

**TKM College of Engineering, Kollam**  
TEQIP PHASE – II

**Faculty Development Programmes**

**Statement of expenditure**

| SI No: | Activity                            | Amount Actually spent as on date 31.10.13 in lakhs | Planned to be spend till December 2014 in lakhs | Total in lakhs |
|--------|-------------------------------------|--|---|----------------|
| 1      | FSD                                 | 25   | 135   | 160            |
| 2      | Research and consultancy activities | 0.3  | 30.3  | 30.6           |
| 3      | Reforms                             | 0.3  | 22.65   | 22.95          |
| 4      | Management capacity building        | 3.5  | 30  | 33.5           |
| 5      | Teaching assistantship              | 0  | 30  | 30             |
| 6      | Attending Conference (IOC)          | 4.5  | 42  | 46.5           |
|        | Grand Total                         | 33.6   | 289.95  | 323.55         |

# FSD

## Action plan till 31.12.13

### A. In house programmes

#### 1. Faculty Development Plan for Training in Subject Domain based on TNA (5 days duration)

Name of Department: Civil Engineering

| Sl. No | Title of the course              | Name of coordinator/s                  | From – To                      | No. of days | Participation (nos) expected |                          |                                  |       | Planned Expenditure in lakhs | Objectives         |
|--------|----------------------------------|--|--------------------------------|-------------|------------------------------|--------------------------|----------------------------------|-------|------------------------------|--------------------|
|        |                                  |  |                                |             | Own Institution              | Other TEQIP Institutions | Other AICTE Engineering colleges | Total |                              |                    |
| 1      | Training on total station & GPS  | Prof. R. Hazeena                       | 11/11/2013<br>to<br>15/11/2013 | 5           | 30                           | 10                       | 10                               | 50    | 0.9                          | Updating knowledge |
| 2      | Photo geology & remote sensing   | Dr. Udayakumar                         | 09/12/2013<br>to<br>13/12/2013 | 5           | 20                           | 10                       | 5                                | 35    | 1                            | Updating knowledge |
| 3      | Water resources & climate change | Prof. Vincent K John<br>Prof. Adarsh.S | 25/11/2013<br>to<br>29/11/2013 | 5           | 20                           | 10                       | 5                                | 35    | 1                            | Updating knowledge |
|        |                                  |  |                                |             |                              |                          |                                  | Total | 2.9                          |                    |

**Name of Department: Electronics & Communication Engineering**

| Sl. No | Title of the course                           | Name of coordinator/s                | From - To                  | No. of days | Participation (nos) expected |                          |                                  |       | Planned Expenditure in lakhs | Objectives                          |
|--------|---|--------------------------------------|----------------------------|-------------|------------------------------|--------------------------|----------------------------------|-------|------------------------------|-------------------------------------|
|        |   |                                      |                            |             | Own Institution              | Other TEQIP Institutions | Other AICTE Engineering colleges | Total |                              |                                     |
| 2      | FDP on Soft computing                         | Prof Abid Hussain ,<br>Prof Nishanth | 4/11/13<br>to<br>9/11/13   | 5           | 10                           | 5                        | 15                               | 30    | 1.5                          | Improving competence in the subject |
| 3      | Simulation Tools for RF and Microwave Design. | Dr.Sheeba.O<br>Pof.Heera Karunakaran | 20/11/13<br>to<br>24/11/13 | 5           | 10                           | 5                        | 15                               | 30    | 1.5                          | Improving competence in the subject |
| 4      | Image Processing & Applications.              | Dr. Sheeba.O,<br>Prof. Preetha Basu  | Dec. 2013                  | 5           | 10                           | 5                        | 15                               | 30    | 1.5                          | Improving competence in the subject |
| Total  |   |                                      |                            |             |                              |                          |                                  |       | 4.5                          |                                     |

## 2. Faculty Development Plan for Training in areas other than Subject Domain based on TNA (5 days duration)

Name of Department: Electrical and Electronics Engineering

| Sl. No | Title of the course                              | Name of coordinator/s                         | From - To                  | No. of days | Participation (nos) expected |                          |                                  |       | Planned Expenditure in lakhs | Objectives   |
|--------|--|---|----------------------------|-------------|------------------------------|--------------------------|----------------------------------|-------|------------------------------|--|
|        |  |   |                            |             | Own Institution              | Other TEQIP Institutions | Other AICTE Engineering colleges | Total |                              |  |
| 1      | Simulation softwares for Electrical engineering  | Prof. V. Gayathri                             | 04/11/13<br>to<br>08/11/13 | 5           | 20                           | 5                        | 5                                | 30    | 1.5                          | To be equipped with new software tools in Electrical Engg.     |
| 2      | English for Technical Communication and Research | Prof. Asha Raveendrath<br>Prof.FathimaM Kasim | 11/11/13<br>to<br>15/11/13 | 5           | 20                           | 5                        | 5                                | 30    | 1.5                          | To improve usage of English for written and oral communication |
|        |  |   |                            |             |                              |                          |                                  | Total | 3.0                          |  |

