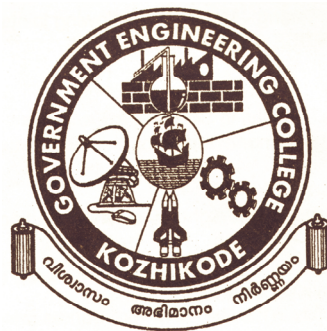


**AGENDA FOR THE BOG MEETING TO  
BE HELD ON 5TH SEPT 2012**



**GOVT. ENGINEERING COLLEGE  
KOZHIKODE**

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# **AGENDA FOR THE BOG MEETING TO BE HELD ON 5TH SEPT 2012**

<i>Item No.</i>	<i>BoG Agenda particulars</i>	<i>Annexure no.</i>
1	<i>Confirmation of the minutes of the previous BoG meeting held on 13.06.2012. The minutes of the last BoG meeting was sent to all BoG members by email.</i>	1
2	<i>Activities undertaken after last BoG meeting</i>	2
3	<i>Goods Procurement activity report</i>	3
4	<i>Academic unit proposals with detailed budget.</i>	4
5	<i>III Cell activity report and Budget Allocation of Industry academic linkage.</i>	5
6	<i>Financial management unit report including Accounts Summary</i>	6
7	<i>Constitution of Counseling and Guidance Cell</i>	7
8	<i>Other items.</i>	8

# 1. ANNEXURE 1

## **MINUTES OF THE BOARD OF GOVERNERS(BoG) MEETING HELD AT PRINCIPAL'S CONFERENCE ROOM ON 13<sup>TH</sup> JUNE 2012 AT 11 AM AT GOVERNMENT ENGINEERING COLLEGE KOZHIKODE.**

The List of Members present in the BoG meeting is given as Annexure-

Dr. K. Gopakumar, Professor and Chairman of CEDT, Indian Institute of Science Bangalore 560012 and Chairman of TEQIP Cell Government Engineering College Kozhikode presided over the meeting.

### **Item no. 1. Presentation of brief report on the activities after the last BoG meeting.**

- 1.1 TEQIP office started functioning.
- 1.2 An office clerk was appointed for TEQIP.
- 1.3 BSNL landline connection is obtained for TEQIP office.
- 1.4 Started a web link for TEQIP in the college website and published the minutes of earlier BoG meetings and other TEQIP details in it.
- 1.5 Purchase proposals for Rs 4.79 Crores was submitted to NPIU and got approval. The purchase procedures are going on.
- 1.6 The following persons have participated in the Training Programmes listed below
  - a. Two days workshop on Management information systems MIS- held at Mysore on 11<sup>th</sup> and 12<sup>th</sup> of April 2012 was attended by Prof K. Sangeetha.
  - b. PMSS training programme was attended by Prof Z A Zoya, Dr. Peethambaran.K.M, & Prof K Sangeetha on 3<sup>rd</sup> Feb 2012 at CET.
  - c. E-FMS training programme was attended by Dr. Muhammed Arif M and Dr. Peethambaran. K. M on 13<sup>th</sup> April 2012.
- 1.7 Industry Institute Interaction cell (IIIC) was started and a one day workshop was conducted on 23<sup>rd</sup> April 2012 and the following Companies have agreed to sign MOU with the college in connection with admitting students to be a part of their live projects/ activities.
  - i. SWEANS software technologies, KINFRA, Kakkanchery
  - ii. CYBROSYS technologies, KINFRA, Kakkanchery
  - iii. VKC, Feroke, Calicut
  - iv. Steel Complex, Feroke, Calicut
  - v. Parrisons Liberty, KINFRA, Kakkanchery.
- 1.8 Tally software was purchased and installed.

**Item no. 2. Ratification of the Conduct of one day workshop on Industry Institute Interaction cell IIC and change of Institutional nominee.**

2.1 The conduct of one day workshop by Industry Institute Interaction cell (IIC) was ratified.

2.3 The appointment of the Institutional nominee as Dr Abdul Hameed K M is ratified as the earlier nominee got transferred.

2.2 It is decided to split the purchase proposals of equipments, department wise within 10 days and submit the department wise purchase committee minutes to the Chairman.

**Item No. 3. Approval of training programme proposals**

3.1 It is decided to start the remedial classes for the weak students. The honorarium to one faculty member for taking remedial class is limited to a maximum of Rs. 15,000/- per year. It is decided that no expense for study material should be met for remedial classes. It is also decided to submit a revised budget for remedial classes in the next BoG.

3.2 Three motivational training programme on life skills towards professional excellence for the faculty, technical staff and administrative staff are approved

3.3 The proposals for the national training programme submitted by the faculties are sanctioned.

3.4 Proposals for training programmes and conferences for the whole year should be presented in the next BoG meeting.

3.5 It is decided that the faculty can attend International conferences for presenting technical papers.

3.6 The BoG has approved the conduct of In-house Invited talks, Short term courses and Workshops by the departments. It is advised to submit a revised detailed budget in the next BoG.

3.7 Assistantship for non-GATE candidate for M. Tech is fixed as Rs.4000/- per month. The number of such candidates shall not greater than 10. They should perform teaching assistance for seven hours per week.

## 2. Annexure 2

### **ACTIVITIES UNDERTAKEN AFTER THE PREVIOUS BoG MEETING HELD ON 13.06.2012.**

- A Counselling and Guidance Cell was constituted.
- Accounts are maintained as per the financial manual of TEQIP.
- Minutes of the last BoG meeting was prepared and sent to Chairman for conformation. After confirmation it was distributed among all BoG members.
- Information about all the activities of TEQIP was informed to the Chairman.
- Procurement plan, quotations and minutes of the Bog meeting are published in College web site.
- Proposals of IIIcell and academic cell are prepared.
- Equity action plan was prepared and sent to the SPFU.
- Three day training finished to faculty and lab staff was conducted.
- Procurement financial sanction are being accorded and entered to PMSS software.
- Principal Prof K Vidyasagar, coordinator Asst. Prof. Ansu V and procurement nodal officer Prof. Peethambaran Km attended one day workshop held at SPFU, DTE on 25/7/2012.
- All the training programmes as instructed by the SPFU was attended.
- The hard copy of PIP was sent to Chairman and soft copy to all the BoG members and faculty of the college for better TEQIP performance.
- A data entry operator for TEQIP office was appointed on temporary basis for the project period.
- Prof. Shaji, Prof. Aniruthan & Prof. Sreejith attended the meeting 22/08/12 at SPFU Trivandrum.
- Prof. Kauzer K M attended the TEQIP meeting at GEC Kannur on 23/8/12.
- Uploaded 17 procurement proposals for shopping and 1 NCB in PMSS.
- Published all uploaded procurement Quotations in college web Site under TEQIP link.
- Sent Quotation invitation letters to the firms and Sent NCB document to SPFU for approval.
- Received Quotations are being processed.

### 3. Annexure 3

#### **GOODS PROCUREMENT ACTIVITY REPORT:-**

Total amount of Goods Procurement approved by NPIU= Rs. 4.79 Crores.

