends In Energy, Environment And Green Technology	Jayadeep Kumar J	School Of Engg. CUSAT, Cochin	5	1,000	4,533
	8	FDP On Research Trends In Semi Conductor Device Modelling And Fabrication	Renjini S Aswathy S S	CE Cherthala	5	1,000 1,000	2,198 2,198
	9	Pedagogy Implementation In Mathematics For Engineering Education	Reji Thankachan Libi A Remya R S Anuja V Nair	IIT Guwahati	5	-	28,921 29,453 29,453 28,253
2015 -16	1	Microsoft Saksham IT Championship	Remya R S	Mar Baselious College Of Engineering & Technologies	5	-	2,818
	2	Power Industry - Familiarisation At PETARC	Raju M Ajmal K	PETARC, Moolamattom, Idukki	3	10,000 10,000	2,191 1,700
	3	FDP On Research Methodology	Anu Mohan	CE Adoor	5	1,000	878
	4	STTP On Solar Energy Conversion And Management	Raju M	IIT Guwahati	5	-	32,772
	5	Clean Energy System And Technology	Ajmal K Raju M Interest for Delay	NIT Goa	3	5,000 5,000	10,496 9,584 -25

6	FDP On Microcontroller And Its Application To Power Convertors	Raju M	IIT Roorkee	5	-	28,607
7	Language Computing	Jyothi R L Sylish S V Anilkumar A	CDAC Vellayambalam	5	28,625 28,625 28,625	2,493 1,610 2,493
8	Computational Fluid Dynamics	Baiju V Premnath G	CE Adoor	5	5,000 5,000	1,218 1,218
9	FDP On Research Methodology For Science, Engineering And Management	Haseena P Y Prema kumary K R	NIT Calicut	5	7,500 7,500	2,432 2,573
10	Fdp On Signal Processing For Biomedical Applications	Haseena P Y	MES College Of Engineering Kuttipuram	5	2,000	2,654
11	Fdp On Electrical System Design And Electrical Cad	Meera Murali Preema R Chandran	E Vadakkara	5	1,500 1,500	2,988 2,988
12	Summer School On Image Processing	Dr. C Gopakumar Anuja V Nair Jyothi R L Remya R S Anilkumar A	NIT Kurushetra	5	1,500 1,500 1,500 1,500 1,500	38,550 36,054 29,338 36,054 18,585
13	STTP On Antennas And Microwave Passive Components- Design & Measurements	C V Anil Kumar Dr. C Gopakumar	IIT Kharagpur	7	15,000 15,000	29,404 29,404
14	Phd Synopsis Submission- Smitha P	-	-	-	-	7,524

	15	Phd Synopsis Submission- Shajil	-	-	-	-	7,494
2016-17	1	FDP On Semi Conductor Devices, Circuits And Systems - With A Research Perspective	Retheekumary S Santhi Vijai Shamna S S Subeena H Niyas S K	Model Finishing School, Thiruvananthapuram	5	35,000 35,000 35,000 35,000 35,000	2,033 1,526 1,526 1,526 1,526
	2	Computer Simulation And Visualization Tools For Research	Binu V P Manoj Ray D Sheena S Nowshad Sethu Lekshmi U S Tintumol C R	MEC, Thrikakkara	5	35,000 35,000 35,000 35,000 35,000	2,192 - 1,648 1,648 1,648
	3	Cyber Security: An Investigator's Perspective	Sabeena K Anilkumar A Jyothi R L Retheekumary S Sheela R Remya R S Ganesh B Shani Raj Geetha S Dr. Geetha S Revikumar Thampi V R	Model Finishing School, Thiruvananthapuram	5	35,000 35,000 35,000 35,000 35,000 35,000 35,000 35,000 35,000 35,000 35,000	1,920 1,920 1,920 2,033 2,033 1,920 1,920 1,920 1,920 2,033 1,920
	4	Research Trends In Computing Algorithm	Alkha Mohan Arya Chandran Hariharan	MEC, Thrikkakkara	5	35,000 35,000 35,000	1,558 1,558 1,558

			Manoj Ray D			35,000	-
			Swetha Saira Appoose			35,000	1,558
	5	Cyber Defense And Forensic Investigation	Binu V P	ESCI Hyderabad	5	28,750	9,853
	6	Essentials Of Energy Management	Revikumar Thampi V R	MEC, Ernakulam	5	35,000	1,960
			Dr. Ajil Kumar A			35,000	1,960
			Baiju V			35,000	2,176
			Radhika R Chandran			35,000	1,558
			Reshma Ittiachan			35,000	1,558
			Seena Mathew			35,000	1,558
	7	EDA Tools And Advances In Signal Processing	Aagi A S	MEC , Thrikkakkara	5	35,000	1,462
			Binu V P			35,000	2,193
			Niyas S K			35,000	1,462
			Shamna S S			35,000	1,462
			Shani Raj			35,000	1,968
	8	Power Industry Familiarization For Engg. Faculty	Libi A	PETARC, Moolamattom	3	13,800	2,028
			Haseena P Y			13,800	2,028
			Deepa A K			13,800	2,078
			Sylish S V			13,800	2,078
	9	Current Trends In Non -Conventional Energy Based Systems	Baiju V	CE , Chenganoor	5	35,000	1,704
			Libi A			35,000	1,704
			Manu Madhavan			35,000	1,294
	10	Knowledge On Virtual Instrumentation For Engineers	Dr. C Gopakumar	CE , Chenganoor	5	35,000	1,628
			Deepa T R			35,000	1,628
						35,000	1,662

			<i>Raju M</i>				
	11	<i>Mechatronics Automation And Robotics</i>	<i>Ganesh R</i> <i>Revikumar</i> <i>Thampi V R</i> <i>Premnath G</i> <i>Sajan J</i> <i>Mathew</i>	<i>MEC ,</i> <i>Ernakulam</i>	5	35,000 35,000 35,000 35,000	1,911 1,974 1974 1558
	12	<i>Research Area In Biomedical Engineering</i>	<i>Haseena P Y</i> <i>Leena B R</i>	<i>MEC ,</i> <i>Ernakulam</i>	5	35,000 35,000	1,912 1,533
	13	<i>Power System, Devices And Control - Practical Aspects</i>	<i>Deepthi P K</i> <i>Libi A</i> <i>Manu</i> <i>Madhavan</i> <i>Seena Mathew</i> <i>Subeena H</i>	<i>MEC ,</i> <i>Ernakulam</i>	5	35,000 35,000 35,000 35,000 35,000	1,458 1,968 1,458 1,458 1,458
	14	<i>Application Of Custom Power Devices For Power Quality Improvement</i>	<i>Raju M</i>	<i>MNIT, Jaipur</i>	3	2,500	2,0652
	15	<i>Recent Trends In Robotics</i>	<i>Hariharan R</i> <i>Arya Chandran</i> <i>Dr C</i> <i>Gopakumar</i> <i>Remya R S</i> <i>Revikumar</i> <i>Thampi</i> <i>Seena Mathew</i> <i>Ganesh R</i> <i>Baiju V</i>	<i>CE Chenganoor</i>	5	35,000 35,000 35,000 35,000 35,000 35,000 35,000 35,000	1,440 1,440 1,966 - 1,966 1,440 1,854 1,,966
	16	<i>Research Simulations And Predictive Analysis</i>	<i>Arya Chandran S</i> <i>Hariharan R L</i>	<i>MEC</i> <i>Thrikkakara</i>	5	35,000 35,000	1,417 1,417

			Sethulekshmi U S			35,000	1,417
						35,000	1,417
			Sheena S Noushad			35,000	1,417
			Tintumol C R				
	17	Computer Aided Drafting And Design	Aagi A S Alkha Mohan Ganesh R Raju M Subeena H	MEC Thrikkakara	5	35,000 35,000 35,000 35,000 35,000	1,825 1,825 2,355 2,435 1,825
	18	Hands On Training In Open Source Tools For Kernel Programming And Administration	Arya Chandran S Binu V P Hariharan R L Niyas S K Remya R S Sajan J Mathew Swetha Saira Appoose Tintumol C R	MEC Thrikkakara	5	35,000 35,000 35,000 35,000 35,000 35,000 35,000 35,000	1,795 2,370 1,795 1,795 - 1,795 1,795 1,795
	19	FDP On Transforms: Techniques And Applications	Anilkumar A Dr. C Gopakumar Jyothi R L Premakumary K R Remya R S Reshma Ittiachan Sheena S Noushad Renu K K	CE Kallooppa	5	35,000 35,000 35,000 35,000 35,000 35,000 35,000 35,000 35,000	2,384 2,810 2,215 2,890 952 1,805 1,805 2,839 1,805



			<i>Sethulekshmi U S</i>				
	20	<i>Design And Engineering</i>	<i>Baiju V</i> <i>Dr. Ajil Kumar A</i> <i>Ganesh R</i> <i>Libi A</i> <i>Manu Madhavan</i> <i>Premnath G</i> <i>Revikumar Thampi V R</i> <i>Sylish S V</i> <i>Deepa A K</i>	<i>CE Trivandrum</i>	5	<i>35,000</i> <i>35,000</i> <i>35,000</i> <i>35,000</i> <i>35,000</i> <i>35,000</i> <i>35,000</i> <i>35,000</i> <i>35,000</i>	<i>2,430</i> <i>2,430</i> <i>2,,350</i> <i>2,430</i> <i>1,513</i> <i>2,430</i> <i>2,430</i> <i>2,430</i> <i>2,430</i>
	21	<i>Tools Techniques For Processing Digital Image</i>	<i>Deepa A K</i> <i>Alkha Mohan</i> <i>Sabeena K</i> <i>Geetha S</i> <i>Smitha P</i> <i>Shaji L</i> <i>Deepthi P K</i> <i>Sajan J Mathew</i>	<i>CE Chenganur</i>	5	<i>35,000</i> <i>35,000</i> <i>35,000</i> <i>35,000</i> <i>35,000</i> <i>35,000</i> <i>35,000</i> <i>35,000</i>	<i>2,330</i> <i>1,481</i> <i>1,481</i> <i>2,330</i> <i>2,330</i> <i>2,330</i> <i>1,481</i> <i>1,481</i>
	22	<i>Advances In Automation And Computing</i>	<i>Alkha Mohan</i> <i>Arya Chandran</i> <i>Deepa T R</i> <i>Ganesh R</i> <i>Jayakrishnan</i> <i>Nimmi</i> <i>Remya R S</i> <i>Sabeena</i>	<i>Model Finishing School, Thiruvananthap uram</i>	5	<i>35,000</i> <i>35,000</i> <i>35,000</i> <i>35,000</i> <i>35,000</i> <i>35,000</i> <i>35,000</i> <i>35,000</i>	<i>1,510</i> <i>1,510</i> <i>1,920</i> <i>1,920</i> <i>1,510</i> <i>1,510</i> <i>1,920</i> <i>1,920</i>

			<i>Sree S Bhagya</i>			<i>35,000</i>	<i>1,510</i>
			<i>Sylish S V</i>			<i>35,000</i>	<i>2,033</i>
			<i>Vidya S</i>			<i>35,000</i>	<i>1,510</i>
	23	<i>Medical Imaging Techniques</i>	<i>Geetha S</i>	<i>IIT Delhi</i>	5	-	<i>17,686</i>
			<i>Remya R S</i>				<i>10,019</i>
			<i>Sabeena K</i>				<i>17,686</i>
			<i>Smitha P</i>				<i>18,098</i>
			<i>Shajy L</i>				<i>12,151</i>
	24	<i>FDP On Estimation And Detection Theory</i>	<i>Aswathy S S</i>	<i>CE Cherthala</i>	3	<i>500</i>	<i>1,808</i>
	25	<i>Advanced Linux Administration</i>	<i>Anu Mohan</i>	<i>Model Finishing School, Thiruvananthapuram</i>	5	<i>35000</i>	<i>1,469</i>
			<i>Arya A P</i>			<i>35,000</i>	<i>1,469</i>
			<i>Aryachandran S</i>			<i>35,000</i>	<i>1,469</i>
			<i>Nimmi V</i>			<i>35,000</i>	<i>1,469</i>
			<i>Remya R S</i>			<i>35,000</i>	<i>1,895</i>
			<i>Prasanthi R S</i>			<i>35,000</i>	<i>1,469</i>
			<i>Sheela R</i>			<i>35,000</i>	<i>2,001</i>
			<i>Sree S Bhagya</i>			<i>35,000</i>	<i>1,469</i>
			<i>Vidya S</i>			<i>35,000</i>	<i>1,469</i>
	26	<i>Recent Advances In Computing</i>	<i>Anilkumar A</i>	<i>MEC, Thrikkakkara</i>	5	<i>35,000</i>	<i>2,030</i>
			<i>Binu V P</i>			<i>35,000</i>	<i>2,240</i>
			<i>Geetha S</i>			<i>35,000</i>	<i>1,968</i>
			<i>Jisy Raju</i>			<i>35,000</i>	<i>1,558</i>
			<i>Jyothi R L</i>			<i>35,000</i>	<i>1,968</i>
			<i>Manoj Ray D</i>			<i>35,000</i>	-
			<i>Shani Raj</i>			<i>35,000</i>	<i>1,968</i>
			<i>Smitha P</i>			<i>35,000</i>	<i>2,158</i>
			<i>Subeena H</i>			<i>35,000</i>	<i>1,558</i>
	27	<i>Control And</i>	<i>Ajmal K</i>	<i>MEC,</i>	5	<i>35,000</i>	<i>1,558</i>

		<i>Optimization Techniques : An Engineering Approach</i>	<i>C V Anilkumar Haseena P Y Libi A Reshma Ittiachan Revikumar Thampi V R</i>	<i>Thrikkakkara</i>		<i>35,000 35,000 35,000 35,000 35,000</i>	<i>2,208 2,080 2,208 1,558 2,208</i>
	28	<i>Recent Trends In Data Mining Techniques</i>	<i>Binu V P Shani Raj Remya R S Sylish S V Reji Thankachan</i>	<i>CE Kalloppara</i>	5	<i>35,000 35,000 35,000 35,000 35,000</i>	<i>2,193 1,968 1,968 1,968 1,968</i>
	29	<i>Big Data Analytics, Machine Learning And Cloud Computing</i>	<i>Anilkumar A Arya chandran Hariharan R L Niyas S K Swetha Saira Appose</i>	<i>MEC, Thrikkakkara</i>	5	<i>35,000 35,000 35,000 35,000 35,000</i>	<i>2,289 1,845 1,845 1,845 1,845</i>
	30	<i>Gian Course Mobile System Security</i>	<i>Shani Raj Binu V</i>	<i>MNIT Jaipur</i>	5	<i>3,500 3,500</i>	<i>27,809 28,649</i>
	31	<i>Advances In Control System</i>	<i>Libi A Haseena P Y</i>	<i>Dr. Babasaheb Ambedkar Technical University, MH</i>	5	<i>5,000 5,000</i>	<i>19,464 19,464</i>
	32	<i>Advanced optimization Techniques</i>	<i>Dr. Shajy L Dr. C Gopakumar Sabeena K Geetha S</i>	<i>MNIT, Jaipur</i>	5	<i>3,000 3,000 3,000 3,000</i>	<i>26,512 34,855 28,287 28,287</i>
	33	<i>FDP On Cyber Security Analytics</i>	<i>Revikumar Thampi V R</i>	<i>Model Finishing School,</i>	5	<i>35,000</i>	<i>2,203</i>

			Ganesh R Shamna S S	Thiruvananthapuram		35,000 35,000	2,205 1,803
	34	FDP On Big Data Analytics Using Hadoop And R Tool	Kuryachan T D Reji Thankachan Deepa T R	ESCI, Hotel Welbeck Residency, Ooty	5	30,000 30,000 30,000	3,270 3,102 3,102
	35	STTP On Data Analysis For Research And Publication	Anilkumar A, Shajy L Jyothi R L Dr. C. Gopakumar	IIT Roorkee	3	9,000 9,000 9,000 9,000	17,454 17,454 15,466 17,343
	36	Dc Smart Grids: Renewable Integration Energy Storage And System Operation	Radhika R Chandran Reshma Ittiachan Seena Mathew	MNIT Jaipur	5	4,000 4,000 4,000	12,656 12,656 12,656
	37	IAPR Summer School On Document Informatics	Jyothi R L Anilkumar A	Birla Institute of Scientific Research, Jaipur	6	10,000 10,000	24,995 22,507
	38	NBA - SAR Filing And Preparedness For Assessment	Raju M Binu V P Remya R S Deepa T R	ESCI, GOA	3	34,500 34,500 34,500 34,500	6,234 6,056 6,284 2,744
	39	FDP On Applied Mathematics In Engineering	Remya R S Radhika R Chandran Seena Mathew	CE POONJAR	5	35,000 35,000 35,000	996 1,436 1,436
	40	Introduction to Cryptography	Binu V P Shani Raj	IIT Kharagpur	5		22,469 21,681
	41	FDP on Semiconductor	C V Anilkumar	Model Engineering	5	35,000	1,970