**Name of Department: Mechanical Engineering**

| Sl. No | Title of the course | Name of coordinator/s | From - To            | No. of days | Participation (nos) expected |                          |                                  |       | Planned Expenditure in lakhs | Objectives                             |
|--------|---------------------|-----------------------|----------------------|-------------|------------------------------|--------------------------|----------------------------------|-------|------------------------------|--|
|        |                     |                       |                      |             | Own Institution              | Other TEQIP Institutions | Other AICTE Engineering colleges | Total |                              |  |
| 1      | Student Counseling  | Dr. S .Jose           | 18/11/13 to 22/11/13 | 5           | 10                           | 10                       | 5                                | 25    | 1.2                          | Faculty can perform well in counseling |
| Total  |                     |                       |                      |             |                              |                          |                                  |       | 1.2                          |  |

**Name of Department: Electronics & Communication Engineering**

| Sl. No | Title of the course      | Name of coordinator/s | Dates     | No. of days | Participation (nos) expected |                          |                                  |       | Planned Expenditure in lakhs | Objectives  |
|--------|--------------------------|-----------------------|-----------|-------------|------------------------------|--------------------------|----------------------------------|-------|------------------------------|---|
|        |                          |                       |           |             | Own Institution              | Other TEQIP Institutions | Other AICTE Engineering colleges | Total |                              |   |
| 1      | Professional Development | Dr.Suresh Babu        | Dec. 2013 | 5           | 15                           | 5                        | 10                               | 30    | 1.0                          | Developing the institution as a hub for up gradation of technical education |
| Total  |                          |                       |           |             |                              |                          |                                  |       | 1                            |   |

## In-house Training Programmes / Continuing Education Programmes planned -Subject Domain (3 to 5 days duration)

**Name of Department: Electrical and Electronics Engineering**

| Sl. No       | Title of the programme                                   | Name of coordinator/s  | Date                     | No. of days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure in lakhs | Objectives                          |
|--------------|--|------------------------|--------------------------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|------------------------------|-------------------------------------|
|              |  |                        |                          |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                              |                                     |
| 1            | Advanced Digital Signal Processing                       | Prof. Sunitha Beevi K  | 18/11/2013 to 22/11/2013 | 5           | 25                           | 5                        | 5                                 | 5          | 40    | 2                            | Improving competence in the subject |
| 2            | Recent Advances in Power Electronics & Industrial Drives | Prof. Sindhu D. Pillai | 16/12/2013 to 20/12/2013 | 5           | 25                           | 5                        | 5                                 | 5          | 40    | 2                            | Subject Knowledge upgradation       |
| <b>Total</b> |  |                        |                          |             |                              |                          |                                   |            |       | <b>4</b>                     |                                     |

**Name of Department: Mechanical Engineering**

| Sl. No | Title of the programme             | Name of coordinator/s  | Date                 | No. of days | Participation (nos) expected |                          |                                    |            |       | Planned Expenditure in lakhs | Objectives  |
|--------|------------------------------------|------------------------|----------------------|-------------|------------------------------|--------------------------|------------------------------------|------------|-------|------------------------------|---|
|        |                                    |                        |                      |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec. Engg Institutions | Industries | Total |                              |   |
| 1      | Research Methodology for Engineers | Prof. Nizar Hussain. M | 11/11/13 to 13/11/13 | 3           | 10                           | 10                       | 5                                  | -          | 25    | 1.2                          | To get awareness for research methodology and methods |

|       |   |  |                      |   |    |    |    |   |    |     |  |
|-------|---|--|----------------------|---|----|----|----|---|----|-----|--|
| 2     | Recent advances in Industrial Engineering | Dr. C A. Shajahan & Prof . Mohamed Zakeer          | 04/11/13 to 08/11/13 | 5 | 10 | 10 | 15 | 5 | 40 | 1.2 | To give awareness about broad application of Industrial Engg   |
| 3     | Nanotechnology                            | Prof. Syed Mohamed Fahad<br>Prof. T.S.Krishnakumar | 28/10/13 to 01/11/13 | 5 | 15 | 5  | 10 | 5 | 35 | 1.1 | To introduce fundamental concept in nanotechnology             |
| 4     | CFD for Micro/ Nano scale Flows           | Dr.M.Jose Prakash<br>Dr. K E. Reby Roy             | 25/11/13 to 29/11/13 | 5 | 20 | 5  | 10 | 5 | 40 | 1.0 | To introduce CFD solution technique in micro/ nano scale flows |
| 5     | Solid Modelling & Auto CAD                | Dr. KE. Reby Roy<br>Mr. Dimithra Raj               | 9/12/13 to 13/12/13  | 5 | 20 | 5  | 10 | 5 | 40 | 1.2 | To train staff in this area                                    |
| Total |   |  |                      |   |    |    |    |   |    | 5.7 |  |