In which the total amount of Goods Procurement uploaded to PMSS:

17 Shopping	=	Rs 38,95,460/-
1 NCB	=	Rs 26,05,600/-



## 4. Annexure 4

### ACADEMIC UNIT PROPOSALS WITH DETAILED BUDGET

#### Details of Invited talks, Short term courses and Workshops

##### Department of Chemical Engineering

Program	Topic	Proposed date	Approximate Expenditure(Rs.)
Invited Talks	Safety in process plants	August 2012	21,000
	Advances in Chemical Engineering	October 2012	17,000
	Simulation Soft wares	January 2013	31000
	<b>Total</b>		<b>69,000</b>

##### Department of Mechanical Engineering

Programme	Topic	Proposed date	Approximate Expenditure(Rs.)
Short Term Course	1. Quality & Reliability Engineering	January 2013	1,40,500
	2. Current trends in Nano Technology	November 2012	1,40,500
	3. Advances in Design Optimisation	January 2013	1,40,500
Invited Talks	Modern Perspectives in Nano Technology by Dr. Shoban NIT Calicut	September 2012	19,000
	Development in IC Engines by Dr. A Ramesh	October 2012	19,000
	Maintenance Engineering-Diagnostics and preventive strategies by Prof. Varghese Job	January 2013	19,000
	Design for Manufacturing by Dr. Mohan Ram	January 2013	19,000
	<b>Total</b>		<b>4,97,500</b>

**Department of Applied Electronics & Instrumentation**

Programme	Topic	Proposed date	Approximate Expenditure(Rs.)
Short Term Course	Role of Power Electronics in Energy Conservation	January 2013	1,00,000
Invited Talks	Spares Signal Processing	Nov 2012	10,000
	Multirate Systems	Dec 2012	10,000
	Data Acquisition Systems	January 2013	30,000
Workshop	Workshop on Electronic Waste Management	February 2013	1,35,500
	<b>Total</b>		<b>2,85,500</b>

## **DETAILED BUDGET ESTIMATE FOR SHORT TERM TRAINING PROGRAMMES, WORKSHOPS AND INVITED TALKS**

### **DETAILED BUDGET ESTIMATE FOR SHORT TERM TRAINING PROGRAM FOR FACULTIES ON “ROLE OF POWER ELECTRONICS IN ENERGY CONSERVATION”**

1. Honorarium to Resource persons	:	Rs 18000
2. TA/DA to external faculties	:	Rs 19000
3. Honorarium to co-coordinators and Supporting staff:	:	Rs 4500/.
4. Course kit	:	Rs 7000/.
5. Course materials (Hard & Soft copy)	:	Rs 6000/.
6. Printing, stationery etc.,	:	Rs 3000/.
7. Light refreshment & Lunch	:	Rs 25000/.
8. Preparation for Teaching aids	:	Rs 2000/.
9. Consumables	:	Rs 1500/.
10. Text book/Reference book	:	Rs 14000/.
<b>Total amount</b>	:	<b>Rs1, 00,000/.</b>

### **DETAILED BUDGET ESTIMATE FOR WORKSHOP FOR FACULTIES ON “ELECTRONIC WASTE MANAGEMENT”**

1. Honorarium to Resource persons	:	Rs 25000
2. TA/DA to external faculties	:	Rs 25000
3. Honorarium to co-ordinators and Supporting staff:	:	Rs 4500/.
4. Course kit	:	Rs 15000/.
5. Course materials (Hard & Soft copy)	:	Rs 8000/.
6. Printing, stationery etc.,	:	Rs 3000/.
7. Light refreshment & Lunch	:	Rs 30000/.
8. Preparation for Teaching aids	:	Rs 3000/.
9. Consumables	:	Rs 2000/.
10. Text book/Reference book	:	Rs 20000/.
<b>Total amount</b>	:	<b>Rs1, 35,500/.</b>

**DETAILED BUDGET ESTIMATE FOR INVITED TALK ON “MODERN PRESPECTIVES IN NANO TECHNOLOGY”(ME DEPT.)**

1. Honorarium to Resource persons	:	Rs 3000/.
2. TA/DA, Boarding, Lodging and refreshment for speaker	:	Rs 12000/.
3. Refreshment for Audiences (60 Nos.)	:	Rs 2500/.
4. Miscellaneous (Materials, papers, etc.)	:	Rs 1500/.
<b>Total amount</b>	:	<b>Rs19,000/.</b>

**DETAILED BUDGET ESTIMATE FOR INVITED TALK ON “DEVELOPMENT IN IC ENGINES ”(ME DEPT.)**

1. Honorarium to Resource persons	:	Rs 3000/.
2. TA/DA, Boarding, Lodging and refreshment for speaker	:	Rs 12000/.
3. Refreshment for Audiences (60 Nos.)	:	Rs 2500/.
4. Miscellaneous (Materials, papers, etc.)	:	Rs 1500/.
<b>Total amount</b>	:	<b>Rs19,000/.</b>

**DETAILED BUDGET ESTIMATE FOR INVITED TALK ON “MAINTENANCE ENGINEERING DIAGNOSTICS AND PREVENTIVE STATEGIES”(ME DEPT.)**

1. Honorarium to Resource persons	:	Rs 3000/.
2. TA/DA, Boarding, Lodging and refreshment for speaker	:	Rs 12000/.
3. Refreshment for Audiences (60 Nos.)	:	Rs 2500/.
4. Miscellaneous (Materials, papers, etc.)	:	Rs 1500/.
<b>Total amount</b>	:	<b>Rs19,000/.</b>

**DETAILED BUDGET ESTIMATE FOR INVITED TALK ON “DESIGN FOR MANUFACTURING ”(ME DEPT.)**

1. Honorarium to Resource persons	:	Rs 3000/.
2. TA/DA, Boarding, Lodging and refreshment for speaker	:	Rs 12000/.
3. Refreshment for Audiences (60 Nos.)	:	Rs 2500/.
4. Miscellaneous (Materials, papers, etc.)	:	Rs 1500/.
<b>Total amount</b>	:	<b>Rs 19,000/.</b>

<b>Faculty Development Programme in 'Advances in Design Optimization'</b>		
	No. of days : 6	
1	Honorarium to faculty	36,000.00
2	TA/DA to resource persons	30,000.00
3	Honorarium for coordinators and supporting staff	4,500.00
4	Course kit	15,000.00
5	Course material	9,000.00
6	Printing and stationary	3,000.00
7	Refreshment & lunch	21,000.00
8	Teaching aids	4,000.00
9	Text book / reference book	18,000.00
	Total	1,40,500.00

<b>Faculty Development Programme in 'Current trends in Nanotechnology'</b>		
	No. of days : 6	
1	Honorarium to faculty	36,000.00
2	TA/DA to resource persons	30,000.00
3	Honorarium for coordinators and supporting staff	4,500.00
4	Course kit	15,000.00
5	Course material	9,000.00
6	Printing and stationary	3,000.00
7	Refreshment & lunch	21,000.00
8	Teaching aids	4,000.00
9	Text book / reference book	18,000.00
	Total	1,40,500.00

### Faculty Development Programme in “Quality & Reliability Engineering”

No. of days : 6	
Honorarium to faculty	36,000.00
TA/DA to resource persons	30,000.00
Honorarium for coordinators and supporting staff	4,500.00
Course kit	15,000.00
Course material	9,000.00
Printing and stationary	3,000.00
Refreshment & lunch	21,000.00
Teaching aids	4,000.00
Text book / reference book	18,000.00
Total	1,40,500.00

#### **DETAILED BUDGET ESTIMATE FOR INVITED TALK ON “SAFETY IN PROCESS PLANTS”(CHEMICAL DEPT.)**

1. Honorarium to Resource persons	:3000
2. TA/DA, Boarding, Lodging and refreshment for speaker	: 15000
3. Refreshment for Audiences (60 Nos.)	:2000
4. Miscellaneous (Materials, papers, etc.)	:1000
<b>Total amount</b>	<b>:21, 000/-</b>
	<b>(Twenty one thousand only)</b>

#### **DETAILED BUDGET ESTIMATE FOR INVITED TALK ON “ADVANCES IN CHEMICAL ENGINEERING”(CHEMICAL DEPT.)**

1. Honorarium to Resource persons	:3000
2. TA/DA, Boarding, Lodging and refreshment for speaker	:7000
3. Refreshment for Audiences (60 Nos.)	: 3000
4. Miscellaneous (Materials, papers, etc.)	:4000
<b>Total amount</b>	<b>:17, 000      /-</b>
	<b>(Seventeen thousand only)</b>

#### **DETAILED BUDGET ESTIMATE FOR INVITED TALK ON “SIMULATION SOFTWARES”(CHEMICAL DEPT.)**

1. Honorarium to Resource persons	:6000
2. TA/DA, Boarding, Lodging and refreshment for speaker	: 12000
3. Refreshment for Audiences (60 Nos.)	:3000
4. Miscellaneous (Materials, papers, etc.)	:10000

**Total amount** :31, 000/-  
(Thirty one thousand only)

**DETAILED BUDGET ESTIMATE FOR INVITED TALK ON “Sparse Signal Processing”(AEI DEPT.)**

1. Honorarium to Resource persons : 3000  
2. TA/DA, Boarding, Lodging and refreshment for speaker :4000  
3. Refreshment for Audiences (60 Nos.) :1000  
4. Miscellaneous (Materials, papers, etc.) :2000  
**Total amount** :10, 000/-  
(Ten thousand only)