		<i>Devices from Micro to Nano</i>	<i>Leena B R Shamna S S Niyas S K Seena Mathew Radhika R Chandran</i>	<i>college, Thrikkakara</i>		<i>35,000 35,000 35,000 35,000 35,000</i>	<i>1,970 3,050 1,970 1,900 1,970</i>
	42	<i>Dr. Shajy L Dr. Smitha P</i>	<i>Fundamental Algorithms : Design and Analysis</i>	<i>IIT Kharagpur</i>	5		<i>15,243 20,957</i>
	43	<i>Arya Chandran S Binu V P Deepthi P K Hariharan R L Niyas S K Subeena H Swetha Saira Appose Shani Raj</i>	<i>Internet of Things</i>	<i>Model Finishing School Kochi</i>	5	<i>35,000 35,000 35,000 35,000 35,000 35,000 35,000 35,000</i>	<i>1,825 2,640 1,825 1,825 1,825 1,825 1,825 2,240</i>
	44	<i>Aagi S Deepa T R Dr. Hari V S Raju M Reji Thankachan Shani Raj Shiny C Dr. C Gopakumar</i>	<i>An Insight into DSP</i>	<i>CE Kottarakkara</i>	5	<i>35,000 35,000 35,000 35,000 35,000 35,000 35,000 35,000</i>	<i>- - - 736 - - - -</i>
	45	<i>Haseena P Y Manu Madhavan Shamna S S Leena B R</i>	<i>Road map to Research in Electrical and electronics and computing</i>	<i>CE Poonjar</i>	5	<i>35,000 35,000 35,000 35,000</i>	<i>2,472 2,061 2,061 2,061</i>

		<i>Geetha S</i>				35,000	2,472
	46	<i>Remya R S</i> <i>Libi A</i> <i>Haseena P Y</i>	<i>STTP on Research Methodology</i>	<i>MNIT Jaipur</i>	5	4,000 4,000 4,000	20,939 18,947 18,947
	47	<i>Dr. Ajilkumar A</i> <i>Deepa T R</i> <i>Haseena P Y</i> <i>Jyothi R L</i> <i>Meera Murali</i> <i>Premakumari K R</i> <i>Reji Thankachan</i> <i>Renu K K</i> <i>Sabeena K K</i> <i>Dr. Smitha P</i> <i>Sylish S V</i> <i>Anilkumar A</i> <i>Sylish S V</i>	<i>Quality enhancement initiatives in educational institutions</i>	<i>CE Chenganur</i>	5	35,000 35,000 35,000 35,000 35,000 35,000 35,000 35,000 35,000 35,000 35,000 35,000	2,330 2,330 2,200 2,200 2,200 1,481 2,330 2,330 2,330 2,200 2,330 2,330 2,330
	48	<i>Remya R S</i> <i>Sabeena K</i> <i>Jyothi R L</i> <i>Anilkumar A</i>	<i>Theory of computational and complexity theory</i>	<i>Model finishing school cochin</i>	5	35,000 35,000 35,000 35,000	1,000 2,450 2,270 2,270
	49	<i>Arya Chandran S</i> <i>Binu V P</i> <i>Hariharan R L</i> <i>Niyas S K</i> <i>Leena B R</i> <i>Shamna S S</i> <i>Shani Raj</i> <i>Subeena H</i> <i>Swetha Saira</i>	<i>Big data analytics and cloud computing</i>	<i>Model Finishing School, Cochin</i>	5	35,000 35,000 35,000 35,000 35,000 35,000 35,000 35,000 35,000	1,825 2,640 1,825 1,825 1,825 1,825 2,270 1,825 1,825

		Apoose					
	50	Shiny C	Technology	Model finishing	5	35,000	2,270
		Deepa T R	Innovation	school cochin		35,000	2,110
		Geetha S	and			35,000	2,240
		Revikumar Thampi	Entrepreneurs			35,000	2,270
		V R Seena	hip			35,000	1,845
		Mathew				35,000	1,845
		Meera Murali				35,000	1,845
		Aagi A S				35,000	1,845
		Sheena S				35,000	1,845
		Noushad					
<b>Total</b>						<b>86,94,195</b>	<b>23,32,823</b>

<b>4.d Expenditure on faculty members attended pedagogical training</b>							
Financial Year.	Sl No	Name of Faculty	Designation(Principal , Prof, Assistant Prof, Lab staff, Librarian etc)	Institution in which it is conducted	No of days	Amount Course fee	Amount TA/DA
2012-13	-	-	-	-	-	-	-
2013-14	1.	Remya R S	Asst. Professor in CS	KTDC,	3	30,000	1,712
	2.	Deepa T R	Asst. Professor in EC	Chaitram		30,000	1,712
	3.	Sabeena K	Asst. Professor in CS	Hotel,		30,000	1,712
	4.	Anuja V Nair	Asst. Professor in EC	TVM		30,000	1,712
2014-15	1	Remya R S	Asst. Professor in EC	CET TVM	2	2,809	2208
	2	Anuja V Nair	Asst. Professor in EC	CET TVM	2	2,809	2,208
	3	Mili Roseline Mathews	Asst. Professor in EC	CET TVM	2	2,809	2,208
	4	SPFU - Registration Fees	-	-	-	72,186	-
2015-16	1	Alkha Mohan	Asst. Professor in CS	Teaching Learning Centre, IIT Madras	-	-	4,157
	2	Lissy Raju	Asst. Professor in CS		-	-	4,157
	3	Sree S Bhagya	Asst. Professor in CS		-	-	4,157
	4	Jayakrishnan A	Asst. Professor in CS		-	-	3,748

	5	Nimmi V	Asst. Professor in CS		-	-	3,748
	6	Reshmi <del>Damachandran</del>	Asst. Professor in CS		-	-	3,748
	7	Deepa A K	Asst. Professor in EC		-	-	5,032
	8	Sylish S V	Asst. Professor in EC		-	-	8,177
	9	Reji Thankachan	Asst. Professor in EC		-	-	5,000
	10	Deepa V S	Asso. Professor in EC		-	-	8,177
	11	Aswathy S S	Asst. Professor in EC		-	-	3,357
	12	Chippy Vijayan	Asst. Professor in EC		-	-	3,357
	13	Renjini S	Asst. Professor in EC		-	-	3,357
	14	Libi A	Asst. Professor in EE		-	-	4,678
	15	Haseena P Y	Asst. Professor in EE		-	-	4,678
	16	Preema R <del>Chandran</del>	Asst. Professor in EE		-	-	3,357
	17	Jayadeep Kumar	Asst. Professor in ME		-	-	5,000
	18	Premnath G	Asst. Professor in ME		-	-	5,000
	19	Ganesh R	Asst. Professor in ME		-	-	13,180
	20	Renu K K	Asso. Professor in AS		-	-	14,175
	21	Sheela R	Asst. Professor in AS		-	-	13,367
	22	Retheekumary S	Asst. Professor in AS		-	-	13,367
	23	Jyothi R L	Asst. Professor in CS		-	-	10,023
	24	Mili Roseline Mathews	Asst. Professor in EC		-	-	10,023
	25	Raju M	Asst. Professor in EE		-	-	5,175
	26	Dr. Ajilkumar A	Asso. Professor in ME		-	-	5,175
	27	Revikumar Thampi V R	Asst. Professor in ME		-	-	5,175
	28	Deepa T R	Asst. Professor in EC			-	10,023
	29	Anuja V Nair	Asst. Professor in EC			-	7,891
2016-17	1	Shamna S S	Asst. Professor in EC		-	-	3,758
	2	Meera Murali	Asst. Professor in EE		-	-	3,758
	3	Reshma Ittiachan	Asst. Professor in EE	Teaching	-	-	3,758



	4	Arya A P	Asst. Professor in EE	Learning Centre, IIT Madras	-	-	3,758	
	5	Remya R S	Asst. Professor in CS		-	-	9,135	
	6	Dr.Smitha P	Asst. Professor in CS		-	-	8,541	
	7	Binu V P	Asst. Professor in CS		-	-	9,487	
	8	Geetha S	Asst. Professor in CS		-	-	8,195	
	9	Shani Raj	Asst. Professor in EC		-	-	8,195	
	10	Shiny C	Asst. Professor in EC		-	-	9,135	
	11	Dr.C Gopakumar	Asst. Professor in EC		-	-	9,150	
	12	C V Anil Kumar	Asst. Professor in EC		-	-	8,047	
	13	Baiju V	Asst. Professor in ME		-	-	8,486	
	14	Prema kumary K P	Asst. Professor in AS		-	-	8,047	
	15	Dr.Geetha S	Asst. Professor in CS		-	-	8,322	
	16	Aryachandran S	Asst. Professor in CS		-	-	3,289	
	17	Hariharan R L	Asst. Professor in CS		-	-	3,289	
	18	Niyas S K	Asst. Professor in EC		-	-	3,289	
	19	Sajan J Mathew	Asst. Professor in EE		-	-	3,289	
	20	Santhi Vijai	Asst. Professor in EC		-	-	3,289	
	21	Swetha Saira Anand	Asst. Professor in CS		-	-	3,289	
	22	Sethulekshmi U S	Asst. Professor in CS		-	-	3,337	
	23	Tintumol C R	Asst. Professor in CS		-	-	3,337	
	24	Sheena A Newshad	Asst. Professor in CS		-	-	3,337	
	25	Sabeena K	Asst. Professor in CS		-	-	4,935	
	26	Aagi S	Asst. Professor in CS		-	-	3,822	
	27	Deepthi P K	Asst. Professor in EE		-	-	3,812	
	28	Radhika R Chandran	Asst. Professor in EE		-	-	3,812	
	29	Seena Mathew	Asst. Professor in EE		-	-	3,812	
	30	Leena B R	Asst. Professor in EC		-	-	4,585	
	31	Subeena H	Asst. Professor in EC		-	-	4,585	
	32	Sauda M S	Asst. Professor in EC		-	-	4,585	
Total						2,00,613	3,77,396	

**4.e Expenditure on organising in-house subject area training Programs/ Workshops/ seminars / conferences / continuing education programs.**

Financial Year	Sl. No	Description of the program	Venue	Name of Co-ordinator	No of days	No of beneficiaries	Expenditure			IRG generated
							TA/DA	Honorarium	others	
2012-13	-	-	-	-	-	-	-	-	-	-
2013-14	1.	Web Technology through PHP	College Of Engineering Karunagappally	Smitha P	6	27	-	36,000	47,350	-
	2.	Speech Processing		Deepa V S	3	30	21,500	-	14,109	-
	3.	Data Science And Engineering		Geetha S	6	19	15,050	27,000	36,817	-
	4.	VLSI Design		Deepa T R	6	32	10,960	21,000	40,239	-
	5.	Recent Areas In Image Processing		Jyothi R L	1	30	1,748	3,000	3,038	-
	6.	Energy Management And Recent Trends In Power		Haseena P Y	5	42	10,210	21,000	29,935	-
	7.	Recent Trends In Signal Processing		Anisha Muhammed	6	35	42,153	28,000	36,510	-
	8.	Soft Computing Theory And Techniques		Remya R S	7	42	57,371	34,000	59,336	-
	9.	Advance In Algorithm - A Design And Analysis Perspective		Manoj Ray D, Sabeena K	4	36	13,135	24,000	40,355	-

	10.	Expert Lecture On Data Mining Models And Techniques		Smitha P	1	23	2,685	3,000	3,082	-
	11.	Expert Lecture On Computer Graphics - Open Gl Techniques		Diana	1	30	2,575	3,000	2,000	-
	12.	Expert Lecture On Fundamentals Of Spectral Estimation		Deepa T R	2	35	1,926	6,000	4,480	-
	13.	Virtual Instrumentation Using Labview		Sylish S V	5	35	9,254	30,000	53,009	-
	14.	Workshop On Multimedia Using 3d Max		Vinod R	3	30	-	18,000	23,892	-
	15.	Workshop On Random Processes And Applications		Premaku mary K R  Sheela R	3	41	15,817	20,000	24,386	-
	16.	Workshop On Power System Analysis And Load Despatch		Haseena P Y	2	35	1,850	9,000	18,540	-
	17.	Workshop On Content Management System Using Joomla		Anil Kumar A	3	30	3,040	9,000	24,209	-
	18.	Linux Administration And Networking		Shaji L	3	30	2,880	18,000	21,225	-
2014-15	1.	Expert Lecture On Introduction To Linux	Colleg e Of Engin	Remya R S	1	16	1,702	3,000	1,920	-

	2.	Expert Talk On Speech Compression	eering Karunagappally	Shiny C	3	20	2,376	6,000	6,400	-
	3.	Expert Talk On Compression Standards		Shiny C	1	24	2,156	3,000	4,640	-
	4.	Stochastic Methods In Analysis And Processing Of Digital Images		Jyothi R L	3	33	6,665	12,000	32,163	3,000
	5.	Expert Talk On Tools & Techniques In Speech Processing		Deepa V S	1	19	2,104	3,000	1,800	-
	6.	Workshop On Vedic Mathematics In Engineering		Premnath G	3	50	13,228	25,000	25,073	2,000
	7.	Workshop On Open Source Hardware With State Of The Art Hands On Experiment		Kuryachan T D	3	30	5,051	15,000	27,976	6,000
	8.	Workshop On Latex		Remya R S	3	40	7,137	18,000	33,186	-
	9.	Open Source Tools In Signal Processing		MiliRoseline Mathews Anuja V Nair	3	40	5,525	15,000	31,481	-
	10.	Workshop On Micro Controller Programming		Dr. C Gopakumar	3	35	5,470	12,000	19,955	-
	11.	Advanced Communication Technologies		Anuja V Nair Remya R	7	40	12,510	27,000	39,133	-

				S						
2015-16	1.	STTP On Recent Issues In Biomedical Research	College Of Engineering Karunagappally	Remya R S	3	43	9,815	15,000	28,611	1,500
	2.	Linear Algebra And Its Applications		Binu V P	3	44	12,576	18,000	30,065	-
	3.	Mechatronics Robotics Memos		Raju M	3	52	18,118	16,500	46,715	2,500
	4.	Research Issues And Emerging Trends In Control & Automation Engineering		Libi A	5	67	98,849	36,000	71,173	-
	5.	Advancements And Algorithms In Image Processing		Shani Raj	6	64	14,752	27,000	56,797	4,000
	6.	Hands On Training In Labview And Usp		Deepa T R Subeena H	6	26	12,486	30,000	67,330	-
	7.	PCB Design And Fabrication Techniques		Kuryachan T D	3	30	4,417	12,000	21,091	10,000
	8.	Workshop On Statistics Application Of Image Processing And Probability		Geetha S	1	34	2,344	3,000	6,876	-
	9.	Workshop On Introduction To Python Programming		Jyothi R L	1	38	2,694	6,000	5,800	-

	10.	Workshop On Differential Equations And Applications		Sheela R	2	39	5,680	19,000	29,994	-
	11.	Seminar On Satellite Image Processing.		Subeena H Deepa A K	1	27	1,707	3,000	1,920	-
	12.	Seminar On Multidimensional Signal Processing		Subeena H RejiThankachan	1	26	3,611	5,000	2,613	-
2016-17	1.	How To Do A Good Ph. D And How To Write Papers/ Thesis Using Latex	College Of Engineering	Libi A	5	51	91,348	36,000	58,674	-
	2.	Workshop On Fuzzy Logic And Ann Applications In Engineering	Karunagappally	Raju M	6	45	51,341	36,000	72,900	5,000
	3.	Pre Conference Workshop On Recent Trends In Computing, Communication And Signal Processing		Dr.Gopakumar C	4	26	30,788	27,000	52,657	-
	4.	Expert Talk on Applications of Image Transforms		Reji Thankachan Sabeena K	1	32	2,347	2,700	1,985	-
	5.	Workshop On Biomedical Image And Signal Processing		Remya RS	3	30	20,450	18,000	30,646	-

	6.	Workshop On Accreditation Procedures of NBA		Revikum arThampi	1	52	2,280	3,000	11,049	-
	7.	Big data networking and platforms design and application		Dr.Gopakumar C	1	34	800	5,000	2,820	-
	8.	Workshop On Computer Vision :Techniques And Application		Geetha S	3	35	49,243	15,000	43,185	-
<b>Total</b>							<b>7,01,634</b>	<b>8,22,525</b>	<b>13,18,905</b>	<b>34,000</b>