**DETAILED BUDGET ESTIMATE FOR INVITED TALK ON “Multirate Systems”(AEI DEPT.)**

1. Honorarium to Resource persons : 3000  
2. TA/DA, Boarding, Lodging and refreshment for speaker : 4500  
3. Refreshment for Audiences (60 Nos.) :1000  
4. Miscellaneous (Materials, papers, etc.) : 1500  
**Total amount** :10, 000  
(Ten Thousand Only)

**DETAILED BUDGET ESTIMATE FOR INVITED TALK ON “Data Acquisition System” (AEI DEPT.)**

1. Honorarium to Resource persons (2 days) : 6000  
2. TA/DA, Boarding, Lodging and Refreshment for speaker : 18000  
3. Refreshment for Audiences (60 Nos.) : 2000  
4. Miscellaneous (Materials, papers, etc.) :4000  
**Total amount** :30, 000/-  
(Thirty Thousand Only)

**PROPOSAL FOR CONDUCTING INHOUSE TRAINING PROGRAMS  
FOR FACULTIES, TECHNICAL STAFFS AND ADMINISTRATIVE  
STAFFS**

Sl.No	Name of the programs	Duration	Target Group	Approximate Expense in Lakhs
1	Training program on professional skill development	3 days (26/7/12 to 28/7/12)	Faculties (50 Nos.)	0.5
2	Training program for motivation and professional Excellency, life skills, RTI act etc.	3 days (First week of Sept.)	Administrative staffs (50 Nos.)	0.5
3	Training program for motivation , professional Excellency, life skills, etc.	3 days (16/8/2012 to 18/8/2012)	Technical staffs (50 Nos.)	0.5



## **PROPOSAL FOR ATTENDING NATIONAL TRAINING PROGRAMS FOR FACULTIES**

Sl. No	Name of the program	Schedule	Venue	Name of participants	Approximate Expense
1	Energy Management	26/11/2012 to 30/11/12 (5 days)	IIT Bombay	Dr. K.M Peethambaran (ME Dept.) Prof. Biju IK (ME Dept.) Prof. Hemachandran (ME Dept.) Prof. Mercy Anna Philip (Ch.E Dept.)  Prof. R. Noufal. E (CE Dept)	Course fee= 5x10000=Rs50000+TA & DA as per rule
2	Indian Geo-technical Conference, on Advances in Geo-technical Engineering	13/12/12 to 15/12/12 (3 days)	IIT Delhi	Dr. K.M. Kouzer (CE Dept)	Course fee = Rs45000+TA & DA as per rule
3	Fourth International Seminar on Forensic Geo-technical Engineering	10/1/2013 to 12/1/2013	IISc& ISSMGE , Bangalore	Dr.K.M. Kouzer (CE Dept)	Course fee = Rs 6000 + TA & DA as per rule
4	Vibration Analysis Level-1-WI202,SKF Bearing	4/10/12 to 5/10/12	RMI Pune	Prof. Sajeed AM Prof. Saijal KK Prof. Najeeb K (ME Dept)	Course fee=3x16000=48000 + ST + TA & DA as per rule
5	Vibration Analysis Level-2-WI202,SKF Bearing	5/12/12 to 7/12/12	RMI Pune	Prof. Sajeed AM Prof. Saijal KK Prof. Najeeb K (ME Dept)	Course fee=3x24000=72000 + ST + TA & DA as per rule
6	Certificate Course on Piping Engineering	4/12/2012 to 15/12/2012	IIT Bombay	Prof. Biju IK Dr. B. Sreejith (ME Dept)	Course fee=2x55000=110000+TA & DA as per rule

7	Training Programme on Simulink for System and Algorithm Modelling	27/9/2012 to 28/9/2012	MathworksIndia, Pune	Prof. Abdu Rahiman (AE&I Dept.)	Rs 32000/.
8	Training Programme on Statistical Methods in Matlab	15/10/2012 to 17/10/2012	Mathworks India, Bangalore	Prof. Abdu Rahiman (AE&I Dept.)	Rs 35000/.
9	IEEE Medical Engineering Workshop	19/11/2012 to 30/11/2012	IIT Kharagpur	Prof. Abdu Rahiman (AE&I Dept.)	Rs 38000/.
10	International Conference on Emerging Electronics	15/12/2012 to 17/12/2012	IIT Bombay	Prof. Abdu Rahiman (AE&I Dept.)	Rs 25000/.
11	Introduction to Non-Destructive Testing	09-10 Oct' 12	Reliability Maintenance Institute, Pune	Dr. K.M Peethambaran Prof. Biju I.K Prof. Hemachandran. N (ME Dept.)	3x16000 = 48000 + ST + TA & DA as per rule.

## **PROPOSAL FOR ATTENDING INTERNATIONAL TRAINING PROGRAMS FOR FACULTIES**

As per the direction from Project Implementation Plan (PIP) of TEQIP PHASE-II, Faculties for improved competences as the part of the Continuing Education program , it is essential to encourage the participation in International seminar, Conferences, Training Programs/ workshops etc., and interaction with peer groups within India and abroad. It is also required to establish linkages with academic and research institutions and industry. It is necessary to depute the faculty members to attend the International programs on the basis of related fields, experiences and interest.

At present our institution has got the opportunities to explore the collaboration with a professor of a world class accredited technological University. An Eminent and Erudite professor of Kerala state higher education board (in the year 2011 at Kerala University). Dr. V.M Murukeshan, Dy. Director, The centre for Optical and Laser Engineering, Nanyang Technological University Singapore has offered his services to conduct various international programs and identified some of the international training programs/ workshop for our faculties at Nanyang Technological University, Singapore. These programs will help us to find out emerging research areas, developing technical skills and competence and also interact with peer groups in various Countries as mentioned in the PIP.

On the basis of this opportunities and the direction from the PIP of TEQIP, our academic committee has decided to sponsor eight faculties according to their eligibilities during Oct 2012 –March 2013. The following programs are identified during this period.

1. WSQ Implements Optical Metrology-4days
2. WDA IC- Plus Signal Integrity in High Speed Digital System-5 days
3. WSQ Establish Lean and Six Sigma Methodology- 5 days
4. WSQ Rapid Prototyping for Rapid Product Development- 4 days
5. WDA IC –Plus VLSI Design Essentials- 5 days

At present the academic committee has propose the following programmes.

Sl. No	Name of the Program	Schedule	Venue	Name of Participants	Approximate Expense
1	WSQ Establish Lean Six Sigma Methodology	5 days 5/11/2012 to 9/11/2012	Nanyang Technological University, Singapore	4 participants from College	Course fee =1605 Singapore Dollars x 4= 6420 dollars (4x72000)+TA & DA as per rule
2	WSQ Rapid prototyping for rapid product development	4 days January 2013	Nanyang Technological University, Singapore	4 participants from College	Course fee = 1520 Singapore Dollars x 4= 6080 dollars (4x68000)+TA & DA as per rule
3	SPPRA_2013, 10 <sup>th</sup> International Conference on Sgnal Processing Pattern Recognition and Application	12/2/2013 to 14/2/2013	INNsbruck, Austria	One participant from college.	Rs 1, 27000/.

## **NATIONAL TRAINING PROGRAMS FOR TECHNICAL STAFF**

Sl. No	Name of the Program	Schedule	Venue	Name of Participants	Approximate Expense
1	High Pressure Pipe Welding 6G	27/8/2012 to 7/9/2012	Advanced Training Institute Chennai	Mr.Ranjith K.G (ME Dept.)	Rs 12000/.
2	CNC Turn Mill Programming and Operation	1/10/2012 to 15/10/2012	Advanced Training Institute Chennai	Mr.Sanal. G.L (ME Dept.)	Rs 12000/.
3	Machine Tool Maintenance	1/10/2012 to 15/10/2012	Advanced Training Institute Chennai	Mr.Hareendranath . V.K Mr.Aboobacker. M (ME Dept.)	Rs 24000/.
4	Mechanical Testing of Metals	29/10/2012 to 12/11/2012	Advanced Training Institute Chennai	Mr. Sunny Joseph (ME Dept.)	Rs 12000/.
5	Auto Cadd 2D & 3D Design and Drafting	26/11/2012 to 10/12/2012	Advanced Training Institute Chennai	Mr. Mohammed Shafi. M Mr. Mohammed Ameer. M.P Mr.Pramod. M.P (ME Dept.)	Rs 36000/.
6	Power Electronics and its Industrial Application	29/10/2012 to 12/11/2012	Advanced Training Institute Chennai	Mr. Kishore kumar. M.T (AE&I Dept.)	Rs 12000/.