<b>4.f Expenditure on participation by faculty in Seminar/ Conferences/ workshop etc.</b>								
Financial Year	Sl. No	Description of the program	Name of participant	Name of organizer	Venue	No of days	Registration fee	TA/DA
2012-13		-	-	-	-	-	-	-
2013-14	1.	Computer Hardware Maintenance Networking And recent Advance In Computing And Communication	Santhini Paul	Rajagiri School Of Engineering Technology	CET Rajagiri School Of Engineering Technology	3	2,500	1,748
	2.	National Workshop On Accreditation And Autonomy	Anuja V Nair	ISTE – WPLP	Hotel Singaar International, Kanyakumari	3	30,000	1,894
			Shiny C				30,000	2,094
			Sheela R				30,000	2,094
			Rethy Kumary				30,000	2,094
			Remya R S				30,000	1,894

	3.	National Conference On VLSI And Embedded System Technology Advancements	Jeena James	Sree Buddha College Of Engineering, Patoor	Sree Buddha College Of Engineering, Patoor	3	1,000	1,684
	4.	Computer Hardware Maintenance Networking And Trouble Shooting	Sreelatha P Sreepriya S	Tkm College Of Engg, Kollam	Tkm College Of Engg, Kollam	3	-	717 717
	5.	Koha Library Management System	Haseena K	Tkm College Of Engg, Kollam	Tkm College Of Engg, Kollam	2	-	717
	6.	Research Promotion W/S On Graph Theory	Premakumari K R Jyothi R L	IITM, TVM	IITM, TVM	3	-	2,269 2,062
2014-15	1.	National Conference On Recent Trends In Electronics World, Retrew 14	Reji Thankachan Deepa A K	TKM IT	TKM IT, Kollam	1	3,000 1,000	1,669 1,669
	2.	Parallel Computing Architecture And Applications On Multicore To Many Core Processing Systems	Vinod R Manoj Ray D Shaji L	CDAC & IIT Bombay	IIT Bombay	5	7,500 7,500 7,500	18,722 19,522 11,196
	3.	Formulation Of Research And Development Initiatives For Scientists	Mili Roseline Mathews Remya R S Dr. C	ESCI Hyderabad	ESCI Hyderabad	5	18,202 18,202 18,202	15,297 15,297 16,429



			Gopakumar					
	4.	Workshop On Control Systems	Meera Murali Preema R Chandran	IIT Kharagpur	IIT Kharagpur	11	- -	2,336 2,336
	5.	Image And Video Processing Using Matlab	Binu V P	IIITM - K	IIITM - K, Thiruvananthapuram	2	6,000	6,063
	6.	All India Seminar On Accreditation And Quality Assurance In Higher Education Institutions	Dr. Ajil Kumar A	NSS College Of Engineering, Palakkad	NSS College Of Engineering, Palakkad	2	-	4,162
	7	First One Day International Seminar - Fostering Alumni Support For Technological Entrepreneurship And Research (Faster 2014)	Revi Kumar Thampi V R	CERD	CET	1	1,000	1,745
	8.	12th International Conference On Signal Processing (Icsp' 14)	Deepa A K	IEEE	Wanwarm Hotel, Hangzhou, China	5	39,032	1,28,967

	9.	International Conference On Energy, Environment, Materials And Safety ( Iceems' 14) 2014 IEEE	Jayadeep Kumar J	University School Of Engg, Cusat	University School Of Engg, Cusat	3	4,000	3,803
	10.	Speech Processing	Deepa A K Deepa V S	RIT Kottayam	RIT Kottayam	2	1,000 1,000	2,029 2,029
	11.	National Level Workshop On E- Resources Management Tools, Techniques And Best Practices	Jincy William	CE Vadakkara	CE Vadakkara	3	500	1,280
	12	Attended - National Workshop On Koha (Advanced Level)	Jincy William	University Of Calicut	University Of Calicut	3	2,000	1,092
	13	Linux Server Administration	Dr. Shajy L	ESCI HYDERABAD	ESCI HYDERABAD	5	25,281	10,349
	14.	Assembly Language Programming In Nasm	Sajil Daniel John Manju J	CE Perumon	CE Perumon	3	3,000 3,000	1,540 1,540
2015-16	1	Workshop On Advanced Control Engineering (Ace - 2015 )	Libi A Haseena P Y	NIT	NIT Thiruchirapalli , TN	2	1,200 1,200	5,311 5,451
	2	Workshop On Cyber Security-Fundamentals And Advancements	Binu V P Jyothi R L Geetha S Remya R S	IIT	IIT, Delhi	3	-	33,870 33,567 33,567 33,567

	3	Workshop On Design And Engineering	Revikumar Thampi V R	KTU	CE Trivandrum	2	-	2,083
	4	Workshop On Power System Simulation Studies Using Etap Software	Arya A P Sujitha Surendran Prasanthi R S	Govt. Engg College, Barton Hill	Govt. Engg College, Barton Hill	2	1,000 1,000 1,000	608 608 608
	5	National Workshop On Advanced Design Nanoscale Device Using Tcad	Renjini S	CE Chenga nnoor	CE Chengannoor	2	500	1,480
	6	Workshop On Mathematical Analysis And Its Applications To Engineering	Anilkumar C V Premakumary K R Dr. C. Gopakumar	IIT Guwahati	IIT Guwahati	2	-	4,0994 4,0994 4,0994
	7	Workshop On English For Writing Ph D Thesis And Journal Papers	Smitha P	NIT Trichy	NIT Trichy	3	2,000	5,937
	8	National Workshop On Patents And Intellectual Property Rights	Remya R S Shani Raj Shaji L	NIT Goa	NIT Goa	2	2,500 2,500 2,500	7,878 7,878 8,434
	9	3rd IEEE International Conference On Moocs, Innovation And Technology In Education	Manoj Ray D	Amritsar CET, Amritsar	Amritsar CET, Amritsar	3	12,000	2,7893

	10	IEEE International Conference On Data Mining And Advanced Computing. (Sapience - 16)	Alkha Mohan	IEEE	SN Gurukulam College Of Engg, Ernakulam	3	8,000	1,702
	11	International Conference On Engineering And Technology (ICETech 15)	Remya R S Shaji L	IEEE	Rathinam Technological Campus, Coimbatore, Tamilnadu	1	3,000 3,000	3,330 3,772
	12	International Conference On Advances In Engineering And Applied Sciences ( Icaeas' 15)	Shaji L	Noorul Islam University, Kumara coil, Kanyakumari	Noorul Islam University, Kumaracoil, Kanyakumari	2	7,500	2,750
	13	International Conference On Advances In Engineering And Applied Sciences ( Icaeas' 15)	Smitha P	Noorul Islam University, Kumara coil, Kanyakumari	Noorul Islam University, Kumaracoil, Kanyakumari	2	15,000	2,750
	14	2014 IEEE International Conference On Computational Intelligence And Computing Research	Shajy L	ESCI Hyderabad	Park College Of Engineering And Technology, Coimbatore, Tamilnadu	3	7,500	4,828
	15	International Conference On Computational Intelligence And Computing Research	Smitha L	IEEE	Park College Of Engineering And Technology, Coimbatore, Tamilnadu	3	6,500	4,828

	16	International Conference On Recent Advances In Engineering, Science And Technology (Icon' 15)	Shajy L	Noorul Islam University, Kumara coil, Kanyakumari	Noorul Islam University, Kumaracoil, Kanyakumari	1	2,500	2,400
	17	International Conference On Recent Advances In Engineering, Science And Technology (Icon' 15)	Smitha L	Noorul Islam University, Kumara coil, Kanyakumari	Noorul Islam University, Kumaracoil, Kanyakumari	1	5,000	2,400
	18	Design And Analysis Of Algorithms (Daa 15) Design And Analysis Of Algorithms (Daa 15)	Jyothi R L	IIITM- K, Thiruvananthapuram	IIITM- K, Thiruvananthapuram	6	6,000	2,760
	19	4th international Conference On Communication And Signal Processing (Iccsp 15)	Reji Thankachan	Adhiparasakthi Engineering College, Melmaruvathur, TN	Adhiparasakthi Engineering College, Melmaruvathur, TN	3	8000	7,674
	20	STTP On Research Skills And Methods	Reji Thankachan Anil kumar A Shaji L Jyothy R L Shani Raj	IIT Kanpur	IIT Kanpur	3	-	20,982 15,303 15,303 23,973 23,973
	21	STTP On Recent Trends In Applied Physics	Retheekumary	CUSAT	CUSAT	5	1,000	4,136
2016-17	1	National Seminar On Techniques And	Deepa A K	Amritha Vishwa Vidyapeedam,	Amritha Vishwa Vidyapeedam, Coimbatore	2	1,500	4,262
			Sylish S V				1,500	4,262

		<i>Applications Of Hyper Spectral Image Analysis</i>		<i>Coimbatore</i>				
	2	<i>International Conference On Information Science (ICIS '16)</i>	<i>Remya R S, Sabeena K</i>	<i>CE Cherthala</i>	<i>CE Cherthala</i>	2	7,500 7,500	2,018 1,818
	3	<i>International Conference On Innovations In Bio-Inspired Computing And Applications</i>	<i>Manoj Ray D</i>	<i>MIR Labs, TIST Kochi, India</i>	<i>MIR Labs, TIST Kochi, India</i>	3	10,429	-
	4	<i>International conference on IEEE Tencon-2015</i>	<i>C V Anilkumar</i>	<i>Holiday Inn, Sands coati, central, MACAU, China</i>	<i>Holiday Inn, Sands coati, central, MACAU, China</i>	4	39,332.4	1,31,550
	5	<i>17th National Conference On Technological Trends</i>	<i>Geetha S</i>	<i>CE Trivandrum</i>	<i>CE Trivandrum</i>	2	2,000	1,818
	6	<i>One Day Seminar On Differential Equations And Fourier Series - Some Applications</i>	<i>Sheela R</i>	<i>Mar Baseliou s College Of Engg &amp; Technol ogy, Tvm</i>	<i>Mar Baseliou s College Of Engg &amp; Technology, Tvm</i>	1	300	1,422
	7	<i>National Workshop On Image Processing For Biomedical Application</i>	<i>Sylish S V Deepa A K</i>	<i>Amritha Vishwa Vidyape dam, Coimbat ore</i>	<i>Amritha Vishwa Vidyape dam, Coimbatore</i>	1	1,500 1,500	4,386 6,236
	8	<i>Control System Design - Fractional Controller And Its Applications</i>	<i>Libi A Haseena P Y</i>	<i>India Institute Of Science And Technol ogy</i>	<i>India Institute Of Science And Technology (IIST)</i>	2	3,000 3,000	1,998 1,998

				(IIST)				
	9	International Symposium On Antennas And Propagation	C V Anilkumar	CE Poonjar	CE Poonjar	1	-	4,566
	10	Power Quality challenges with RE integration in smart Grid	Raju M	CPRI, Bangalore	CPRI, Bangalore	2	8,050	7,970
2017-18	1	International conference – ICACC 2016	Dr. Gopakumar C	Rajagiri SE & T	Rajagiri SE & T	3	7,500	-
<b>Total</b>							<b>5,15,430.4</b>	<b>9,36,446</b>

<b>4.g Expenditure on staff development.</b>									
Financial Year	Sl. No	Description of the program	Name of participant	Name of organiser	Venue	No of days	Registration fee/ Amount Spend	IR Generated	TA /DA
2012-13		-	-	-	-	-	-	--	-
2013-14	1.	<b>Conducted SDP - Study And Maintenance Of Modernized Electronics Lab</b>		Kuryachan T D	CE Karunag appally	7	73,137	-	17,302
	2.	<b>Conducted SDP- Open Source Software For Library Management Using Koha</b>		Jincy William	CE Karunag appally	3	46,964	-	4,326
	3.	<b>Conducted SDP- Mastering Time Management And Developing Interpersonal Relationship</b>		Vidya S	CE Karunag appally	3	47,304	-	9,269

	4.	<b>Attended</b> -National Workshop On Personality Development And Capacity Building	Vinod Kumar Vidya, Sandhya M	ISTE,Bengaluru	Abad Airport Hotel, Cochin	2	20,000 20,000 20,000	-	1,418 748 748
	5.	<b>Attended</b> - Workshop On Dspace Digital Library Software	Jincy William, Haseena K	TKM, Kollam	TKM, Kollam	2	500 500	-	717 717
2014-15	1.	<b>Attended</b> -Sttp On Moodle Fundamentals	Sooraj Lal S Lijin B	CE, Kidangoor	CE, Kidangoor	2	1,000 1,000	-	773 773
	2	<b>Conducted SDP</b> - IT Enabled Office Management System	Vinod Kumar R	CE Karunagapally	CE Karunagapally	3	42,680	1,500	6,976
2015-16	1.	<b>Attended</b> - National Training In Digital Library Management Using Dspace	Jincy William Lissa A	Kerala Agricultural University, Vellanikkara	Kerala Agricultural University, Vellanikkara, Thrissur	2	400 400	-	582 582
	2.	<b>Attended</b> - National Workshop On Koha	Lijin Sooraj	Marian College,Kuttikkanam	Marian College, Kuttikkanam	3	2,000 2,000	-	1,310 1,310
	3.	<b>Attended</b> - Open Source Library Management Software ( Koha)	Lissa A	Kerala Agricultural University, Vellanikkara, Thrissur	Kerala Agricultural University, Vellanikkara, Thrissur	2	-	-	982



	4.	<b>Conducted SDP</b> - Automated Accounting System Using Tally Erp 9 Solution	Sheeja, Sandhya murali	CE Karunagapally	CE Karunagapally	3	77,396	3,500	6,400
	5.	<b>Attended</b> - SDP On A Glimpse Into The Design And Implementation Of Electronics Hardware Resources	Sunil P C Ansad	CE Adoor	CE Adoor	3	-	-	528 528
2016-17	1.	<b>Attended</b> - SDP On Automated Accounty Using Tally Erp Solution	Sadhyamurali P	Ce Chenganoor	Ce Chenganoor	3	15,000	-	1,319
	2.	<b>Attended</b> - Sttp On Fault Diagnosing And Maintenance Of Electrical And Electronics Equipments And Measuring Instruments	Binny F	Petarc, Moolamattom	Ce Vadakkara	3	3,000	-	2,552
	3.	<b>Attended</b> - Kerala Service Rules, Mop And Financial Coding	Manoj K Mathew, Sheebamol K K	Ce Cherthala	Ce Cherthala	3	300 300	-	1,908 1,908
	4.	<b>Attended</b> - Power And Control Equipment Familiarization Programme	Binny F	Petarc, Moolamattom	Petarc, Moolamattom	6	12,000	-	2,575
	5.	<b>Attended</b> - Power And Control Equipment Familiarization Programme	Anoop S Anilkumar V Kuryachan T D	Petarc, Moolamattom	Petarc, Moolamattom	3	13800 13,800 13,800	-	1,571 1,571 2,178
	6.	<b>Conducted</b> - SDP On Financial And Service Rules	Manoj K Mathew	CE Karunagapally	CE Karunagapally	4	62,678	8,000	4,961

	7	<b>Attended</b> Hands on experience in Laptop chip level	Abinlal D, Nithin K V	CE Cherthala	CE Cherthala	3	1,500 1,500	-	2,469 2,469
	8	<b>Attended-</b> Performance improvement for Institutional development	Vidya J, Dr. Anitha D S, Sandhya Murali P, Sheebamol K K, Manoj K Mathew, Suresh kumar G, Leena S, Anilkumar V	ESCI, Hyderabad	ESCI, Hyderabad	4	20,700 20,700 20,700 20,700 20,700 20,700 20,700 20,700	-	5,664 5,770 5,664 5,664 5,664 5,664 5,664 5,664
2017-18	1	<b>Conducted.</b> Performance and quality improvement for administrative staff	Sheeba Mol	CE Karunagapally	CE Karunagapally	3	52,419	1,000	10,110
<b>Total</b>							710978	13000	136998

<b>4.h Others. (FSD).</b>								
Financial Year	Sl. No	Description of the program	Name of participant	Name of organiser	Venue	No of days	Registration fee	TA/DA
2012-13	-	-	-	-	-	-	-	-
2013-14	-	-	-	-	-	-	-	-
2014-15	-	-	-	-	-	-	-	-
2015-16	1	1.IEEE Membership.	Raju M Dr. Hari V S C V Anilkumar Deepa A K Deepa V Sylish S V	-	-	-	2,886 2,550 2,592 2,574 2,577 2,794	-

			Jyothi R L				3,275	
2016-17	-	-	-	-	-	-	-	-
<b>Total</b>							<b>19,248</b>	

**5. Year wise Expenditure details of all the sub-activities in enhanced Interaction with Industry**

<b>5.a Expenditure on academic Programs i.e. MTech/PhD etc. with industry</b>								
	Financial Year	Description of the program	Name of the Expert	Name of co-ordinator	Venue	No of days/hrs	honorarium	TA/DA etc
	2012-13	-	-	-	-	-	-	-
	2013-14	-	-	-	-	-	-	-
	2014-15	-	-	-	-	-	-	-
	2015-16	-	-	-	-	-	-	-
	2016-17	-	-	-	-	-	-	-
<b>Total</b>							-	-

<b>5.b Expenditure on short term programs with industry</b>								
Financial Year	Sl. No	Description of the program	Name of the Expert	Name of co-ordinator	Venue	No of days /hrs	Honorarium	TA/DAetc
2012-13	-	-	-	-	-	-	-	-
2013-14	1.	Renewable Energy Sources	Dr. M Jayaraju	Haseena P Y	CE, Karunagapally	1 Day	3,000	1,836 2,620
	2.	Convergence To Next Generation Networks	Augustine V	Deepa V S		1 Day	3,000	468
	3.	Industrial Tutoring InPIC Programming	Rayees Ratheesh P S	Deepa A K		2 Days	6,000 6,000	1,642 1,642 3,133
	4.	Expert Lecture in Mobile platforms	Dhanya James Joseph Crispin	Remya R S		1 Day		1,912 1,912 1,245

	5.	<i>Business Intelligence - An Application Of Artificial Intelligence</i>	<i>Sreyas N Namboothiri</i>	<i>Remya R S</i>		<i>1 Day</i>	<i>2,000</i>	<i>1,782</i>
	6.	<i>Documenting And Presenting Project Reports – Latex</i>	<i>Dr. K Najeeb, Adarsh N K</i>	<i>Remya R S</i>		<i>4 Days</i>	<i>9,000</i> <i>9,000</i>	<i>2,560</i> <i>3,600</i>  <i>22,064</i>
	7.	<i>Java Application Development using NetBeans</i>	<i>Mahesh S</i>	<i>Smitha P</i>		<i>2 Days</i>	<i>4,000</i>	<i>1,172</i> <i>1,700</i>
	8.	<i>Expert lecture on Clustering Techniques</i>	<i>Sandhya Harikumar</i>	<i>Deepa A K</i>		<i>1 Day</i>	<i>3,000</i>	<i>480</i> <i>1,870</i>
2014-15	1.	<i>VLSI Design - Application and Future Scope</i>	<i>Dr. Vinod A. L</i>	<i>C V Anilkumar</i>	<i>College of Engineering, Karunagapall</i>	<i>1 Day</i>	<i>3000</i>	<i>2,014</i> <i>578</i>
	2.	<i>Advanced features in 3Ds- MAX</i>	<i>Ashwin A V</i> <i>Arun Raj R</i>	<i>Anilkumar A</i>		<i>3 Days</i>	<i>6000</i> <i>6,000</i>	<i>4,326</i> <i>4,326</i>  <i>3,990</i>
	3.	<i>Industrial Tutoring In JSP</i>	<i>Ratheesh T S</i> <i>Sourabh Sukumaran</i>	<i>Sabeena K</i>		<i>1 Day</i>	<i>4,000</i> <i>4,000</i>	<i>1,172</i> <i>1,172</i>  <i>4,081</i>
	4.	<i>Industrial Tutoring In C#</i>	<i>Jikku M John</i> <i>Kamalnath R</i>	<i>Sabeena K</i>		<i>2 Days</i>	<i>4,000</i> <i>4,000</i>	<i>1,472</i> <i>1,472</i>  <i>5,460</i>
	5.	<i>Industrial Tutoring In Php</i>	<i>Vaisakh H</i> <i>Ajith John Varghese</i>	<i>Sabeena K</i>		<i>2 Days</i>	<i>4,000</i> <i>4,000</i>	<i>1,472</i> <i>1,472</i>  <i>5,618</i>

	6.	<i>Industrial Tutoring In Prepare to become an Industry Professional</i>	<i>Irfan Haneef</i>	<i>Baiju V</i>		<i>1 Day</i>	<i>3,000</i>	<i>3,572 2,490</i>
2015-16	1.	<i>Industrial Talk On Electronic Product Design</i>	<i>Shainaj Kumar</i>	<i>Deepa A K</i>	<i>College of Engineering, Karunagapally</i>	<i>1 Day</i>	<i>3,000</i>	<i>1,915</i>
	2.	<i>Industrial Talk On Internet Of Things</i>	<i>BijumonJanardhan,</i>	<i>Deepa A K</i>		<i>1 Day</i>	<i>3,000</i>	<i>1,835 780</i>
	3.	<i>Java Programming</i>	<i>Aravind S</i>	<i>Remya R S</i>		<i>3 days</i>	<i>9,000</i>	<i>5,154 12697</i>
	4.	<i>Industrial Tutoring On Project Development using Java</i>	<i>Aravind S N Alen Vincent</i>	<i>Anikumar A</i>		<i>1 Day</i>	<i>3,000 3,000</i>	<i>1,953 1,953 3,798</i>
	5.	<i>Principles &amp; Techniques Used In TI Signalling</i>	<i>Binu R</i>	<i>Aswathy S S</i>		<i>1 Day</i>	<i>3,000</i>	<i>1,931 4,440</i>
	6.	<i>Talk On Antenna Types For(S7 Ec Students) Dooradarsan</i>	<i>Shaji M</i>	<i>Renjini S</i>		<i>1 Day</i>	<i>3,000</i>	<i>2,693 6,061</i>
	7.	<i>Embedded System Design Using Keil and Proteus</i>	<i>Deepa K V</i>	<i>Deepa T R</i>		<i>1 Day</i>	<i>3,000</i>	<i>1,771 5,223</i>

	8.	Industrial Workshop On Raspberry Pi	Anand M, Dinu D Arun M Sajit	Anu Mohan		2 Days	3,000 3,000 3,000 3,000	1,739 1,739 1,739 1,739 2,500
	9.	Workshop On Mobile And Laptop Service	Sonu S Pillai	Shiny C		1 Day	3,000	1,185 1,345
	10.	Expert Talk On On Internet Of Things	Shahim Baker	Jyothi R L		1 day	3,000	1,938 2,671
	11.	Talk On Switch Gear And Protection	Jayarajan C N	Raju M		2 Days	-	2,122 7,529
	12.	Mobile Application Development Using Phone Gap	Jobin C S Saran S	Deepa T R		2 Day	6,000 6,000	4,190 4,190 9,596
	13.	Machine learning techniques and applications	Sandhya Harikumar	Remya R S		2 Days	6,000	896 1,240
	14.	Industrial Tutoring On Multimedia Project Using Maya	Arun Raj R Aswin A V	Anikumar A		3 Day	5,400 5,400	4,524 4,524 3,300
2016-17	1.	Evaluation Of Analog Converters	Santhi Krishna	Deepa T R	College of	1 Day	3,000	4,180 827
	2.	Workshop On Microwave	Karthik A	Shiny C		1 Day	3,000	1,739 2,429

	3.	How To Built A Career In Cyber Security	O K Shafeeque	Jyothi R L	Engineering, Karunagapally	1 Day	3,000	1,390 5693
	4.	Evangelising Social Entrepreneurs	Saran S, Sreemol V	Deepa T R		1 Day	3,000 3,000	4,636 2,065 3,738
	5.	Creative Innovation In Start Up Ecosystem	Nisha Elsa Johnson Yaafer Khan	Libi A		2 Day	3,000 3,000	1,448 1,448 6204
	6.	Recent Trends In Power Generation	A G Hareendralal	Raju M		1 Day	3,000	1,707 11,591
	7.	Antenna And Wave Propagation	Shaji M	Deepa A K		1 Day	3,000	2,378 4,166
	8.	3D Max	BijoyBhadran B	Anilkumar A		3 Days	9,000	3,780 1,350
	9.	Expert Talk On Entrepreneurship Developmen	Adarsh V K	Deepa A K		1 Day	3,000	1,752 700
	10.	Web Technology and PHP	Akshai A L S Surya Arjun Babu C Roshini NairHR	Jyothy R L		4 Days	6,000 6,000 6,000 6,000	2,780 2,780 2,780 2,780 10,325
	11.	Expert Talk On EDA Tools-Spice	Shainaj Kumar V K	Deepa A K		2 Days	6,000	1,906 2,400
	12.	Design With CPLD's And FPGA's	Arun Kumar	Deepa T R		1 Day	3,000	1,576 1,074

	13.	Ideation Boot Camp	Saran S, Sneha John P	Deepa T R		1 Day	3,000 3,000	3,652 1,970 6,546
	14.	Laptop And Mobile Phone Servicing	Sonu S Pillai	Dr.CGopaku mar		1 Day	2,000	1,095 1,296
	15.	Java And Android Application Development	Anu C, Nidhin M V Thomas P V Aju Mathew Jibin George Sreejith O P Abdul Wahid BhagyaSoman	Shani Raj		4 Days	3,000 3,000 3,000 3,000 3,000 3,000 3,000 3,000	1,560 1,560 1,580 1,580 1,600 1,600 1,390 1,390 11,875
	16.	Workshop On Hybrib Mobile Application Development	Jobin C S Saran S	Deepa T R		1 Day	6,000 6,000	3,768 4,348 8,922
	17.	Expert Talk On RTC To GDS – II	Sreyas S Nampoothiri	Deepa T R		1 Day	3,000	4,300 700
	18.	Expert Talk On "Design And Development Cycle Of Embedded System In Industry"	Robert Bosh	Anilkumar C V		1 Day	3,000	2,541 798
	19	Expert lecture on Web Development using JSP	Venkatesh Kumar B Yogesh S Nidhin Jibin George	Shani Raj		2 Day	3000 3,000 3,000 3,000	3,507 3,507 1,590 1,871 4,800



	20	Workshop on IOT	Bijoy R Vipin A	Deepa A K		1 Day	3,000 3,000	1,790 1,790 3,756
	21	Workshop on Micro controllers	Sapthas R S Thomas sabu	Deepa A K		1 Day	3,000 3,000	1,870 1,870 2,880
	22	Expert talk on advanced technology solution tips provided to customers in IT industries	Manu shanker	Deepa A K		1 Day	3,000	2,750
	23	Workshop on internet of things	Vipin A Bijoy R	Deepa A K		1 Day	3,000 3,000	1,870 1,870 3,021
	24	Internet Programmin g PHP	Saran S Jobin C S	Remya R S		3 Days	9,000 9,000	3,456 4,625 14,958
	25	Workshop on PLC & Scada	Kumaraswam y Rama Subramaniyan  Sudalaivi	Raju M		3 Days	9,000  9,000	3,170  3,170 10,230
	26	Workshop on free and open software	Justin Joseph Pradeep T S Abdul Vahid V V	Jyothi R L		3 Days	12,000 15,000 3,000	2,300 980 2,070 11,870
2017-2018	1	Workshop on MatLab	Nebu Pullickal	Reji Thankachan		1 Day	3000	1640 4,053
	2	Introduction to Web application	Lline B F Dhanya K Nair Shifna S Monish P L			2 Days	3,000 3,000 3,000 3,000	1,270 1,270 1,270 1,270 4,280

	3	Workshop on Laptop and Mobile phone servicing	Sonu S Pillai Ajith N U	Sabeena K		1 Day	3,000 3,000	1,980 1,980 4,106	
	4	Training on simulation softwares in Industry Perspective	Kanan S A Basim Basheer	Raju M		3 Days	6,000	3,170	
							6,000	3,170	
								7,115	
	Total						4,17,800	4,95,073	

#### 5.c Expenditure on academic networking with other institutions

Financial Year	Sl No	Description of the program	No of days/hrs	Honorarium	TA/DA etc
2012-13		-	-	-	-
2013-14		-	-	-	-
2014-15		-	-	-	-
2015-16		-	-	-	-
2016-17		-	-	-	-
<b>Total</b>				-	-

#### 5.d Expenditure incurred on Campus placements (UG & PG)

Financial Year	I. No	Description of the program	Name of the Expert	Name of Placement co-ordinator	Venue	No of days /hrs	honorarium	TA/DA etc
2012-13	-	-	-	-	-	-	-	-
2013-14	-	-	-	-	-	-	-	-
2014-15		1.BIZTIME IT Solutions Pvt Ltd,Bangalore		Baiju V	CE Karunagappally	1 Day		11,743
2015-16	-	-	-	-	-	-	-	-
2016-17	-	-	-	-	-	-	-	-
<b>Total</b>							-	<b>11,743</b>

#### 5.e Expenditure on UG Students attended industrial internship

Financi	Sl. No	Description of the program	Name of the Company	No of days /hrs	Expenditure, TA/DA etc
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<i>al Year</i>					
2012-13	-	-	-	-	-
2013-14	-	-	-	-	-
2014-15	-	-	-	-	-
2015-16	-	-	-	-	-
2016-17	1.	Internship by S6 ECE Students	KELTRON, Calicut AIR, Tvm RTTC, Tvm KMML, Chavara KMML, Chavara	6 Days 5 Days 5 Days 5 Days 5 Days	10760 2,248 17,220 683 566
	2	Internship by S2 EEE Students	IRE, Chavara	5 Days	1,180
2017-18	1	Internship by S6 EEE Students	Koodamkulam Nuclear Power Plant	5 Days	13,701
	2	Internship by S8 EEE Students	Kakkad power station	5 Days	3,402
	3	Industrial Training by S8 EEE Students	Malankkara Small Hydro Power Station, Idukki	6 Days	3,060
	4	Internship S4 CSE	White Oval	5 Days	3,910
			IRE	5 Days	4,331
			Keltron	5 Days	1,760
			AIPCT	5 Days	1,722
	5	Internship- IRE Chavara	Internship- IRE Chavara	5 Days	1,475
	6	Internship - KEL Kundara	Internship - KEL Kundara	7 Days	369
	7	Internship - KEL Kundara	Internship - KEL Kundara	6 Days	1,845
	8	Internship - KEL Kundara	Internship - KEL Kundara	5 Days	1,476
	9	Internship- IRE Chavara	Internship- IRE Chavara	5 Days	1,475
<b>Total</b>					<b>72,311</b>

#### 5.f Others(Industrial Visit)

Financial Year	Sl No.	Description of the	Name of co-ordinator	Venue	No of days	Expenditure	TA/DA etc
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		program			/hrs		
2012-13	-	-	-	-	-	-	-
2013-14	1.	Visit To ITI, Palakkad	Deepa T R Kuryachan T D	ITI, Palakkad	1 Day	2,850	23,370 1,830 1,936
	2.	Visit To Spectrum Softech Solutions , Kochi	Sabeena K Aiswarya S Kumar Diana Mathew	Spectrum Softech Solutions , Kochi	1 Day	2,600	10,296 1,394 1,394
	3.	Visit To 220kv Substation Edappon	Haseena P Y Sabeena A Reshmi V S Vinod S	220kv Substation Edappon	1 Day	2,775	4,480 126 126 126 126
	4.	Visit To TELK Angamaly	Haseena P Y	TELK Angamaly	1 Day	-	12,000
	5.	Visit To Moozhiyar Power Station	Haseena P Y Raju M Arya mol Sudhakaran Sabeena A Anilkumar V	Moozhiyar Power Station	1 Day	2,550	10,710 393 393 393 393 393
	6.	Visit To Poringalkuth u Power Station	Libi A Reshmi V S Vinod S Arya M S	Poriyalkuthu Power Station	1 Day	2,850	18,012 618 618 618 618
2014-15	1.	Visit To RTTC, Kaimanam, T vm	Deepa A K Bence Paul Mili Roselime Mathews Amina S	RTTC , Kaimanam, T vm	1 Day	3,300	10,560 1,658 1,658 418

	2.	Visit to Hycon Power electronics Pvt. Ltd, Trissur	Deepa T R P C Sunil	Hycon Power electronics Pvt. Ltd., Trissur	1 Day	3,211	22,568 585 585
	3.	Visit to Pallivasal Power station, Moolamattom	Libi A Raju M Preema R Chandran Mary M S	Pallivasal Power station, Moolamattom	1 Day	2,750	23,826 651 651 651
	4.	Visit to Pallivasal Power station, Moolamattom	Raju M Ambili Mathew Praveesh P Mary M S	Pallivasal Power station, Moolamattom	1 Day	2,650	20,900 651 651 651 651
2015-16	1	Visit to Kudamkulam Nuclear Power Plant, Thirunelveli	Libi A	Kudamkulam Nuclear Power Plant, Thirunelveli, TN	1 Day		12,258
2016-17	1	Visit to High Voltage India Bangalore	Deepa A K Libi A Haseena P Y Raju M Preema R Chandran Arya A P Ajmal K Reshma Ittiachan Prasanthi P S	High Voltage India Bangalore	1 Day		5,354 5,354 5,354 5,354 3,790 3,790 3,790 3,790 3,790
	2	Visit to Lower Periyar Power house	Deepa A K Kuryachan T D Subeena H	Lower Periyar Power house	1 Day		28,595 815 775
	3	Visit to SFO Technologies	C V Anilkumar	SFO Technologies,	1 Day		2,534