## **PROPOSAL FOR CONDUCTING INHOUSE TRAINING PROGRAMS FOR STUDENTS**

<b>Sl.No</b>	<b>Name of the programs</b>	<b>Duration</b>	<b>Target Group</b>	<b>Approximate Expense in Lakhs</b>
1.	Orientation program for first year students	One day	First year students (250 Nos.)	0.52
2	Employability skills	One day (2 Branches per day)	Fourth year students (Selected 160 Nos)	0.33
3	Training for aptitude test	One day (2 Branches per day)	Thirdyear students(Selected 160Nos)	0.33
4	Communication skills	One day (2 Branches per day)	Third year students(Selected 160Nos)	0.33

## **DETAILED BUDGET ESTIMATE FOR TRAINING PROGRAMMES**

### **DETAILED BUDGET FOR THREE DAYS TRAINING PROGRAM FOR FACULTIES ON “PROFESSIONAL SKILL DEVELOPMENT”**

1. Honorarium to Resource persons	:	Rs 10000/day (9.30am to 5.00 pm)
Total Honorarium to Resource persons	:	Rs 30000/(3 days)
2. Refreshment at morning and evening	:	Rs7500/. (50participants for 3 days)
3. Hospitality Expenses for Resource persons:	:	Rs 3000/.
4. Course material expenses	:	Rs4500/. (50participants)
5. TA to Resource Persons	:	Rs 3000/.
6. Miscellaneous expenses	:	Rs 2000/.

**Total amount** : **Rs 50000/.**

### **DETAILED BUDGET ESTIMATE FOR THREE DAYS TRAINING PROGRAM FOR TECHNICAL STAFF ON “MOTIVATION TRAINING PROGRAM”**

1. Honorarium to Resource persons	:	Rs 10000/day (9.30am to 5.00 pm)
Total Honorarium to Resource persons	:	Rs 30000/(3 days)
2. Refreshment at morning and evening	:	Rs 7500/. (50participants for 3 days)
3. Hospitality Expenses for Resource persons:	:	Rs 3000/.
4. Course material expenses	:	Rs 4500/. (50participants)
5. TA to Resource Persons	:	Rs 3000/.
6. Miscellaneous expenses	:	Rs 2000/.

**Total amount** : **Rs 50000/.**

### **DETAILED BUDGET ESTIMATE FOR THREE DAYS TRAINING PROGRAM FOR ADMINISTRATIVE STAFF ON “MOTIVATION TRAINING PROGRAM”**

1. Honorarium to Resource persons	:	Rs 10000/day (9.30am to 5.00 pm)
Total Honorarium to Resource persons	:	Rs 30000/(3 days)
2. Refreshment at morning and evening	:	Rs 7500/. (50participants for 3 days)
3. Hospitality Expenses for Resource persons:	:	Rs 3000/.
4. Course material expenses	:	Rs 4500/. (50participants)
5. TA to Resource Persons	:	Rs 3000/.
6. Miscellaneous expenses	:	Rs 2000/.

**Total amount** : **Rs 50000/.**

### **DETAILED BUDGET ESTIMATE FOR ONE DAY ORIENTATION PROGRAM FOR FIRST YEAR STUDENTS**

1. Honorarium to Resource persons	:	Rs 10000/day (9.30am to 5.00 pm)
Total Honorarium to Resource persons	:	Rs 40000/(4 Faculties for 4 batch)

2. Refreshment at morning and evening : Rs 7500/. (250participants)  
3. Hospitality Expenses for Resource persons: Rs 2500/.  
4. Miscellaneous expenses : Rs 2000/.

**Total amount : Rs 52000/.**

**DETAILED BUDGET ESTIMATE FOR ONE DAY TRAINING PROGRAM FOR FOURTH YEAR STUDENTS ON “EMPLOYABILITY SKILLS”**

1. Honorarium to Resource persons : Rs 10000/day (9.30am to 5.00 pm)  
Total Honorarium to Resource persons : Rs 20000/.(2 days)  
2. Refreshment at morning and evening : Rs 5000/. (160participants)  
3. Hospitality Expenses for Resource persons: Rs 6000/.  
4. Miscellaneous expenses : Rs 2000/.

**Total amount : Rs 33000/.**

**DETAILED BUDGET ESTIMATE FOR ONE DAY TRAINING PROGRAM FOR THIRD YEAR STUDENTS ON “COMMUNICATION SKILLS”**

1. Honorarium to Resource persons : Rs 10000/day (9.30am to 5.00 pm)  
Total Honorarium to Resource persons : Rs 20000/.(2 days)  
2. Refreshment at morning and evening : Rs 5000/. (160participants)  
3. Hospitality Expenses for Resource persons: Rs 6000/.  
4. Miscellaneous expenses : Rs 2000/.

**Total amount : Rs 33000/.**

**DETAILED BUDGET ESTIMATE FOR ONE DAY TRAINING PROGRAM FOR THIRD YEAR STUDENTS ON “APTITUDE TEST ”**

1. Honorarium to Resource persons : Rs 10000/day (9.30am to 5.00 pm)  
Total Honorarium to Resource persons : Rs 20000/.(2 days)  
2. Refreshment at morning and evening : Rs 5000/. (160participants)  
3. Hospitality Expenses for Resource persons: Rs 6000/.  
4. Miscellaneous expenses : Rs 2000/.

**Total amount : Rs 33000/.**



## REMEDIAL CLASSES FOR WEAK STUDENTS

### 1. Remedial Classes for First year Engineering Students (Beneficiaries: 60 students )

Sl No.	Name of Subject to which the orientation will be given	Duration(Hrs)
1	Engineering Mathematics-I	40
2	Engineering Mathematics-II	40
3	Engineering Graphics	40
4	Engineering Mechanics	40
5	Basics of Civil & Mechanical Engineering	40
6	Basics of Electrical, Electronics & Communication Engg.	40

### Expected Expenses for Remedial Classes for First year Engineering Students (for 60 candidates, 30 days)

Sl No	Item Name	Rate per subject(Rs)	No. of candidates (Nos)	No of days	Total (Rs)
1	Preparation and distribution of course material/Tutorials for six subjects	200	60	30	200x6 = 1200
2	Honorarium to faculty (Rs 600 per hour)	600x6 =3600		30	108000*
				<b>Total</b>	<b>1,09,200</b>
<b>Rupees One Lakhs Nine thousand and two hundred only</b>					

**2. Remedial Classes for Third Semester Engineering Students** (Beneficiaries: 60 students)

Sl No.	Name of Subject to which the orientation will be given	Duration(Hrs)
1	Engineering Mathematics-III	40
2	2 Subjects having failure rate more in Civil Engineering	80
3	2 Subjects having failure rate more in Mechanical Engineering	80
4	2 Subjects having failure rate more in Applied Electronics and Instrumentation	80
5	2 Subjects having failure rate more in Chemical Engineering	80

\* The maximum amount of honorarium to a faculty member per year is Rs 15000/.