		, cochin	Dr. C Gopa kumar Sylish S V Deepa A K Shyni C Deepa T R Premakumari K R Kuryachan T D Jyothilekshmi L Nidhin K V Vijayan	cochin			2,328  2,318 2,328 2,328 2,010 2,534 2,318 606 606 606
	4	Visit to VL cyber park, Kozhikode	Abinlal D Shani Raj	VL cyber park, Kozhikode	1 Day	-	35,644 1013 1048
	5	Visit to ITI Palakkad	Reji Thankachan Deepa T R Niyas S K	ITI Palakkad	1 Day	-	33,538 928 928
	6	Visit to FCRI Kanjikode	Sylish S V Deepa A K	FCRI Kanjikode	1 Day	1360	34,356 893 893
	7	Visit to Matupetty Dam &Sengulam power house	Sabeena K Alkha Mohan Shaisha P Sheena S Noushad	Matupetty Dam &Sengulam power house	1Day	-	26,752 814 814 814
2017-18	1	Visit to Kuttiyadi Hydro electric power station	Haseena P Y	Kuttiyadi Hydro electric power station	1Day	-	28,215
	2	Visit to Pallivasal Hydroelectric Power station and Matupetty	Libi A	Pallivasal Hydroelectric Power station and Matupetty	1Day	-	28,208 815 815 815

		<i>Dam</i>		<i>Dam</i>			
	3	<i>Visit to Kudamkulam Nuclear power Plant</i>	<i>Raju M Reshma Ittiachan</i>	<i>Kudamkulam Nuclear power Plant</i>	<i>1 Day</i>		<i>17,775 890 850</i>
	4	<i>Industrial Visit at UL Cyberpark , Kozhikode,S6 CSE/IT</i>	<i>Remya R S Abinlal Alkhamohan</i>	<i>UL Cyberpark , Kozhikode,S6 CSE/IT</i>	<i>1 Day</i>		<i>22,365 1013 1048</i>
	5	<i>Industrial Visit at UL Cyberpark , Kozhikode,S4 CSE</i>	<i>Jyothi R L Jyothi R L Anilkumar A</i>	<i>UL Cyberpark , Kozhikode,S4 CSE</i>	<i>1 Day</i>		<i>16,898 1045 1045</i>
	6	<i>Industrial Visit at Hydro electric power station , Pallivasal</i>	<i>Sylish Revikumarthampi V R Leena B R</i>	<i>Hydro electric power station , Pallivasal</i>	<i>1 Day</i>		<i>17,440 1095 1055</i>
	7	<i>Industrial Visit at Hydro electric power station , Pallivasal, S2 EEE</i>	<i>Premnath G</i>	<i>Hydro electric power station , Pallivasal, S2 EEE</i>	<i>1 Day</i>		<i>28,116</i>
	8	<i>Industrial Visit at Kuttiyadi</i>	<i>Raju M</i>	<i>Kuttiyadi</i>	<i>1 Day</i>		<i>27,456</i>
<b>Total</b>						<b>26,896</b>	<b>6,16,004</b>

**6. Year wise Expenditure details of all the sub-activities in Management Capacity Enhancement**

<b>6.a Expenditure on Sr. Officials &amp; Sr. faculty attended management development training (MDT)</b>								
<i>Financial Year</i>	<i>Sl. No</i>	<i>Description of the program</i>	<i>Name of participant</i>	<i>Name of organiser</i>	<i>Venue</i>	<i>No of days</i>	<i>Registration fee</i>	<i>TA/DA</i>
2012-13	-	-	-	-	-	-	-	-
2013-14	1.	ISTE-WPLP - National Workshop On Accreditation And Autonomy	Dr. Hari V S	ISTE	Hotel Singaar International, Kanyakumari	3	30,000	2,094
	2.	Quality Initiation In Technical And Higher Educational Institutions	Deepa V S	ESCI, Hyderabad	ESCI, Hyderabad	3	15,168	18,666
			Premakumary K R				15,168	20,101
			Renu K K				15,169	18,036
			Libi A				15,169	19,673
			Smitha P				15,169	21,079
			RejiThankachan				15,169	18,036
	3.	Making Teqip Institutions More Effective Strategic Planning And Good Governance	Dr. Hari V S	CET School of Managment	Chaitram Hotel, Tvm	2	13,483	1,706
			Dr. Ajilkumar A				13,483	1,706
			Manoj Ray D				13,483	1,706
2014-15		-	-	-	-	-	-	-
2015-16	1	Hi Impact Leadership Blueprint For Success	RevikumarThampi V R	TPLC	Govt.Eng.Coll ege, Bartonhill, Thiruvananthapuram	3	36,000	2,329
			Remya R S				36,000	2,154
			Baiju V				36,000	2,329
			Geetha S				36,000	2,154
			C V Anilkumar				36,000	2,329
			Deepa T R				36,000	2,154
2016-17	1	Workshop On Good Governance Leadership -	Dr. Hari V S	NPIU	India Habitat Centre, New Delhi	1	-	25,796
			V P Devassia					29,438



<b>Total</b>	<b>3,77,461</b>	<b>1,91,486</b>
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<b>6.b Expenditure on institutional management capacity enhancement (IMCE), if any</b>								
<i>Financial Year</i>	<i>Sl. No</i>	<i>Description of the program</i>	<i>Name of participant</i>	<i>Name of organiser</i>	<i>Venue</i>	<i>No of days</i>	<i>Registration fee</i>	<i>TA/DA</i>
2012-13	-	-	-	-	-	-	-	-
2013-14	-	-	-	-	-	-	-	-
2014-15	1.	Workshop On Good Governance Leadership And Management	Dr. Hari V S Prof. V P N Namboori	NPIU	Metropolitan Hotel, Newdelhi	2	-	44,711 45,910
	2.	Academic Leadership For Teqip Institutions	Revikumar Thampi V Binu V P	IIM Kozhikode	IIM Kozhikode	1		2,475 2,475
2015-16	-	-	-	-	-	-	-	-
2016-17	1	Soft Skills For Interpersonal Effectiveness: Attitude And Skill Enhancement Lab	Raju M	IIMK	IIMK	4	64,400	3,072
<b>Total</b>							<b>64,400</b>	<b>98,643</b>

## **7. Year wise Expenditure details of all the sub-activities in Institutional Academic Reforms**

<b>7.a Expenditure on accreditation fee for NBA</b>				
<i>Financial Year</i>	<i>Sl No.</i>	<i>Description of the program applied</i>	<i>Fee paid</i>	<i>Status</i>

2012-13		-	-	-
2013-14	1	Accreditation fee for NBA	1,12,360	Waiting for NBA team's visit
2014-15	1	Accreditation fee for NBA	7,86,520	Waiting for NBA team's visit
2015-16		-	-	-
2016-17	1	Mtech Signal Processing	8,05,000	SAR to be uploaded
	2	Mtech Image Processing		
<b>Total</b>			<b>17,03,880</b>	

**8. Year wise Expenditure details of all the sub-activities in Academic Support for Weak students**

<b>8.a Expenditure on students transition from first year to second year of UG Programs. (Remedial coaching)</b>						
<i>Financial Year</i>	<i>Sl. No</i>	<i>Subject</i>	<i>Name of faculty/expert</i>	<i>No of Beneficiaries</i>	<i>No of days /hrs</i>	<i>Expenditure</i>
2012-13	-	-	-	-	-	-
2013-14	1	Data Base Management System	Diana Mathew	53 nos	2 hrs	1,200
	2	Network Theory.	Bence Paul	44	3 hrs	1,800
	3	Digital Signal Processing	Reji Thankachan	45	6 hrs	3,600
	4	Field Theory	Reji Thankachan	29	2 hrs	1,200
	5	Solid State Device	Remya A R	7	3 hrs	1,800
	6	Digital Electronics	Anwar Sha	31	1hrs	600
	7	Statistics	Renu K.K	18	7hrs	4,200
	8	Information Technology	Sabeena K	25	2 hrs	1,200
	9	Computer Organisation	Abin K.R	24	2hrs	1,200
	10	Microprocessor	Aneesha Mohammed	40	6 hrs	3,600
	11	Information Technology	Abin K. R	54	11 hrs	6,600
	12	Computer Organization	Abin K. R	43	12hrs	7,200
	13	Advanced Computer Networks	Smitha P	22	3 hrs	1,800
	14	Knowledge Engineering	Mehareeniza Nazeem	20	2hrs	1,200

15	Distributed Computing	Mehareeniza Nazeem	7	2hrs	1,200
16	Electrical Machines II	Sabeena A	11	4hrs	2,400
17	Electrical Technology	Sabeena A	14	4 hrs	2,400
18	Logic Design	Remya A R	32	6 hrs	3,600
19	Electronics Circuits I	Remya A R	20	5 hrs	3,000
20	Solid State Device	Remya A R	34	5 hrs	3,000
21	Electrical Technology	Resmi V S	30	4 hrs	2,400
22	Electrical & Measurements and Measuring Instruments	Resmi V S	121	7hrs	4,200
23	Software Engineering	Sree S Bhagya	16	2hrs	1,200
24	Electromagnetic Theory	Bence Paul	35	2hrs	1,200
25	Microprocessor Based Systems	Vinod S	12	2 hrs	1,200
26	Electronic Device and Circuits	Anwarsha	62	9 hrs	5,400
27	Circuits Signals and Systems I	Haseena P Y	30	6 hrs	3,600
28	Engineering Maths	Premakumari K R	27	7 hrs	4,200
29	Information Retrieval	Alkha Mohan	22	3 hrs	1,800
30	Data Base Management System	Diana Mathew	34	12 hrs	7,200
31	Computer Graphics	Jaya Krishnan	50	13 hrs	7,800
32	Digital Signal Processing	Reji Thankachan	30	4 ½ hrs	2,700
33	Network Theory	Reji Thankachan	12	1 hrs	600
34	System Processing	Sabeena K	47	4 hrs	2,400
35	Microproceesor Based System Design	Vinod R	18	2 hrs	1,200
36	Principles of Programming Language	Remya R S	21	3 hrs	1,800
37	Advanced architecture and parallel computing	Remya R S	8	1 hrs	600
38	Discrete computational structures	Remya R S	10	2 hrs	1,200

	39	Object Oriented Programming	Anilkumar A	12	3 hrs	1,800
	40	Cryptography	Aiswarya S Kumar	2	1hrs	600
	41	Multimedia Computing	Sree Lekshmi M	2	1hrs	600
	42	Logic Design and Electronics	Jeena James	16	8hrs	4,800
	43	Hardware Modeling	Jeena James	7	3 hrs	1,800
	44	Digital Electronics	Anwarsha	29	4 hrs	2,400
	45	Probability Random Process	Aswathy S S	37	3 hrs	1,800
	46	DSD	Shiny C	10	6 hrs	1,200
	47	Network Theory	Reji Thankachan	42	11 hrs	6,600
	48	Signal Processing	Reji Thankachan	17	6 hrs	3,600
	49	Discrete computational structures	Remya R S	20	3 hrs	1,800
	50	C Programming	Vinod R	30	4 hrs	2,400
	51	Microprocessor	Vinod R	28	3 hrs	1,800
	52	Digital electronics	Anvarsha	49	4 hrs	2,400
	53	Network Theory	Reji Thankachan	30	5 hrs	3,000
	54	Electrical &Measurements and Measuringl	Reshmi V S	42	4 hrs	2,400
	55	Solid state electronics	Remya A R	27	13 hrs	7,800
	56	Probability and random process	Aswathy S S	30	13 hrs	4,200
2014-15	1	Engineering Graphics	Jayadeepkumar J	28	8 hrs	4,800
	2	Digital Signal Processing	Dr.C Gopakumar	35	2 hrs	1,200
	3	Automate language Computing	Remya R S	25	8hrs	4,800
	4	Electrical Machines I	Resmi V S	7	4 hrs	2,400
	5	Control System Engineering	Haseena P Y	22	2 hrs	1,200
	6	Engineering Graphics	Baiju V	30	3 hrs	1,800
	7	Signal and System	Jeena James	16	1 hrs	900
	8	Engineering maths- Differential Equations	Prema kumari K R	48	4hrs	2,400
	9	Engineering	Jayadeep kumar J	37	2 hrs	1,200

		<i>Mechanics</i>				
	10	<i>Engineering mathematics</i>	<i>Sheela R</i>	7	2 hrs	1,200
	11	<i>Applied Science</i>	<i>Renu K K</i>	13	9 hrs	5,400
	12	<i>Digital Electronics</i>	<i>Sabeena A</i>	25	10 hrs	6,000
	13	<i>Digital Signal Processing</i>	<i>Reji Thankachan</i>	13	3 hrs	1,800
	14	<i>Computer Programming</i>	<i>Diana Mathew</i>	20	4hrs	2,400
	15	<i>Digital Signal Processing</i>	<i>Bence Paul</i>	30	9 hrs	5,400
	16	<i>Automate Languages and Computation</i>	<i>Remya R S</i>	3	5 hrs	3,000
	17	<i>Engineering Graphics</i>	<i>Jayadeep kumar J</i>	20	4 hrs	2,400
	18	<i>Control Systems Engineering</i>	<i>Haseena P Y</i>	34	5 hrs	3,000
	19	<i>Engineering Mechanics</i>	<i>Joji Johnson</i>	30	22 hrs	13,200
	20	<i>Engineering Mathematics</i>	<i>Jayaram D S</i>	40	12 hrs	7,200
2015-2016	1	<i>Network Theory</i>	<i>Ms.Deepa A K</i>	20	15hrs	9,000
	2	<i>Electronics Circuits I</i>	<i>Dr.C.Gopakumar</i>	30	22 hrs	13,200
	3	<i>Software Engineering</i>	<i>Ms.Jisy Raju</i>	16	2 hrs	1,200
	4	<i>Discrete Computational Structures</i>	<i>Ms.Remya R S</i>	16	4hrs	2,400
	5	<i>Automatic Language and Computations</i>	<i>Ms.Remya R S</i>	4	10 hrs	6,000
	6	<i>Enginnering Mathematics</i>	<i>Ms.Renu K K,</i>	3	4 hrs	2,400
	7	<i>Network Theory</i>	<i>Ms.Renjini S</i>	8	7 hrs	4,200
	8	<i>Design Estimation and costing</i>	<i>Ms.Meera Murali</i>	15	11 hrs	6,600
	9	<i>Circuit signals and systems</i>	<i>Ms.Ambili Mathew</i>	7	4hrs	2,400
	10	<i>Microprocessor based System</i>	<i>Ms.Ambili Mathew</i>	22	12 hrs	7,200
	11	<i>Electrical Machines II</i>	<i>Ms.Preema R Chandran</i>	10	7hrs	4,200
	12	<i>Circuits Signals and Systems</i>	<i>Ms.Mary M S</i>	4	4hrs	2,400
	13	<i>Distributed Computing</i>	<i>Mr.Jayakrishnan A</i>	3	3hrs	1,800
	14	<i>Computer Organization and Architecture</i>	<i>Mr.Jayakrishnan A</i>	7	8 hrs	4,800
	15	<i>Electronics Circuits II</i>	<i>Mr.Deepak Kumar G K</i>	10	4hrs	2,400