**Expected Expenses for Remedial Classes for Third Semester Engineering Students (for 60 candidates, 20 days)**

Sl. No.	Item Name	Rate per subject(Rs)	No. of candidates (Nos)	No. of days	Total (Rs)								
1	Preparation and distribution of course material/Tutorials for <u>threesubjects</u> (Rs 300/subject )-charges include DTP,Photo copying of tutorials, purchase of Note books/paper,CD making, Binding charges tec.)  15 Civil Engineering Students 15 Mechanical Engineering Students 15 Applied Electronics & Instrumentation Engineering students 15 Chemical Engineering Students	300	60	20	300 x 3 = 900								
2	Honorarium to faculty* (Rs 600 per hour)  Details of Honorarium to Teachers in a day of 6 hrs class(9.30am - 4.30pm)												
<table border="1"> <thead> <tr> <th>Branch</th> <th>No of hrs</th> <th>Amt</th> <th>total</th> </tr> </thead> <tbody> <tr> <td>Civil Engg.</td> <td>4</td> <td>600</td> <td>2400</td> </tr> </tbody> </table>		Branch	No of hrs	Amt	total	Civil Engg.	4	600	2400				
Branch	No of hrs	Amt	total										
Civil Engg.	4	600	2400										

Mechanical Engg	4	600	2400	<b>10800</b>	<b>60</b>	<b>20</b>	<b>216000<sup>@</sup></b>
Applied Electronics & Instrumentation	4	600	2400				
Chemical Engg.	4	600	2400				
Mathematics for all students	2	600	1200				
Total amount of Honorarium to teachers in a day			10800				
						<b>Total</b>	<b>2,16,900</b>
<b>Rupees Two Lakhs, sixteen thousand and nine hundred only</b>							

\*Faculty member will be a teacher/First grade instructors having M-tech

<sup>@</sup>The maximum amount of honorarium to a faculty member per year is Rs 15000/.

**3. Remedial Classes for Fourth Semester Engineering Students (Beneficiaries: 60 students )**

Sl No.	Name of Subject to which the orientation will be given	Duration(Hrs)
1	Engineering Mathematics-IV	40
2	2 Subjects having failure rate more in Civil Engineering	80
3	2 Subjects having failure rate more in Mechanical Engineering	80
4	2 Subjects having failure rate more in Applied Electronics and Instrumentation	80
5	2 Subjects having failure rate more in Chemical Engineering	80

**Expected Expenses for Remedial Classes for Fourth Semester Students (for 60 candidates, 20 days)**

Sl No	Item Name	Rate per subject(Rs)	No. of candidates (Nos)	No of days	Total (Rs)																				
1	Preparation and distribution of course material/Tutorials for <u>three</u> subjects(Rs 300/subject )-charges include DTP,Photo copying of tutorials, purchase of Note books/paper,CD making, Binding charges tec.)15 students from each branch	300	60	20	300 x 3= 900																				
2	Honorarium to faculty* (Rs 600 per hour)  Details of Honorarium to Teachers in a day of 6 hrs class(9.30am - 4.30pm)  <table border="1" data-bbox="247 1377 758 1948"> <thead> <tr> <th>Branch</th> <th>No of hrs</th> <th>Amt</th> <th>total</th> </tr> </thead> <tbody> <tr> <td>Civil Engg.</td> <td>4</td> <td>600</td> <td>2400</td> </tr> <tr> <td>Mechanical Engg</td> <td>4</td> <td>600</td> <td>2400</td> </tr> <tr> <td>Applied Electronics &amp; Instrumentation</td> <td>4</td> <td>600</td> <td>2400</td> </tr> <tr> <td>Chemical</td> <td>4</td> <td>600</td> <td>2400</td> </tr> </tbody> </table>	Branch	No of hrs	Amt	total	Civil Engg.	4	600	2400	Mechanical Engg	4	600	2400	Applied Electronics & Instrumentation	4	600	2400	Chemical	4	600	2400	10800	60	20	216000 <sup>@</sup>
Branch	No of hrs	Amt	total																						
Civil Engg.	4	600	2400																						
Mechanical Engg	4	600	2400																						
Applied Electronics & Instrumentation	4	600	2400																						
Chemical	4	600	2400																						

	Engg.								
	Mathematics for all students	2	600	1200					
	Total amount of Honorarium to teachers in a day			10800					
								<b>Total</b>	<b>2,16,900</b>
<b>Rupees Two Lakhs, sixteen thousand and nine hundred only</b>									

\*Faculty member will be a teacher/First grade instructors having M-tech

@The maximum amount of honorarium to a faculty member per year is Rs 15000/.

**4. Remedial Classes for Fifth Semester Engineering Students** (Beneficiaries: 60 students)

Sl No.	Name of Subject to which the orientation will be given	Duration(Hrs)
1	2 Subjects having failure rate more in Civil Engineering	80
2	2 Subjects having failure rate more in Mechanical Engineering	80
3	2 Subjects having failure rate more in Applied Electronics and Instrumentation	80
4	2 Subjects having failure rate more in Chemical Engineering	80

**Expected Expenses for Remedial Classes for Fifth Semester Students (for 60 candidates, 20 days)**

Sl. No	Item Name	Rate per subject(Rs)	No. of candidates (Nos)	No of days	Total (Rs)																								
1	Preparation and distribution of course material/Tutorials for <u>three</u> subjects (Rs 300/subject )-charges include DTP, Photo copying of tutorials, purchase of Note books/paper, CD making, Binding charges tec.) 15 students from each branch	300	60	20	300 x 3 = 900																								
2	Honorarium to faculty* (Rs 600 per hour) Details of Honorarium to Teachers in a day of 4 hrs class <table border="1" data-bbox="252 1218 855 1720"> <thead> <tr> <th>Branch</th> <th>No of hrs</th> <th>Amt</th> <th>total</th> </tr> </thead> <tbody> <tr> <td>Civil Engg.</td> <td>4</td> <td>600</td> <td>2400</td> </tr> <tr> <td>Mechanical Engg</td> <td>4</td> <td>600</td> <td>2400</td> </tr> <tr> <td>Applied Electronics &amp; Instrumentation</td> <td>4</td> <td>600</td> <td>2400</td> </tr> <tr> <td>Chemical Engg.</td> <td>4</td> <td>600</td> <td>2400</td> </tr> <tr> <td colspan="3">Total amount of Honorarium to teachers in a day</td> <td>9600</td> </tr> </tbody> </table>	Branch	No of hrs	Amt	total	Civil Engg.	4	600	2400	Mechanical Engg	4	600	2400	Applied Electronics & Instrumentation	4	600	2400	Chemical Engg.	4	600	2400	Total amount of Honorarium to teachers in a day			9600	9600	60	20	192000 <sup>@</sup>
Branch	No of hrs	Amt	total																										
Civil Engg.	4	600	2400																										
Mechanical Engg	4	600	2400																										
Applied Electronics & Instrumentation	4	600	2400																										
Chemical Engg.	4	600	2400																										
Total amount of Honorarium to teachers in a day			9600																										
				<b>Total</b>	<b>1,92,900</b>																								
<b>Rupees One Lakh, ninety two thousand and nine hundred only</b>																													

\*Faculty member will be a teacher/First grade instructors having M-tech

<sup>@</sup>The maximum amount of honorarium to a faculty member per year is Rs 15000/.

**5. Remedial Classes for Sixth Semester Engineering Students** (Beneficiaries: 60 students)

Sl No.	Name of Subject to which the orientation will be given	Duration(Hrs)
1	2 Subjects having failure rate more in Civil Engineering	80
2	2 Subjects having failure rate more in Mechanical Engineering	80
3	2 Subjects having failure rate more in Applied Electronics and Instrumentation	80
4	2 Subjects having failure rate more in Chemical Engineering	80

**Expected Expenses for Remedial Classes for Sixth Semester Students(for 60 candidates, 20 days)**

Sl No	Item Name	Rate per subject(Rs)	No. of candidates (Nos)	No of days	Total (Rs)																				
1	Preparation and distribution of course material/Tutorials for three subjects (Rs 300/subject )-charges include DTP,Photo copying of tutorials, purchase of Note books/paper,CD making, Binding charges tec.)  15 students from each branch	300	60	20	300 x 3 = 900																				
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Branch	No of hrs	Amt	total																						
Civil Engg.	4	600	2400																						
Mechanical Engg	4	600	2400																						
Applied Electronics & Instrumentation	4	600	2400																						
Chemical Engg.	4	600	2400																						

	Total amount of Honorarium to teachers in a day	9600				
					<b>Total</b>	<b>1,92,900</b>
<b>Rupees One Lakh, ninety two thousand and nine hundred only</b>						

\*Faculty member will be a teacher/First grade instructors having M-tech

@The maximum amount of honorarium to a faculty member per year is Rs 15000/.