	16	Modern Digital Signal Processing	Ms.Divya Raj	10	5hrs	3,000
	17	Industrial and Power Electronics	Ms.Ambili Mathew	6	4hrs	2,400
	18	Basic Electrical and Electronics Engineering	Ms.Meera Murali	31	6hrs	3,600
	19	Technical Communication	Ms.Libin Muslih	8	3hrs	1,800
	20	Digital Image Processing	Mili Rosline Mathews	7	4 hrs	2,400
	21	Audio and Video Engineering	Aswathy S S	9	5hrs	3,000
	22	Computer Programming	Alkha Mohan	18	11 hrs	6,600
	23	CProgramming	Jisya Raju	21	13 hrs	7,800
	24	Computer Programming	Alkha Mohan	16	13 hrs	7,800
2016-17	1	Introduction to Electrical Engineering	Preema R Chandran	10	3 hrs	1,800
	2	Electronics Devices and circuits	Preema R Chandran	5	3 hrs	1,800
	3	Electrical Machines II	Sujitha Surendran	4	5 hrs	3,000
	4	Design estimating and Costing	Meera Murali	14	10 hrs	6,000
	5	Linear Integrated Circuits	Meera Murali	3	6hrs	3,600
	6	Circuits Signals and Systems I	Haseena P Y	28	12 hrs	7,200
	7	Control System II	Haseena P Y	8	2 hrs	1,200
	8	Electronic Theory	Chippy Vijayan	2	5hrs	3,000
	9	Network Theory	Niyas S K	39	3 hrs	1,800
	10	Digital Signal Processing	Niyas S K	11	24 hrs	14,400
	11	Fluid Dynamic and Heat Engineering	Jayadeepkumar J	20	8 hrs	4,800
	12	Engineering Graphics	Jayadeepkumar J	20	6 hrs	3,600
	13	Advanced Computer Networks	Sree S Bhagya	14	10 hrs	6,000
	14	Microprocessor Based System	Arya A P	3	8 hrs	4,800
	15	Power System engineering	Prasanthi P S	12	9 hrs	5,400
	16	Field Theory	Ajmal K	18	12 hrs	7,200
	17	HVDC	Ajmal K	10	3hrs	1,800
	18	Power System	Ajmal K	10	3hrs	1,800
	19	Electrical Machine II	Preema R Chandran	3	4hrs	2,400
	20	Modern Digital Signal	Sujitha Surendran	3	6hrs	3,600

		<i>Procesing</i>				
21	<i>Computer Networks</i>	<i>Alkha Mohan</i>	2	10 hrs	6,000	
22	<i>Signal and Systems</i>	<i>Chippy Vijayan</i>	53	12 hrs	7,200	
23	<i>Communication Engineering III</i>	<i>Aswathy S S</i>	11	4 hrs	2,400	
24	<i>Digital Signal Processing</i>	<i>Reji Thankachan</i>	6	6 hrs	3,600	
25	<i>Electronics Measurements and Instrumentation</i>	<i>Shamna S S</i>	4	1 hrs	600	
26	<i>Micro Processor: Architecture and Programming</i>	<i>Subeena H</i>	6	2 hrs	1,200	
27	<i>Microware Techniques and Device</i>	<i>Subeena H</i>	13	8 hrs	4,800	
28	<i>Automata Theory Languages and Computations</i>	<i>Remya R S</i>	20	22 hrs	13,200	
29	<i>Introduction to Electrical Engineering</i>	<i>Ajmal K</i>	9	24 hrs	14,400	
30	<i>Basic of Electrical Engineering</i>	<i>Ajmal K</i>	9	6 hrs	3,600	
31	<i>Industrial and Power Electronics</i>	<i>Meera Murali</i>	5	10 hrs	6,000	
32	<i>Communication Engineering II</i>	<i>Shiny C</i>	10	12 hrs	7,200	
33	<i>Control System I and Modern Control System</i>	<i>Haseena P Y</i>	12	8 hrs	4,800	
34	<i>Introduction to Computing and Problem Solving</i>	<i>Alkha Mohan</i>	5	8 hrs	4,800	
35	<i>Advanced Computer Networks</i>	<i>Alkha Mohan</i>	18	5 hrs	3,000	
36	<i>Analysis and Design of Algorithms</i>	<i>Alkha Mohan</i>	6	3 hrs	1,800	
37	<i>Switch Theory and Logic of Design</i>	<i>Swetha Saira Appose</i>	14	4 hrs	2,400	
38	<i>Microprocessor Based System Design</i>	<i>Swetha Saira Appose</i>	5	3 hrs	1,800	
39	<i>Computer Programming</i>	<i>Aagi A S</i>	20	3 hrs	1,800	
40	<i>Open GL Computer Graphics</i>	<i>Dr.Sreeni K G</i>	21	6 hrs	3,600	
<b>Total</b>						<b>5,14,200</b>

8.b Expenditure on students Expert class							
	Financial Year	Subject	Name of faculty/expert	No of Beneficiaries	No of days /hrs	hon ora riu m	TA/ DA/ etc
	2012-13	-	-	-	-	-	-
	2013-14	-	-	-	-	-	-
	2014-15	-	-	-	-	-	-
	2015-16	-	-	-	-	-	-
	2016-17	-	-	-	-	-	-
Total						-	-

<b>8.c Expenditure on any other Student support scheme (EAP)</b>							
<i>Financial Year</i>	<i>Sl. No</i>	<i>Subject</i>	<i>Name of faculty/expert</i>	<i>No of Beneficiaries</i>	<i>No of days /hrs</i>	<i>honorarium</i>	<i>TA/DA/etc</i>
2012-13	-	-	-	-	-	-	-
2013-14	1	Expert Lecture on DBMS	Sandhya Harikumar	38	3 days	9,000	1,440 4,980
	2	Students orientation and counselling	Dr. Vijayan Pillai H	121	1 day	3,000	1,496
	3	Expert Lecture Clustering Techniques	Sandhya Harikumar	23	1 day	3,000	480 1,850
	4	Soft Skill Training	Akhil Shan Arun Shan	68	4 days	12,000 12,000	900 900 6,231
	5	Expert Lecture on Multirate Filter Design Techniques	Shanu N	24	2 Days	6,000	1,926 3,500
	<b>Bridge course</b>						
	6	Technical communication	Libin Muslin	132	45 hrs	27,000	-
	7	Engineering Physics	Retheekumari S	130	22hrs	13,200	-
	8	Mathematics	Renu K K	35	7hrs	4,200	-
	9	Mathematics	Sheela R	42	8hrs	4,800	-
	10	Functions	Premakumari K R	52	11hrs	6,600	-
	11	C Programming	Diana Mathew	27	2hrs	1,200	-
	12	Computer Programming	Anilkumar A	35	5hrs	3,000	-
	13	C Programming	Seena Jojith	35	6hrs	3,600	-
	14	C Programming	Shajy L	44	12hrs	7,200	-
	15	Computer Programming	Meharuniza Naseem	70	18hrs	10,800	-
	16	Counseling class for First Year Students	Dr. Vijayan Pillai H		2 Days	3,000	1,000



		(Deepa A K)					
2014-15	1.	Soft Skill Training for Final Year Students	Arun Kumar Vipin V S Rajesh P S Sendhil Kumar N	118	2 Days	6,000 6,000 6,000 6,000	940 940 940 940 6,374
	2.	Placement orientation programme	Rajesh P S Arunkumar V Senthilkumar M	121	3 Days	6,000 6,000 6,000	1,830 3,160 1,830 8,397
	3.	Soft Skill Training for final year students	Subash Gauthaman Cliff Marcus Dare Arun Kumar v Jayesh J L Rajesh P S Vishnu Raj Rajaraman K S Mithunjith A K	183	5 Days	12,000 12,000 12,000 12,000 12,000 12,000 9,000 9,000	3,937 3,937 4,062 4,062 4,062 4,312 2,281 3,687 24,060
	1	Soft Skill Training for Final Year Btech Students	Naveen Cheriyan Jayesh J L Rajesh P S Vishnu Raj Joseph James Arunkumar V Praveenkumar S K Rajan Thampuran	181	5 Days	15,000 15,000 15,000 15,000 15,000 15,000 15,000 15,000	4,344 4,344 4,344 4,344 4,344 4,344 4,344 4,344 42,520
	2	Mind Tuning Motivation	Dr. T Padmakumar	46	1 Day	6,000	1,798 4,324
	3	Soft Skill Training	Ratheesh P S	172	5 Days	15,000 15,000	2,111 2,804

			Vishnu Raj			15,000	2,804
			Cliff Marcus Dare			15,000	2,111
			Hari Nair			15,000	2,111
			Percy Moses			15,000	2,111
			Jayesh J L				45,198
	Bridge course						
	4	Mathematics	Jayaram D S	110	12hrs	7,200	-
	5	Physics	Neethu S	110	21hrs	12,600	-
	6	Mathematics	Sheema A	108	6hrs	3,600	-
2016-17	1.	Counselling for First year students	Dr. C Somarajan	37	1 Day	3,000	1,024 1,017
	2	Project oriented Training programme	Dr. Vishnu Nampoothiri	48	4 Day	14,400	- 9,400
	3	Workshop on Life skill	Alexander F	76	1 Day	3,000	1,576 9,307
	4	Motivational and Counselling class	Justin Tomas Thomas Sabu	82	1 Day	3,000 3,000	2,683 2,683 3,710
	5	Motivational and Counselling class	Justin Tomas	39	2 Day	6,000	2,846 4,200
	6	Motivational and Counselling class	Justin Tomas	40	1 Day	3,000	9,840
	7	Soft skill training for S4 EC, CSE and EEE	Rajeev R Pillai	106	4 Days	6,000	1,690
			Rajesh P S			6,000	1,672
			Sarala N P			3,000	1,547
			Hari S Nair			6,000	1,672
			Vishnu Raj			6,000	1,690
			Shinu B			6,000	1,690
			Sanjay Rajan			3,000	4,170
			Jude Joseph F			3,000	4,170
			Jyothish V			6,000	1,565
			Bimil			3,000	3,370
			Cliff Marcus Dare			3,000	4,170
			Karthik Kasav			6,000	1,960

			Seetha Thampi			3,000	1,960
			Deepak Jose			6,000	3,635
			Sandheep V S			6,000	1,690
							15,068
	8	Orientation training for placement	Rajeev R Pillai	112	4 Days	3,000	1,565
			Hari S Nair			3,000	1,565
			Sandeep V S			6,000	1,565
			Sarala N P			6,000	1,514
			Jude Joseph			3,000	1,565
			Vishnu Raj			6,000	
			Jyothish V			6,000	
			Bimil			3,000	
			Shinu B			6,000	
			Karthik keshav			6,000	
			Rajesh P S			6,000	
			Seetha Thampi			6,000	
			Sanjay Rajan			3,000	
			Deepak Jose			6,000	
			Cliff Marcus Dale			3,000	4,560
							16,016
	9	Motivational and Counselling class	Justin Thomas	43	2 Days	6,000	3,044
			Arun Prasad			6,000	1,005
							6,525
	Bridge Course						
	10	Physics	Neethu K S	116	18 hrs	10,800	-
	11	Basic Science	Teetu Babu	116	12 hrs	7,200	-
	12	English	Libin Muslih	116	6 hrs	3,600	-
2017-18	1	Soft skill training Programme	Hari S Nair	42	3 Days	3,000	1,300
			Shinu B			3,000	
			Cliff Marcus Dare			3,000	1,300
			Vishnu Raj			3,000	5,600

	2	Soft skill training Programme	Shinu Balachandran Hari S Nair Cliff Marcus Dare Vishnu Raj Hari S Nair			3,000 3,000 3,000 3,000 3,000	1,460 3,280 400
	3	Project oriented training programme	Nebu Pullickal Kannan S A Basim Basheer	49	4 Days	9,000 3,000 12,000	3,170 3,170 3,170 6,500
	4	Getting ready for Placement - S6 EEE	Rajeev R Pillai Deepak Jose Karthik Kesav Jyothish V Seetha Thampi Hari S Nair Cliff Marcus Dale Sarala M P Sandheep V S Vishnu Raj Rajeev R Pillai Deepak Jose Jyothish V Hari S Nair	49	5 Days	3,000 3,000 3,000 3,000 3,000 3,000 3,000 3,000 3,000 3,000 3,000 3,000 3,000 3,000	3,757 1,190 1,190 1,190 4,555
	5	Getting ready for Placement - S6 EC	Deepak Jose Hari S Nair Sarala M P Vishnu Raj Seetha Thampi Jyothish V	36	5 Days	3,000 3,000 3,000 3,000 3,000 3,000	3,758 1,190 1,190 1,190 2,235 3,757

			<i>Shinu Balachandran</i>			3,000	1,190
			<i>Karthik Kesav</i>			3,000	1,915
			<i>Sandeep V S</i>			3,000	1,190
			<i>Rajeev R Pillai</i>			3,000	1,190
							6,656
	6	<i>Aptitude Training, S8</i>	<i>Deepak Jose</i>	132	4 Days	6,000	3,918
			<i>Hari S Nair</i>			3,000	1,190
			<i>Rajesh P S</i>			6,000	2,380
			<i>Sarala M P</i>			6,000	2,380
			<i>Vishnu Raj</i>			6,000	2,380
			<i>Jude Joseph</i>			3,000	1,190
			<i>Seetha Thampi</i>			6,000	1,927
			<i>Jyothish V</i>			6,000	3,917
			<i>Bimil</i>			3,000	3,758
			<i>Shinu Balachandran</i>			6,000	2,380
			<i>Karthik Kesav</i>			6,000	1,927
			<i>Cliff Marcus Dale</i>			3,000	3,917
			<i>Sanjay Rajan</i>			3,000	3,917
			<i>Sandeep V S</i>			6,000	1,190
			<i>Rajeev R Pillai</i>			3,000	
							21184
	7	<i>Aptitude Training, Mtech</i>	<i>Deepak Jose</i>	51	4 Days	3,000	3,758
			<i>Hari S Nair</i>			3,000	1,190
			<i>Rajesh P S</i>			6,000	2,380
			<i>Sarala M P</i>			6,000	2,380
			<i>Vishnu Raj</i>			3,000	1,190
			<i>Jude Joseph</i>			3,000	1,190
			<i>Seetha Thampi</i>			3,000	1,915
			<i>Jyothish V</i>			3,000	3,917
			<i>Bimil</i>			3,000	3,758
			<i>Shinu Balachandran</i>			3,000	1,190

			Karthik Kesav			3,000	1,927
			Cliff Marcus Dale			3,000	3,917
			Sanjay Rajan			3,000	3,917
			Sandeep V S			3,000	1,190
							8,548
	8		Karthik Keshav	44	5 Days	3,000	2,235
			Vishnu Raj			3,000	1,190
			Cliff Marcus			3,000	3,757
			Deepak Jose			3,000	
			Shinu Balachandran			6,000	1,190
			Sandheep V S			3,000	1,190
			Rajeev R Pillai			3,000	1,190
			Seetha Thampi			3,000	1,915
			Hari S Nair			3,000	1,190
							7,799
<b>Total</b>						<b>7,26,000</b>	<b>8,35,298</b>

**9. Year wise Expenditure details of all the sub-activities in Incremental Operating Cost**

<b>9.a Expenditure on Incremental operating cost</b>							
<i>Financial Year</i>	<i>Sl. No</i>	<i>Items</i>	<i>Maintenance</i>	<i>TA/DA</i>	<i>Stationeries</i>	<i>Minor items/work</i>	<i>others</i>
2012-13	-	-		-	-	-	-
2013-2014		<i>Consumables</i>					
	1	Payment of printer catridge , canon 303– Canon LBP 2900B	-	-	-	-	16,450
	2	Payment of postal stamps	5,000	-	-	-	-
	3	Payment for printing & Stationery items	-	-	2,950	-	-
	4	Payment for indent books	-	-	5,350	-	-
	5	Payment of consumables- Electrical Workshop	-	-	-	-	19,900

	6	Payment for stationery items – Teqip II office	-	-	18,638	-	-
	7	Payment for printing and stationery items (Registers)	-	-	11,350	-	-
	8	Payment for consumables – Mechanical workshop	-	-	-	-	10,740
	9	Payment for stationery items- TEQIP II Office	-	-	19,912	-	-
	10	Payment for Spiral binding charges	-	-	525	-	-
	11	Payment for printing stationery for library	-	-	22,750	-	-
	12	Payment for installation of projectors	-	-	-	-	12,800
	13	Payment for seal	-	-	1,530	-	-
	14	Payment for consumables- Battery water, Silica Gel, RJ 45 Jack	-	-	-	-	1,805
	15	Payment for consumables- Toner Refilling	-	-	-	-	1,600
	16	Payment for consumables- Toner Refilling	-	-	-	-	400
	17	Payment for Laser printer catridge	-	-	-	-	2,800
	18	Payment for consumables – Electrical Dept	-	-	-	-	18,489
	19	Payment for consumables	-	-	-	-	12,894
	Operation and Maintenance						
	20	Conducted implementation programme for staff members	-	-	-	-	3,600
	21	Attended PMSS workshop – Dr. Ajilkumar A	-	22,925	-	-	-
		Attended PMSS workshop – Manoj Ray D	-	22,925	-	-	-
	22	Attending effective monitoring and reviewing – Dr. Hari V S	-	1,564	-	-	-
		Attending effective monitoring and reviewing – Dr. Ajilkumar A	-	1,564	-	-	-
		Attending effective monitoring and reviewing – Manoj Ray D	-	1,564	-	-	-
		Attending effective monitoring and reviewing – Deepa V S	-	1,564	-	-	-
		Attending effective monitoring and reviewing – Libi A	-	1,564	-	-	-
	23	Attending orientation programme, SPFU – Hari V S	-	1,564	-	-	-
		Attending orientation programme, SPFU – Dr.	-	1,564	-	-	-