**6. Remedial Classes for Seventh Semester Engineering Students**(Beneficiaries: 60 students)

Sl No.	Name of Subject to which the orientation will be given	Duration(Hrs)
1	2 Subjects having failure rate more in Civil Engineering	80
2	2 Subjects having failure rate more in Mechanical Engineering	80
3	2 Subjects having failure rate more in Applied Electronics and Instrumentation	80
4	2 Subjects having failure rate more in Chemical Engineering	80

**Expected Expenses for Remedial Classes for Seventh Semester Students (for 60 candidates, 20 days)**

Sl No	Item Name	Rate per subject(Rs)	No. of candidates (Nos)	No of days	Total (Rs)																
1	Preparation and distribution of course material/Tutorials for three subjects (Rs 300/subject )-charges include DTP, Photo copying of tutorials, purchase of Note books/paper, CD making, Binding charges tec.)  15 students from each branch	300	60	20	300 x 3=900																
2	Honorarium to faculty* (Rs 600 per hour)  Details of Honorarium to Teachers in a day of 4 hrs class  <table border="1" data-bbox="252 1451 855 1960"> <thead> <tr> <th>Branch</th> <th>No of hrs</th> <th>Amt</th> <th>total</th> </tr> </thead> <tbody> <tr> <td>Civil Engg.</td> <td>4</td> <td>600</td> <td>2400</td> </tr> <tr> <td>Mechanical Engg</td> <td>4</td> <td>600</td> <td>2400</td> </tr> <tr> <td>Applied Electronics &amp; Instrumentation</td> <td>4</td> <td>600</td> <td>2400</td> </tr> </tbody> </table>	Branch	No of hrs	Amt	total	Civil Engg.	4	600	2400	Mechanical Engg	4	600	2400	Applied Electronics & Instrumentation	4	600	2400				
Branch	No of hrs	Amt	total																		
Civil Engg.	4	600	2400																		
Mechanical Engg	4	600	2400																		
Applied Electronics & Instrumentation	4	600	2400																		

	Chemical Engg.	4	600	2400	<b>9600</b>	<b>50</b>	<b>20</b>	<b>1,92,000<sup>@</sup></b>
	Total amount of Honorarium to teachers in a day			9600				
							<b>Total</b>	<b>1,92,900</b>
<b>Rupees One Lakh, ninety two thousand and nine hundred only</b>								

\*Faculty member will be a teacher/First grade instructors having M-tech

<sup>@</sup>The maximum amount of honorarium to a faculty member per year is Rs 15000/.

**7. Remedial Classes for Eighth Semester Engineering Students**(Beneficiaries: 60 students )

Sl No.	Name of Subject to which the orientation will be given	Duration(Hrs)
1	2 Subjects having failure rate more in Civil Engineering	80
2	2 Subjects having failure rate more in Mechanical Engineering	80
3	2 Subjects having failure rate more in Applied Electronics and Instrumentation	80
4	2 Subjects having failure rate more in Chemical Engineering	80

**Expected Expenses for Remedial Classes for Eighth Semester Students (for 60 candidates, 20 days)**

Sl No	Item Name	Rate per subject( Rs)	No. of candidates (Nos)	No of days	Total (Rs)																								
1	Preparation and distribution of course material/Tutorials for three subjects(Rs 300/subject )-charges include DTP,Photo copying of tutorials, purchase of Note books/paper,CD making, Binding charges tec.)15 students from each branch	300	60	20	300 x 3 = 900																								
2	Honorarium to faculty* (Rs 600 per hour) Details of Honorarium to Teachers in a day of 4 hrs class																												
	<table border="1"> <thead> <tr> <th>Branch</th> <th>No of hrs</th> <th>Amt</th> <th>total</th> </tr> </thead> <tbody> <tr> <td>Civil Engg.</td> <td>4</td> <td>600</td> <td>2400</td> </tr> <tr> <td>Mechanical Engg</td> <td>4</td> <td>600</td> <td>2400</td> </tr> <tr> <td>Applied Electronics &amp; Instrumentation</td> <td>4</td> <td>600</td> <td>2400</td> </tr> <tr> <td>Chemical Engg.</td> <td>4</td> <td>600</td> <td>2400</td> </tr> <tr> <td colspan="3">Total amount of Honorarium to teachers in a day</td> <td>9600</td> </tr> </tbody> </table>	Branch	No of hrs	Amt	total	Civil Engg.	4	600	2400	Mechanical Engg	4	600	2400	Applied Electronics & Instrumentation	4	600	2400	Chemical Engg.	4	600	2400	Total amount of Honorarium to teachers in a day			9600				
Branch	No of hrs	Amt	total																										
Civil Engg.	4	600	2400																										
Mechanical Engg	4	600	2400																										
Applied Electronics & Instrumentation	4	600	2400																										
Chemical Engg.	4	600	2400																										
Total amount of Honorarium to teachers in a day			9600																										
		9600	50	20	1,92,000 @																								

	<b>Total</b>	<b>1,92,900</b>
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**Rupees One Lakh, ninety two thousand and nine hundred only**

\*Faculty member will be a teacher/First grade instructors having M-tech

@The maximum amount of honorarium to a faculty member per year is Rs 15000/.

## **SUMMARY OF EXPENDITURE FOR REMEDIAL CLASSES FOR ENGINEERING STUDENTS**

<b>Sl. No</b>	<b>Name of the programme</b>	<b>Amount Needed</b>
<b>1.</b>	Remedial Classes for First year Engineering Students	<b>109200</b>
<b>2.</b>	Remedial Classes for Third Semester Engineering Students	<b>216900</b>
<b>3</b>	Remedial Classes for Fourth Semester Engineering Students	<b>216900</b>
<b>4</b>	Remedial Classes for Fifth Semester Engineering Students	<b>192900</b>
<b>5</b>	Remedial Classes for Sixth Semester Engineering Students	<b>192900</b>
<b>6</b>	Remedial Classes for Seventh Semester Engineering	<b>192900</b>
<b>7</b>	Remedial Classes for Eighth Semester Engineering Students	<b>192900</b>
	Total	<b>13,14,600</b>
	<b>Rupees Thirteen Lakhs, fourteen thousand and six hundred only</b>	

## 5. ANNEXURE 5

### **III CELL ACTIVITY REPORT AND BUDGET ALLOCATION OF INDUSTRY ACADEMIC LINKAGE**

**TEQIP II ACTION PLAN( SIX MONTHLY) ON INDUSTRY- ACADAMIA LINKAGE  
(Timeframe 01.05.2012 to 30.09.2012, and 01.10.2012 to 31.03.2012)  
Mechanical Department**

Item	Activities/Indicators	Activities/Indicators Completed during April to June 2012		Activities/Indicators Nos. Target		Activities/Indicators Nos. Target	
		Nos.	Cost Incurred (Rs in Lakh)	July to Sept 2012	Cost Estimate (Rs in Lakh)	Oct 2012 to Mar 2013	Cost Estimate (Rs in Lakh)
Establishing Industry-Institution-Interaction (I-I) Cells in all project institutions	No. of curricula designed/ revised with involvement of industry						
	No. of teachers trained at industry			2	1,20,000/-	3	1,80,000/-
	No. of students trained at industry			4	8,000/-	32	80,000/-
	No. of joint R&D projects with industry					2	6,00,000/-
	No. of joint consultancy projects with industry						
	No. of joint publications with industry						
	No. of collaborative academic programmes(UG/PG/PhD)			2	60,000/-	2	60,000/-
	No. of consultancy assignments from industry						
	No. of technology transfers to industry						
	No. of training programs including continuing education programs for industry						
	No. of facilities/resources shared with industry						
	No. of students projects at industry( industrial problem solving projects)			15	30,000/-	15	30,000/-
No. of teachers exposed to industrial practices & technologies							

No. of students exposed to industrial practices & technologies *			50	5,000/-	50	5,000/-
No .of industry experts invited as adjunct faculty						
Job placement of all graduates (Nos.) in industry						

11,78,000/-

\*By inviting experts from industry to expose students( 50 Nos. per batch, Approx) to Industrial projects & technologies

**TEQIP II ACTION PLAN ( SIX MONTHLY) ON INDUSTRY- ACADAMIA LINCAGE**  
**(Timeframe 01.05.2012 to 30.09.2012, and 01.10.2012 to 31.03.2012)**