		Ajilkumar A					
		Attending orientation programme , SPFU – Manoj Ray D	-	1,564	-	-	-
		Attending orientation programme, SPFU – Deepa V S	-	1,564	-	-	-
		Attending orientation programme , SPFU – Vinod kumar	-	1,564	-	-	-
	23	Attended workshop on IIIC cell– Anilkumar V	-	1,952	-	-	-
	24	Attended training programme on PMSS – Manoj Ray D	-	1,892	-	-	-
		Attended training programme on PMSS –Anilkumar A	-	1,892	-	-	-
	25	Attended workshop on IIIC cell– Baiju V	-	1,952	-	-	-
	26	Attending discussion with Dr. Sujathan, R & D division, RCC- Shajy L	-	1,756	-	-	-
	27	Attending discussion with Dr. Keshava Chandrashekar, R & D division, SCTI- Shajy L	-	1,756	-	-	-
		Attending discussion with Dr. Keshava chandrashekar, R & D division, SCTI- Smitha P	-	1,756	-	-	-
	28	Conducted BOG 1	-	25,410	-	-	6,005
	29	Attended Review meeting at DTE- Hari V S	-	1,564	-	-	-
		Attended Review meeting at DTE- Dr. Ajilkumar A	-	1,564	-	-	-
		Attended Review meeting at DTE- Smitha P	-	1,564	-	-	-
		Attended Review meeting at DTE- Deepa V S	-	1,564	-	-	-
		Attended Review meeting at DTE- Libi A	-	1,564	-	-	-
		Attended Review meeting at DTE- Manoj Ray D	-	1,564	-	-	-
		Attended Review meeting at DTE- Baiju V	-	1,564	-	-	-
	30	First Mentors Visit- Prof. Sudheer K P, IIT Madras	-	16,113	-	-	17,523
	31	Attended Review meeting at CGPU CE TVM – Dr. Ajilkumar A	-	1,692	-	-	-
		Attended Review meeting at CGPU CE TVM – Manoj Ray D	-	1,692	-	-	-
		Attended Review meeting at	-	1,692	-	-	-



		<i>CGPU CE TVM – Deepa V S</i>					
		<i>Attended Review meeting at CGPU CE TVM – Smitha P</i>	-	1,692	-	-	-
		<i>Attended Review meeting at CGPU CE TVM – Premakumari K R</i>	-	1,692	-	-	-
	32	<i>Festival Allowance – Rijo George</i>	-	-	-	-	910
		<i>Festival Allowance – Shanida</i>	-	-	-	-	910
		<i>Festival Allowance – Dini M</i>	-	-	-	-	910
	33	<i>Attended Review meeting for finalizing procurement plan – Manoj Ray D</i>	-	1,614	-	-	-
		<i>Attended Review meeting for finalizing procurement plan – Dr. Ajilkumar A</i>	-	1,614	-	-	-
		<i>Attended Review meeting for finalizing procurement plan – Hari V S</i>	-	1,614	-	-	-
		<i>Attended Review meeting for finalizing procurement plan – Dr. Ajil kumar A</i>	-	1,614	-	-	-
		<i>Attended Review meeting for finalizing procurement plan – Manoj Ray D</i>	-	1,614	-	-	-
	34	<i>Conducting Written test &amp; Interview for MIS officer</i>	-	1,489	-	-	3,000
	35	<i>Attended Teqip Review Workshop, Bangalore – Hari V S</i>	-	16,273	-	-	-
		<i>Attended Teqip Review Workshop, Bangalore –Dr. Ajilkumar A</i>	-	16,273	-	-	-
		<i>Attended Teqip Review Workshop, Bangalore –Manoj Ray D</i>	-	16,273	-	-	-
	36	<i>Attended Review meeting on Progress of TEQIP II, TVM – Hari V S</i>	-	1,644	-	-	-
		<i>Attended Review meeting on Progress of TEQIP II, TVM – Dr. Ajilkumar A</i>	-	1,644	-	-	-
		<i>Attended Review meeting on Progress of TEQIP II, TVM – Manoj Ray D</i>	-	1,644	-	-	-
		<i>Attended Review meeting on Progress of TEQIP II, TVM – Deepa V S</i>	-	1,644	-	-	-
		<i>Attended Review meeting on</i>	-	1,644	-	-	-

		<i>Progress of TEQIP II, TVM – Premakumari K R</i>					
		<i>Attended Review meeting on Progress of TEQIP II, TVM – Smitha P</i>	-	1,644	-	-	-
		<i>Attended Review meeting on Progress of TEQIP II, TVM – Baiju V</i>	-	1,644	-	-	-
		<i>Attended Review meeting on Progress of TEQIP II, TVM – Sheela R</i>	-	1,582	-	-	-
		<i>Attended Review meeting on Progress of TEQIP II, TVM – Shajy L</i>	-	1,582	-	-	-
		<i>Attended Review meeting on Progress of TEQIP II, TVM – Haseena PY</i>	-	1,532	-	-	-
		<i>Attended Review meeting on Progress of TEQIP II, TVM – Vinod Kumar</i>	-	1,202	-	-	-
	37	<i>Attending workshop on MIS- Jayadeep Kumar J</i>	-	23,894	-	-	-
	38	<i>Attended Tally Programme – Vinod Kumar</i>	-	2,220	-	-	-
		<i>Attended Tally Programme- Shanida</i>	-	558	-	-	-
		<i>Attended Tally Programme-Dini M</i>	-	558	-	-	-
	39	<i>BOG Meeting 2</i>	-	15,098	-	-	26,085
	40	<i>Attended meeting regarding direct to student program– QEEE Meeting– Dr. Ajilkumar A</i>	-	32,306	-	-	-
	41	<i>Attended workshop on assessment of IIIC activities – Hari V S</i>	-	1,487	-	-	-
		<i>Attended workshop on assessment of IIIC activities – Dr. Ajilkumar A</i>	-	1,706	-	-	-
		<i>Attended workshop on assessment of IIIC activities – Premakumari K R</i>		1,487		-	-
		<i>Attended workshop on assessment of IIIC activities – Baiju V</i>	-	1,706	-	-	-

	42	Cluster level meeting of IIIC – Dr. Ajilkumar A	-	1,529	-	-	-
		Cluster level meeting of IIIC – Baiju V	-	1,529	-	-	-
	43	Attended Discussion meeting on effective implementation of TEQIP II at DTE – Hari V S	-	1,612	-	-	-
		Attended Discussion meeting on effective implementation of TEQIP II at DTE- Dr. Ajilkumar A	-	2,792	-	-	-
		Attended Discussion meeting on effective implementation of TEQIP II at DTE-Manoj Ray D	-	1,987	-	-	-
	44	Advertisement - Kasturi & sons	-	-	-	-	2,56,000
	45	Advertisement – Malayala Manorama	-	-	-	-	1,24,928
	46	BOG 3 - Dr. Ajilkumar A	-	15,348	-	-	23,773
	47	Advertisement - Kasturi & sons	-	-	-	-	55,440
	48	Advertisement – Malayala Manorama	-	-	-	-	43,776
	49	Attended review meeting on effective implementation of TEQIP II – Hari V S	-	-	-	-	1,705
		Attended review meeting on effective implementation of TEQIP II – Dr. Ajilkumar A	-	-	-	-	1,705
		Attended review meeting on effective implementation of TEQIP II – Manoj Ray D	-	-	-	-	1,705
		Attended review meeting on effective implementation of TEQIP II – Deepa V S	-	-	-	-	1,705
		Attended review meeting on effective implementation of TEQIP II – Premakumari K R	-	-	-	-	1,705
		Attended review meeting on effective implementation of TEQIP II – Sheela R	-	-	-	-	1,705

		<i>Attended review meeting on effective implementation of TEQIP II – Baiju V</i>	-	-	-	-	1,705
		<i>Attended review meeting on effective implementation of TEQIP II – Premnath G</i>	-	-	-	-	1,705
		<i>Attended review meeting on effective implementation of TEQIP II – Shajy L</i>	-	-	-	-	1,637
	50	<i>Courier charges- Smitha P</i>	-	-	-	-	200
	51	<i>Repair charges of Photostat machine</i>	5,000	-	-	-	-
	52	<i>Attended Procurement Coordinators meeting</i>	-	1,644	-	-	-
	53	<i>Conducted data Audit-Dr. Suresh K</i>	-	2,060	-	-	3,554
	54	<i>Salary – Dini M</i>	-	-	-	-	68,425
		<i>Salary – Rijo George</i>	-	-	-	-	1,65,323
		<i>Salary – Shanida</i>	-	-	-	-	68,600
2014-15		<i>Consumables</i>					
	1	<i>Payment of consumables to Project Lab</i>	-	-	-	-	5,706
	2	<i>Purchase of consumables to Microprocessor Lab EC.</i>	-	-	-	-	7,900
	3	<i>Payment of consumables to Digital electronics lab</i>	-	-	-	-	13,898
	4	<i>Payment of consumables communication Engg. Lab</i>	-	-	-	-	12,669
	5	<i>Payment of consumables – Master Roll and ink(Exam cell)</i>	-	-	-	-	932
	6	<i>Payment of consumables</i>	-	-	-	-	1,864
	7	<i>Payment of postal stamps</i>	-	-	1,000	-	-
	8	<i>Purchase of stationery- TEQIP II office</i>	-	-	24,835	-	-
	9	<i>Purchase of seals for TEQIP II office</i>	250	-	-	-	-
	10	<i>Purchase of Seals &amp; Registers- TEQIP II office</i>	3,750	-	-	-	-
	11	<i>Purchase of wooden pamphlet box for library</i>	-	-	-	-	7,100
	12	<i>Payment for Borrowers ticket, plastic towel</i>	-	-	-	-	6,300

13	Payment for printer catridge	-	-	-	-	2,800
14	Payment made for Master roll and ink – Exam cell	-	-	13,540	-	
15	Payment for running expense of diesel generator	2,000	-	-	-	-
16	Purchase of components for communication lab	-	-	-	-	11,661
17	Purchase of consumables for Electronics circuit lab	-	-	-	-	13,468
18	Payment for supply of consumables – Electrical workshop	-	-		-	18,425
19	Payment for purchase of office stationery- TEQIP II office	-	-	7,760	-	-
20	Payment to consumables of digital electronics lab	-	-	-	-	15,595
21	Payment of toner for TEQIP office	-	-	-	-	750
	<i>Operations and maintenance</i>					
22	Conducted performance audit- Dr. Ajil Kumar	-	-	-	-	59,526
23	Attending Meeting with central project advisor-Dr. Ajilkumar	-	1,505	-	-	-
	Attending Meeting with central project advisor - Baiju V	-	1,505	-		-
	Attending Meeting with central project advisor –Manoj Ray D	-	1,505	-	-	-
	Attending Meeting with central project advisor -Jayadeep Kumar	-	1,505	-	-	-
	Attending Meeting with central project advisor -Deepa V S	-	1,505	-	-	-
	Attending Meeting with central project advisor -Premakumari K R	-	1,505	-	-	-
	Attending Meeting with central project advisor -Libi A	-	1,505	-	-	-
	Attending Meeting with central project advisor - Dr. Hari V S	-	1,505	-	-	-
24	Attended MIS Evaluation Camp- Jayadeep Kumar J	-	1,769	-	-	
	Attended MIS Evaluation Camp- Rijo George	-	1,311	-	-	
25	Attend Meeting on MOU signing- Dr. Ajilkumar A	-	1,654	-	-	-
	Attend Meeting on MOU signing-Manoj Ray D	-	1,654	-	-	-
	Attend Meeting on MOU signing- Anilkumar A	-	1,654	-	-	-

	26	Attending procurement review meeting – Dr. Ajilkumar A	-	1,612	-	-	-
	27	Conducting BOG 4	-	16,514	-	-	25,863
	28	Workshop on Environment Management framework & procurement practices- Manoj Ray D	-	27,830	-	-	-
		Workshop on Environment Management framework & procurement practices- Premnath	-	28,280	-	-	-
	29	Attending accreditation review meeting at DTE – Remya R S	-	1,562	-	-	-
		Attending accreditation review meeting at DTE – Revikumar Thampi V R	-	1,612	-	-	-
		Attending accreditation review meeting at DTE – Shiny C	-	1,612	-	-	-
		Attending accreditation review meeting at DTE – Anuja V Nair	-	1,562	-	-	-
		Attending accreditation review meeting at DTE – Dr. Ajilkumar A	-	1,612	-	-	-
		Attending accreditation review meeting at DTE – Anilkumar A	-	1,612	-	-	-
	30	Workshop for QEEE coordinator – Dr. C Gopakumar	-	6,791	-	-	-
		Workshop for QEEE coordinator –Anilkumar A	-	6,791	-	-	-
	31	QEEE Meeting- Hari V S	-	27,686	-	-	-
	32	Attended Placement coordinators meeting- Baiju V	-	1,585	-	-	-
		Attended Placement coordinators meeting - Revikumar Thampi V R	-	1,585	-	-	-
	33	Special Allowance for onam- Rijo George	-	-	-	-	910
		Special Allowance for onam- Dini M	-	-	-	-	910
		Special Allowance for onam- Anju Y U	-	-	-	-	910
	34	Attended Workshop on Student, Staff satisfaction survey – Dr. Ajilkumar A	-	14,581	-	-	-
		Attended Workshop on Student, Staff satisfaction survey – Binu V P	-	14,581	-	-	-
	35	Mentors visit- Prof. Sudheer K P	-	20,644	-	-	16,145

	36	Conducting performance audit	-	-	-	-	68,913
	37	Data Auditors visit- Dr. Smitha Dharan	-	1,694			3,200
	38	Attended meeting on progress of TEQIP II implementation – Dr. Ajilkumar A	-	1,755	-	-	-
		Attended meeting on progress of TEQIP II implementation – Dr. Hari V S	-	1,755	-	-	-
		Attended meeting on progress of TEQIP II implementation – Manoj Ray D	-	1,755	-	-	-
		Attended meeting on progress of TEQIP II implementation – Deepa V S	-	1,755	-	-	-
		Attended meeting on progress of TEQIP II implementation – C V Anilkumar	-	1,755	-	-	-
		Attended meeting on progress of TEQIP II implementation – Remya RS	-	1,687	-	-	-
		Attended meeting on progress of TEQIP II implementation – Shiny C	-	1,568	-	-	-
		Attended meeting on progress of TEQIP II implementation – Revikumar Thampi V R	-	1,787	-	-	-
		Attended meeting on progress of TEQIP II implementation – Binu V P	-	1,755	-	-	-
		Attended meeting on progress of TEQIP II implementation – Premakumari K R	-	1,755	-	-	-
		Attended meeting on progress of TEQIP II implementation – Baiju V	-	1,755	-	-	-
	39	Attended Post procurement review meeting – Dr. Ajilkumar A	-	30,418	-	-	288
	40	Attended Post procurement review meeting – Manoj Ray D	-	30,418	-	-	-
	41	BOG 5	-	18,215	-	-	25,178
	42	Payment of scrutiny fee for diesel generator	-	-	-	-	20,013
	43	Cancellation of Air ticket for Attend programme on Recent trends and applications in power electronics- Raju M	-	-	-	-	3,579

	44	Cancellation fee of DD – Baiju V	-	-	-	-	110
		Attend annual national accreditation meeting- Anuja V Nair	-	4,308	-	-	-
		Attend annual national accreditation meeting – Deepa T R	-	3,808	-	-	-
		Attend annual national accreditation meeting- Remya R S	-	3,808	-	-	-
		Attend annual national accreditation programme- Revikumar Thampi V R	-	4,008	-	-	-
		Attend annual national accreditation meeting- Shiny C	-	4,508	-	-	-
	45	Salary - Dini	-	-	-	-	1,08,600
		Salary – Anju Y U	-	-	-	-	88,500
		Salary - Shanidha	-	-	-	-	30,100
		Salary – Rijo George	-	-	-	-	3,00,000
2015-16		Consumables					
	1	Payment for purchase of GI Sheet	-	-	-	-	3,744
	2	Payment for purchase of cotton waste	-	-	-	-	550
	3	Payment Anjili Wooden pieces	-	-	-	-	14,885
	4	Payment for Toner refilling– TEQIP II office	-	-	-	-	750
	5	Payment for purchase of postal stamps	500	-	-	-	-
	6	Payment for purchase of toner- TEQIP II office	-	-	-	-	1,600
	7	Payment for Purchase of stationery- Teqip II office	-	-	7,947	-	-
	8	Payment for Purchase of postal stamps	500	-	-	-	-
	9	Payment for Toner Refilling	-	-	-	-	400
	10	Payment for Purchase of chemistry lab consumables	-	-	-	-	19,465
	11	Payment for purchase of consumables, electronics lab	-	-	-	-	4415
	12	Payment for purchase of External Harddisk- TEQIP II office	-	-	-	-	4,800
		Operation and Maintenance					
	13	Payment for inspection fee of electrical inspectorate	-	-	-	-	26,501