**Civil Engineering Dept**

Item	Activities/Indicators	Activities/Indicators Completed during April to June 2012		Activities/Indicators Nos. Target		Activities/Indicators Nos. Target	
		Nos.	Cost Incured (Rs in Lakh)	July to Sept 2012	Cost Estimate (Rs in Lakh)	Oct 2012 to Mar 2013	Cost Estimate (Rs in Lakh)
Establishing Industry-Institution-interaction (I-I-I) Cells in all project institutions	No. of curricula designed/ revised with involvement of industry						
	No. of teachers trianed at industry			1	60,000/-	3	1,80,000/-
	No. of students trained at industry			3	6,000/-	3	6,000/-
	No. of joint R&D projects with industry						
	No .of joint consultancy projects with industry						
	No. of joint publications with industry						
	No. of collaborative academic programmes(UG/PG/PhD)						
	No.of consultancy assignments from industry						
	No. of technology transfers to industry						
	No. of training programs including continuing education programs for industry						
	No.of fecilities/resources shared with industry						
	No. of students projects at industry( industrial problem solving projects)						
	No. of teachers exposed to industrial practices & technologies						
	No. of students exposed to industrial practices&technologies *			100	10,000/-	100	10,000/-
	No .of industry experts invited as adjunct faculty						
Job placement of all graduates (Nos.) in industry							

2,72,000/-

\*By inviting experts from industry to expose students( 50 Nos. per batch, Approx) to Industrial projects & technologies



**TEQIP II ACTION PLAN(SIX MONTHLY) ON INDUSTRY- ACADAMIA LINCAGE**  
**(Timeframe 01.05.2012 to 30.09.2012, and 01.10.2012 to 31.03.2012)**

**Dept. Of Applied Electronics**

Item	Activities/Indicators	Activities/Indicators Completed during April to June 2012		Activities/Indicators Nos. Target		Activities/Indicators Nos. Target	
		Nos.	Cost Incurred (Rs in Lakh)	July to Sept 2012	Cost Estimate (Rs in Lakh)	Oct 2012 to Mar 2013	Cost Estimate (Rs in Lakh)
Establishing Industry-Institution-interaction (I-I-I) Cells in all project institutions	No. of curricula designed/ revised with involvement of industry						
	No. of teachers trained at industry			1	60,000/-		
	No. of students trained at industry					25	25,000/-
	No. of joint R&D projects with industry						
	No. of joint consultancy projects with industry						
	No. of joint publications with industry						
	No. of collaborative academic programmes(UG/PG/PhD)						
	No. of consultancy assignments from industry						
	No. of technology transfers to industry						
	No. of training programs including continuing education programs for industry						
	No. of facilities/ resources shared with industry						
	No. of students projects at industry( industrial problem solving projects)			3	18,000/-	3	18,000/-
	No. of teachers exposed to industrial practices & technologies					2	7,000/-
	No. of students exposed to industrial practices & technologies *			50	5,000/-	50	5,000/-
	No. of industry experts invited as adjunct faculty						
	Job placement of all graduates (Nos.) in industry						

1,38,000/-

\*By inviting experts from industry to expose students( 50 Nos. per batch, Approx) to Industrial projects & technologies

**TEQIP II ACTION PLAN(SIX MONTHLY) ON INDUSTRY- ACADAMIA LINCAGE**  
**(Timeframe 01.05.2012 to 30.09.2012, and 01.10.2012 to 31.03.2012) Chemical Engineering**

Item	Activities/Indicators	Activities/Indicators Completed during April to June 2012		Activities/Indicators Nos. Target		Activities/Indicators Nos. Target	
		Nos.	Cost Incurred (Rs in Lakh)	July to Sept 2012	Cost Estimate (Rs in Lakh)	Oct 2002 to Mar 2013	Cost Estimate (Rs in Lakh)
Establishing Industry-Institution-interaction (I-I-I) Cells in all project institutions	No. of curricula designed/ revised with involvement of industry						
	No. of teachers trianed at industry						
	No. of students trained at industry			18	36,000/-	33	75,000/-
	No. of joint R&D projects with industry						
	No .of joint consultancy projects with industry						
	No. of joint publications with industry						
	No. of collaborative academic programmes(UG/PG/PhD)						
	No.of consultancy assignments from industry						
	No. of technology transfers to industry						
	No. of training programs including continuing education programs for industry					1	30,000/-
	No.of facilities/ resources shared with industry						
	No. of students projects at industry( industrial problem solving projects)					20	20,000/-
	No. of teachers exposed to industrial practices & technologies					5	18,000/-
	No. of students exposed to industrial practices& technologies *			50	5,000/-	50	5,000/-
	No .of industry experts invited as adjunct faculty					2	1,50,000/-
Job placement of all graduates (Nos.) in industry							

3,39,000/-

\*By inviting experts from industry to expose students( 50 Nos. per batch, Approx) to Indusrial projects & technologies

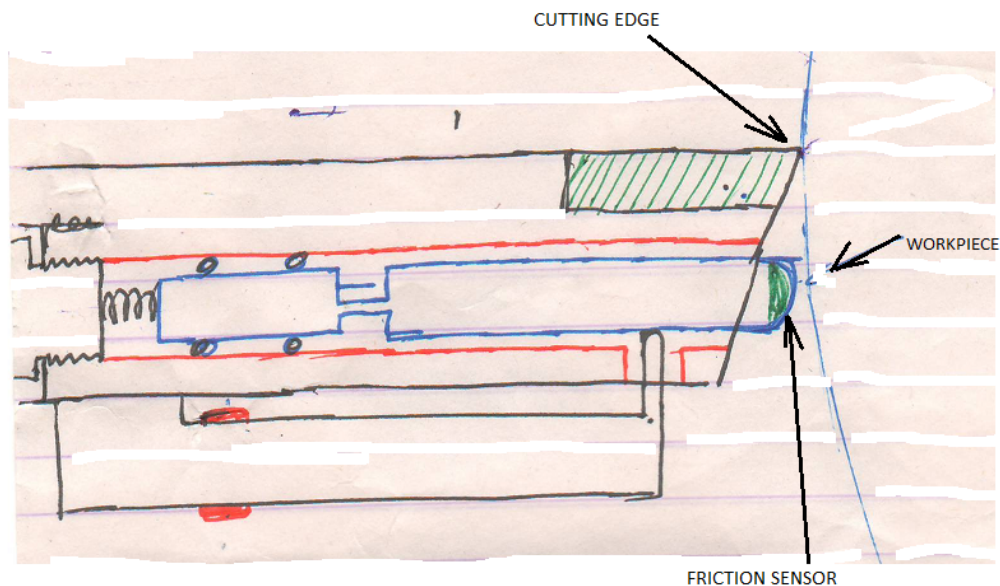
**TEQIP II ACTION PLAN(SIX MONTHLY) ON INDUSTRY-  
ACADAMIA LINCAGE (TIMEFRAME 01.05.2012 TO  
30.09.2012, AND 01.10.2012 TO 31.03.2012)**  
**CONSOLIDATED REPORT**

Item	Activities/Indicators	Activities/Indicators Completed during April to June 2012		Activities/Indicators Nos. Target		Activities/Indicators Nos. Target	
		Nos.	Cost Incurred (Rs in Lakh)	July to Sept 2012	Cost Estimate (Rs in Lakh)	Oct 2012 to Mar 2013	Cost Estimate (Rs in Lakh)
Establishing Industry-Institution-interaction (I-I-I) Cells in all project institutions	No. of curricula designed/ revised with involvement of industry	NIL		(CURRICULA DESIGNED BY UNIVERSITY OF CALICUT)			
	No. of teachers trianed at industry	NIL	.....	4	2,40,000/-	6	3,60,000/-
	No. of students trained at industry	30	.....	25	50,000/-	93	1,86,000/-
	No. of joint R&D projects with industry	.....	.....	.....	.....	2	6,00,000/-
	No. of joint consultancy projects with industry	.....	.....	.....	.....	.....	.....
	No. of joint publications with industry	.....	.....	.....	.....	.....	.....
	No. of collaborative academic programmes(UG/PG/Ph D)	.....	.....	2	60,000/-	2	60,000/-
	No. of consultancy assignments from industry	.....	.....	.....	.....	.....	.....
	No. of technology transfers to industry	.....	.....	.....	.....	.....	.....
	No. of training programs including continuing education programs for industry	.....	.....	.....	.....	1	30,000/-
	No. of facilities/resources shared with industry	.....	.....	.....	.....	.....	.....
	No. of students projects at industry( industrial problem solving projects)	.....	.....	18	48,000/-	38	68,000/-
	No. of teachers exposed to industrial practices & technologies	.....	.....	.....	.....	7	25,000/-
	No. of students exposed to industrial practices& technologies	.....	.....	250	25,000/-	250	25,000/-