14	Payment for asst. Engineer/ electrical section, for HT consumer	-	-	-	-	10,010
15	Payment for inspection fee for electrical section	-	-	-	-	2,300
16	Conducted BOG 6	-	22,332	-	-	25,344
17	Special festival allowance – Rijo George	-	-	-	-	2,400
	Special festival allowance- Dini M	-	-	-	-	1,100
	Special festival allowance- Anju Y U	-	-	-	-	2,400
18	Payment for Renewal fee of ICT academy	-	-	-	-	68,400
19	Attended 7th review meeting- Hari V S	-	1,755	-	-	-
	Attended 7th review meeting- Dr. Ajilkumar A	-	1,755	-	-	-
	Attended 7th review meeting- Baiju V	-	1,755	-	-	-
	Attended 7th review meeting- Deepa V S	-	1,755	-	-	-
	Attended 7th review meeting- Sylish S V	-	1,755	-	-	-
20	Attended Teqip II coordinators meeting – Dr. Ajilkumar A	-	1,662	-	-	-
21	Payment for KTU training fee	-	-	-	-	50,023
22	Payment for expense of statutory Audit	-	-	-	-	931
23	Payment made for Inspection fee for 11KV substation	-	-	-	-	2,500
24	Attended Review meeting on the Progress of implementation of TEQIP II-Dr. Hari v S	-	1,755	-	-	-
	Attended Review meeting on the Progress of implementation of TEQIP II- Dr. Ajilkumar A	-	1,755	-	-	-
	Attended Review meeting on the Progress of implementation of TEQIP II- Deepa V S	-	1,755	-	-	-
	Attended Review meeting on the Progress of implementation of TEQIP II- Baiju V	-	1,755	-	-	-
	Attended Review meeting on the Progress of implementation of TEQIP II- Sylish S V	-	1,755	-	-	-
	Attended Review meeting on the Progress of implementation of	-	1,755	-	-	-

		TEQIP II- Binu V P					
		Attended Review meeting on the Progress of implementation of TEQIP II- C V Anilkumar	-	1,755	-	-	-
		Attended Review meeting on the Progress of implementation of TEQIP II-Libi A	-	1,755	-	-	-
		Attended Review meeting on the Progress of implementation of TEQIP II- Shaji L	-	1,755	-	-	-
		Attended Review meeting on the Progress of implementation of TEQIP II- Premakumary K R	-	1,755	-	-	-
	25	Payment for attended post procurement review meeting – Sylish S V	-	29,814	-	-	2,098
		Payment for attended post procurement review meeting – Manoj Ray D	-	29,814	-	-	2,098
	26	Conducted BOG 7 – Dr. Ajilkumar A	-	16,215	-	-	23,889
	27	Payment of HT fee to electrical inspectorate (150 KVA)	-	-	-	-	76,823
	28	Payment for Attended symposium on teaching, learning in higher education- Dr Hari V S	-	10,555	-	-	-
		Payment for Attended symposium on teaching, learning in higher education- Binu V P	-	8,342	-	-	-
	29	Salary – Rijo George	-	-	-	-	3,00,000
		Salary – Anju Y U	-	-	-	-	1,80,000
		Salary – Dini M	-	-	-	-	1,14,800
	2016-17	1	BOG 8	-	19,858	-	29,641
		2	Payment of TA/ DA for attended Meeting Preparation of strategic plan for TEQIP III – Dr. Ajilkumar A	-	1,672	-	-
			Payment of TA/ DA for attended Meeting Preparation of strategic plan for TEQIP III- Dr. Hari V S	-	1,672	-	-
			Payment of TA/ DA for attended Meeting Preparation of strategic plan for TEQIP III- C V Anilkumar	-	1,672	-	-
		3	Security deposit to special office(revenue), KSEB, Pattom	-	-	-	2,85,726

4	Labelling of equipments TEQIP II	-	-	-	-	19,884
5	Review Meeting, Mascot Hotel TVM, - Dr. Ajilkumar A	-	1,672	-	-	
6	Service charge to multimedia projectors	6,000	-	-	-	-
7	Service charges of 125kga diesel generator	10,006	-	-	-	-
8	Settlement of bills for attended review meeting- Dr. Hari V S	-	-	-	-	1,720
	Settlement of bills for attended review meeting- Dr. Ajilkumar A	-	-	-	-	1,720
9	TA/ DA for preparing estimate of Civil works	-	-	-	-	3,7409
10	Conducted performance audit	-	44,608	-	-	51,081
11	Settlement of bills for conducted data audit	-	1,579	-	-	3,000
12	Festival Allowance – Rijo George	-	-	-	-	2,400
	Festival Allowance – Anju Y U	-	-	-	-	2,400
	Festival Allowance – Dini M	-	-	-	-	1,100
13	Settlement of bills for attended 7th joined,review meeting, Mascot hotel, TVM- Dr. Ajilkumar A	-	-	-	-	1,720
14	Settlement of bills for attended review meeting, HE Dept. , Secretariat Annex- Dr. Hari V S	-	-	-	-	1,720
15	BOG 9	-	10,562	-	-	19,879
16	Refilling of Toner – TEQIP II office	-	-	-	-	400
17	Payment for the purchase of master roll ink	-	-	-	-	14,651
18	Refilling toner catridge	750	-	-	-	-
19	Postal stamp	750	-	-	-	-
20	Refilling of Toner- EC DEpt	-	-	-	-	400
21	Purchase of consumables to EC department	-	-	-	-	24,898
22	Purchase of stationery to TEQIP office	-	-	6,614	-	-
23	Purchase of consumables to CS	-	-	-	-	9,460
24	Toner Filling in EC dept	-	-	-	-	1,950

	25	Payment made for purchase of stationery item (paper)for accreditation purpose	-	-	24,840	-	-
	26	Payment made for purchase of stationery for accreditation purpose	-	-	24,980	-	-
	27	Purchase of consumables to chemistry lab	-	-	-	-	22,035
	28	Refilling of Toner – TEQIP II office	-	-	-	-	400
	Operation and maintenance						
	29	Settlement of bills for conducted one day programme in ISO 9001:2015 certification	-	2,575	-	-	3,400
	30	Renewal Fee – ICT Academic Membership	-	-	-	-	69,000
	31	Payment of TD/DA for attended meeting on the presentation of IDP- C V Anilkumar	-	1,840	-	-	-
	32	Payment of TD/DA for attended meeting on the presentation of IDP- Anilkumar A	-	1,840	-	-	-
		Payment of TD/DA for attended meeting on the presentation of IDP- Dr. Jaya V L	-	1,840	-	-	-
	33	Attended workshop on approval process – Dr. Jaya V L	-	18,299	-	-	-
	34	Payment for AMC of Dell i7Laptop	60,000	-	-	-	-
	35	Payment for AMC of Dell i5 Laptop	75,000	-	-	-	-
	36	Payment of AMC for Photo Copier Machine – Exam cell	35,100	-	-	-	-
		Payment of AMC for Photo Copier Machine- office	18,900	-	-	-	-
	37	Payment for attended preclosure review meeting Dr.Jaya V L	-	1,840	-	-	-
		Payment for attended preclosure review meeting Mr.Binu V P	-	1,840	-	-	-
		Payment for attended preclosure review meeting Ms.Libi A	-	1,800	-	-	-

	38	Payment for attended preclosure review meeting Mr.Ganesh R	-	1,800	-	-	-
		Payment for attended preclosure review meeting Mr.Revikumar Thampi V R	-	1,840	-	-	-
		Payment for attended preclosure review meeting Mr.C V Anilkumar	-	1,840	-	-	-
		Payment for attended preclosure review meeting Mr.Baiju V	-	1,840	-	-	-
		Payment for attended preclosure review meeting Ms.Premakumari K R	-	1,840	-	-	-
		Payment for attended preclosure review meeting Dr.Ajilkumar A	-	1,840	-	-	-
		Payment for attended preclosure review meeting Mr.Sylish S V	-	1,840	-	-	-
		Payment for attended preclosure review meeting Dr.Smitha P	-	1,840	-	-	-
	39	Payment for IEEE membership fee Ms.Deepa A K	-	-	-	-	3,000
		Payment for IEEE membership fee Mr.C V Anilkumar	-	-	-	-	2,830
		Payment for IEEE membership fee Ms.Jyothi R L	-	-	-	-	3,585
		Payment for IEEE membership fee Dr. C Gopakumar	-	-	-	-	2,745
		Payment for IEEE membership fee	-	-	-	-	3,920
	40	BOG 10	-	17,456	-	-	28,497
	41	Payment for repairing charges of Air Conditioner	4,800	-	-	-	-
	42	Payment for 11 <sup>th</sup> Bog Meeting Dr.Ajilkumar A	-	11,164	-	-	19,918
	43	Payment for stationery- TEQIP II office	-	-	7,441	-	-
	44	Payment for consumables-	-	-	-	-	24,587

		<i>Electrical workshop</i>					
	45	<i>Payment for stationery box file accreditation</i>	-	-	4,993	-	-
	46	<i>Payment for stationery display board accreditation ECE dept.</i>	-	-	49,778	-	-
	47	<i>Salary Anju Y U</i>	-	-	-	-	2,11,829
		<i>Salary Dini</i>	-	-	-	-	2,00,475
		<i>Salary Rijo George</i>	-	-	-	-	3,77,000
2017-2018	1	<i>Purchase of First Aid Kit</i>	-	-		-	998
	2	<i>Stationery – TEQIP II office</i>	-	-	1,200	-	
	3	<i>Purchase of Toner cartridge – TEQIP Office</i>	-	-		-	1600
	4	<i>Post procurement Review Meeting – Sylish S V</i>	-	-		-	23,271
		<i>Post procurement Review Meeting – Dr. Ajilkumar A</i>	-	-			23,271
	5	<i>Purchase of Battery water</i>	-	-			
	6	<i>Purchase of wooden pieces</i>	-	-		-	
	7	<i>Salary Anju Y U</i>	-	-	-	-	1,28,000
	8	<i>Salary Dini</i>	-	-	-	-	44,109
	9	<i>Salary Rijo George</i>	-	-	-	-	71,550
<b>Total</b>			<b>26,34,06</b>	<b>8,71,751</b>	<b>3,52,711</b>	<b>0</b>	<b>44,73,289</b>

B.TechPass percentage					
Academic year	2012-13	2013-14	2014-15	2015-16	2016-17
S1 & S2(Transition Rate)	45.4	45.4	59.71	70.3	-
S3	47.9	41.47	26.76	39.72	-
S4	35.29	38.60	24.13	48.22	-
S5	56.66	58.62	46.03	38	-
S6	51.78	51.80	47.61	38	-
S7	53.39	53.39	56.49	72.48	52.55

B.Tech pass percentage	63.1	63.40	46.66	57.14	-
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	No of BOG meetings conducted				
Academic year	2012-13	2013-14	2014-15	2015-16	2016-17
	-	4	2	2	4

Audit disallowance in Statutory audits					
Academic year	2012-13	2013-14	2014-15	2015-16	2016-17
Amount disallowed	Nil	Nil	Nil	Nil	Yet to get the report
Major Reasons cited					
Amount collected back					
Balance remaining					

#### Data on International Travel

Sl No	Name of Faculty	Purpose of Visit	Place of Visit	Dates of visit	Expenditure	Outcome of the visit
1	Deepa A K	<b>Attend IEEE International Conference On Signal Processing 2014</b>	Hangzhou, China	19 Oct 2015 to 23 Oct 2015	1,67,999/-	<b>*Given below</b>
2	C V Anilkumar	<b>Attend International conference on IEEE Tencon-2015</b>	Macaw, China	01 Nov 2015 to 04 Nov 2015	1,70,882	<b>**Given below</b>

**\*Outcomes of attending IEEE ICSP 2014 (As given by Ms.Deepa A K)**

I have attended the 12<sup>th</sup> IEEE international Conference on Signal Processing, organized by Beijing Jiatong University sponsored by IEEE Beijing Section at Vanwarm Hotel, Hangzhou, China from October 19-23 2014. I have presented a paper titled “Embedded Extended Visual Cryptography Scheme for Color Images using ABC Algorithm”. Keynote address by renowned speakers, who are very actively working in emerging areas such as Deep learning, Big data, Social Media etc were very much informative. Nearly 500 papers in cutting edge technologies were presented in the conference by authors from various countries. ICSP brought together diversity of authors and speakers from many nations. The conference provided a platform for interacting with them and sharing ideas and new perspectives in both theoretical and practical aspects of signal processing. It benefited a lot for my research work and guiding projects of PG students. I could impart the rich knowledge and experience to the students and my colleagues. As whole, attending an international conference abroad enhanced my confidence level to a better height

**\*\*Outcome of participation in IEEE TENCON 2015 (As given by Mr. Anil Kumar C V)**

I could attend the international conference IEEE TENCON 2015 organized by IEEE Asia Pacific region (R10) at Macau, China from 1<sup>st</sup> to 4<sup>th</sup> November 2015. The following are the outcome of that event.

1. Could present my research paper before a peer group of experts.
2. The discussions were highly useful for my research thereafter.
3. Planning for the international conference – ICCSP 2016 was initiated in November-December period of 2015. Three experts attended IEEE TENCON 2015 agreed to deliver keynote speech in ICCSP 2016. This was a very positive driving force behind the successful conduct of ICCSP 2016
4. The resources created at the institute using TEQIP-II were better utilized for research activities.
5. My participation in TENCON motivated other faculty members and later, three more research papers (Remya-2, Raju-1) accepted in foreign conferences.

**Data on Faculty in position (As on Feb 2017)**

	At the commencement of the Project period				At the end of the Project period				Requirement as per aicte
Branch	Prof	Associate Prof	Assistant Prof	Contract	Prof	Associate Prof	Assistant Prof	Contract	
CS	-	2	7	5	-	2	7	6	16
EC	-	-	7	7	1	1	7	4	16
EE	-	-	2	2	-	-	3	6	10
IT	-	-	-	5	-	-	-	2	4
ME	-	1	2	2	-	1	4	-	5



Appl Sc	-	-	5	2	-	-	5	2	6
<b>Total</b>	<b>-</b>	<b>3</b>	<b>23</b>	<b>23</b>	<b>1</b>	<b>4</b>	<b>26</b>	<b>20</b>	<b>57</b>

#### Data on new courses started

Post Graduate Courses		
Sl No.	Branch	Academic year of commencement
	Nil	
Under Graduate courses		
	Nil	

#### Data on new Labs started

Post Graduate Courses		
Sl No.	Name of the Lab and Branch	Academic year of commencement
1	Image Processing Lab, CS Dept	2013
2	Signal Processing Lab, EC Dept	2013
Under Graduate courses		
	Nil	

#### Any other achievements of the institution

- First year transition rate has been increased to 70.3% from 41%
- Placement rate has been improved to 31% from 14%
- University Ranks:

In 2014 –II rank in B,Tech. (Information Technology)

II rank in M.Tech. CS (Image Processing)

I rank in M.Tech. EC (Signal Processing)

III rank in M.Tech. EC (Signal Processing)

In 2015 –I rank in M.Tech. CS (Image Processing)

II rank in M.Tech. EC (Signal Processing)

In 2016 –I rank in M.Tech. CS (Image Processing)

I rank in M.Tech. CS (Image Processing)

II rank in M.Tech. EC (Signal Processing)

- Accountability reforms taking place through Board of Governors and Research and Development takes pace through a Research Guidance Committee
- Conducted an International Conference during 8-9 July 2016: “International Conference on Computing Communication and Signal Processing” (ICCCSP-2016)
- Research and Development activities have been improved. Eight project proposals amounting to Rs.185.72 lakhs have been submitted to various funding agencies. The institution is geared to establish centres of excellence in Image Processing and Signal Processing
- Out of the eight proposals submitted, the proposal submitted by Smt Remya R S, Automated detection of Acute Lymphatic Leukaemia is accepted by KSCSTE for a grant of Rs 16.31 Lakhs
- MoU was signed with Regional Cancer Centre Thiruvananthapuram and a joint Research proposal titled “The Estimation of Malignancy Associated Changes (MAC) in sputum cells” for an amount of Rs. 33.36 lakhs, was submitted for funding.
- Interaction with Industry has been improved by signing MoUs, arranging industrial visits, internships, conducting industrial tutoring
- The number of International Journal publication has been increased to 41 from 6.
- Collaboration with IIT Madras under Quality Enhancement in Engineering Education (QEEE) programme of MHRD, Government of India