	No .of industry experts invited as adjunct faculty	.....	.....	.....	.....	2	1,50,000/-
	Job placement of all graduates (Nos.) in industry	.....	.....	.....	.....	.....	.....
					SUM TOTAL		19,27,000/-

## DETAIL OF THE R&D PROPOSAL AS PER TEQIP SCHEME: INTEGRAL TOOL-FRICTION MEASUREMENT GADGET FOR METAL CUTTING TRIBOLOGY

Friction during metal cutting is usually assessed by lathe-tool-dynamometers which calculate friction using a suitable cutting force model mainly the Merchant Circle diagram which expresses friction as a function of the forces recorded by the dynamometer in a metal cutting lathe. As these estimates are highly dependent on the particular force models and since there have been doubts raised regarding the acceptability of a specific model, assessment of friction during metal cutting has been an area of intense research. One of the difficulties assessing friction using conventional tribological equipment is that the friction on a freshly cut and unexposed surface could be different from what would be tested on a surface which had been exposed to the ambient.



A simple-to-use, handy and economical gadget to measure friction during metal cutting is under consideration (see figure above). Friction measuring sensor made integral with the cutting tool is what is proposed. Such a set up would have a sensor sliding on the ensuing new surface either in the presence of a cutting fluid or without it.

The product has been borne out of the discussions with Tribology Lab., IISc Bangalore (Prof. Satish V. Kailas) and an industry (M/s MAGNUM Industries, Bangalore) experienced in the area of developing new tribological equipment. The industry (M/s MAGNUM Industries, Bangalore) has expressed its readiness to participate in the development of the proposed product. Such a product does not exist and the challenge lies in a realizing a (1) reasonably sized set-up which is reliable, (2) made free from the effects of vibration and (3) well calibrated.

Proposed by: Dr.Anirudhan P., Associate Professor, Mech. Engg., Govt. Engg. College, Kozhikkode

Experience: Research : 6 Years, Academic: 12 years

Patents: 1, Publications: 6

Collaboration

Prof. Satish V. Kailas, Professor, Mech. Engg., IISc Bangalore

Industry Partner for R& D

M/s MAGNUM Industries, Bangalore

Expected expenditure: Rs. 4 Lakhs

## **DETAIL OF THE R&D PROPOSAL AS PER TEQIP SCHEME: VEGETABLE OIL BASED METAL WORKING FLUID FROM RUBBER SEED OIL**

Metal Working Fluids (MWF) are used in metal rolling operations and metal cutting operations to reduce friction/wear and to dissipate heat generated during the manufacturing process. These fluids are emulsions made by emulsifying oils in water using suitable emulsifying agents. Conventionally they are made from mineral oil derivatives with chemicals as emulsifying agents. These formulations can cause problems to the skin and their long term exposure can cause serious problems. Moreover, disposal of the used MWFs can cause serious irreparable damage to the soil and environment. Therefore, there has been a shift in the strategy of such formulations from mineral oil based approach to environment friendly vegetable oils.

Kerala being rich in rubber plantation has the potential of delivering adequate amount of rubber seed oil at a far cheaper rate in comparison with some other alternatives suggested (for example, coconut oil costs Rs. 70/- per litre, while rubber seed oil costs Rs. 20/- per litre). Commercial exploitation of this material for its potential use in a metal working fluid is what is proposed under this R& D project. Chemical tests to find a suitable emulsifier-complex made from environment friendly emulsifiers which can emulsify this oil (Composition, as given in table below) would be the main task in this project. Once the emulsification is successful, various environmental risk assessment test need to be performed. The formulated emulsions would then be tested in some standard manufacturing units.

Fatty acid	Nomenclature	Percent
Palmitic	C16:0	10.2 %
Stearic	C18:0	8.7 %
Oleic	C18:1	24.6 %
Linoleic	C18:2	39.6 %
Linolenic	C18:3	16.3 %

Table: Composition of rubber oil

Discussions related to this project has been done with Tribology Lab., IISc Bangalore (Prof. Satish V. Kailas) and an industry (M/s MAGNUM Industries, Bangalore ). The industry (M/s MAGNUM Industries, Bangalore) has expressed its readiness to participate in the development of the proposed product.

RUBCO, a venture in the cooperative sector, committed to deliver commercial products related to rubber and its derivatives need to be consulted for further industrial collaboration in this regard. The need for high quality (pure) rubber oil can be met with their help.

Proposed by: Dr.Anirudhan P., Associate Professor, Mech. Engg., Govt. Engg. College, Kozhikkode

Experience: Research : 6 Years, Academic: 12 years, Patents: 1, Publications: 6

Collaboration: Prof. Satish V. Kailas, Professor, Mech. Engg., IISc Bangalore

Industry Partner for R& D

(1) M/s MAGNUM Industries, Bangalore,, (2) M/s RUBCO Kerala (to be finalised)

Expected expenditure: Rs. 2 Lakhs

## 6. ANNEXURE 6

### **FINANCIAL MANAGEMENT UNIT REPORT INCLUDING ACCOUNTS SUMMARY** **AS ON 22-8-2012**

Direct Expense	14,400/-
Indirect Expense	1,13,769/-
Cash At bank	198,94,807/-
Total Cash in hand	11,140/-
Cash	6,461/-
Petty Cash	4,679/-
Loan From PTA	30,000/-
Telephone Deposit	500/-
Interest Received	3,616/-

#### Indirect Expense

BoG Meeting 13-6-12	28,144/-
Bank Charges	65/-
Local Conveyance	344/-
Office Equipment	660/-
Postage & Couriers	1,132/-
Printing & stationary	8,901/-
Repair & maintenance	80/-
Salary to Clerk	24,850/-
TA	23,375/-
Tally Training	25,270/-
Telephone Charges	948/-
Total	1,13,769/-
Flight Charge (Bill on process)	8900/-



# 7. ANNEXURE 7

## CONSTITUTION OF COUNSELING AND GUIDANCE CELL

*The Counseling and Guidance Cell constituted with the following members.*

Chair person: Prof. Marakkarutty, HOD (Civil)

Coordinator: Dr. Rejini V O, HOD (Chemical)

Executive Committee:-

- |                           |                                 |
|---------------------------|---------------------------------|
| 1) Smt. Subija-           | Dept. Of AE& I                  |
| 2) Shri. Naufal AP -      | Dept. Of Civil Engineering      |
| 3) Smt Ushakumari-        | Dept. Of Chemical Engineering   |
| 4) Mr. Shaijal-           | Dept. Of Mechanical Engineering |
| 5) Ms. Girija K-          | Dept. Of Applied Science        |
| 6) Mohammed Shafeek A-    | Physical Education Teacher      |
| 7) Placement Coordinator; | Ex Officio member.              |

## 8. ANNEXURE 8

### OTHER ITEMS

#### 1. Change of two equipments in the procurement plan.

It is proposed not to purchase the following equipments as it is not necessary as per the present B.Tech syllabus and the proposed M.Tech course for this is changed. Instead it is also proposed to procure furniture for the same amount of Rs. 24 lakhs.

	Package Code	Package Name	Estimated Cost (Rs.)
21	...II/KL/KL1G02/22	DGPS	1,200,000.00
25	...II/KL/KL1G02/26	SHEAR APPARATUS	1,200,000.00

#### 2. Proposal for sanctioning fee for part time Ph.D programme

The proposal for meeting the expenditure for the fees of Mr. Saijal, Asst. prof. In mechanical engineering, to undergo the part time Ph.D programme is enclosed herewith. Rs 42800 per annum.

#### 3. Any other items