**Name of Department: Electronics & Communication Engineering**

| Sl. No | Title of the programme                              | Name of coordinator/s                          | Dates    | No. of days | Participation (nos) expected |                           |                                   |            |       | Planned Expenditure in lakhs | Objectives  |
|--------|---|--|----------|-------------|------------------------------|---------------------------|-----------------------------------|------------|-------|------------------------------|---|
|        |   |  |          |             | Own Institution              | Other TEQI P Institutions | Other AICTE rec Engg Institutions | Industries | Total |                              |   |
| 1      | Modern Trends in Electronic Fabrication Techniques. | Dr. Unni.C<br>Mr. P.Biju<br>Mr. Raseem Hussain | Nov 2013 | 3           | 5                            | 10                        | 10                                | 5          | 30    | 0.5                          | To train technicians in modern practices in Electronic Fabrication. |

|       |                   |                   |          |   |   |    |   |   |    |     |  |
|-------|-------------------|-------------------|----------|---|---|----|---|---|----|-----|--|
| 2     | Technology Clinic | Dr. S.Suresh Babu | Dec 2013 | 5 | 5 | 15 | 5 | 5 | 30 | 0.5 | Skill up gradation for Entrepreneurship Building |
| Total |                   |                   |          |   |   |    |   |   |    | 1.0 |  |

**Name of Department: Chemical Engineering**

| Sl. No | Title of the programme                    | Name of coordinator/s | Date                     | No. of days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure in lakhs | Objectives  |
|--------|---|-----------------------|--------------------------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|------------------------------|---|
|        |   |                       |                          |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                              |   |
| 2      | Research trends in Separation Processes   | Mrs. Mary Mathew      | 22.12.2013 to 26.12.2013 | 5           | 21                           | 5                        | 4                                 | 3          | 30    | 1.5                          | To help the faculty & staff keep abreast of the state-of-the art-procedures in Separation Processes |
| 3      | Advances in Renewable Energy Technologies | Mr. Fazil A           | 25.11.13 to 29.11.2013   | 5           | 21                           | 5                        | 4                                 | 3          | 30    | 1.5                          | To empower the faculty and staff with the current trends in Energy Technology                       |
| Total  |   |                       |                          |             |                              |                          |                                   |            |       | 3                            |   |



### 3. In-house workshops planned – Subject Domain (2-3 days duration)

Name of Department: Electrical and Electronics Engineering

| Sl. No | Title of the programme | Name of coordinator/s    | Date                          | No. of days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure in lakhs | Objectives                       |
|--------|------------------------|--------------------------|-------------------------------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|------------------------------|----------------------------------|
|        |                        |                          |                               |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                              |                                  |
| 1      | PLC & SCADA training   | Prof. Asha Raveendranath | 7 <sup>th</sup> December 2013 | 1           | 15                           | 5                        | 15                                | 5          | 40    | 0.25                         | To be equipped with new software |
| Total  |                        |                          |                               |             |                              |                          |                                   |            |       | 0.25                         |                                  |

Name of Department: Electronics & Communication Engineering

| Sl. No | Title of the programme                                 | Name of coordinator/s | Dates              | No. of days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure in lakhs | Objectives   |
|--------|--|-----------------------|--------------------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|------------------------------|--|
|        |  |                       |                    |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                              |  |
| 1      | Recent Trends in Nano electronic Material and Devices. | Dr.Unni C             | 6/11/13 to 8/11/13 | 3           | 12                           | 5                        | 11                                | 2          | 30    | 0.75                         | To empower the faculty and staff with the current trends |
| Total  |  |                       |                    |             |                              |                          |                                   |            |       | 0.75                         |  |

**Name of Department: Computer Science and Engineering**

| Sl. No       | Title of the programme   | Name of coordinator/s | Date      | No. of days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure in lakhs | Objectives                                   |
|--------------|--|-----------------------|-----------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|------------------------------|--|
|              |  |                       |           |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                              |  |
| 1.           | Compilers – Optimization and Machine Code Generation                                 | Prof. Manu J Pillai   | Dec. 2013 | 2           | 10                           | 20                       | 15                                | 5          | 50    | 0.5                          | To get exposure in Compiler Design           |
| 2            | Familiarization of MATLAB and Toolboxes (Neural Network and Image Processing Toolbox | Dr Amarnishad T M     | Nov. 2013 | 2           | 10                           | 20                       | 15                                | 5          | 50    | 0.5                          | To get hands on training in MATLAB Toolboxes |
| <b>Total</b> |  |                       |           |             |                              |                          |                                   |            |       | <b>1</b>                     |  |

**4. Seminars / Expert Lectures planned – Subject Domain(1-2 days duration)**

**Name of Department: Electronics & Communication Engineering**

| Sl. No | Title of the programme                      | Name of coordinator/s | From – To | No. of days | Participation (nos) Expected |       |          |       | Planned Expenditure in lakhs | Objectives                           |
|--------|---|-----------------------|-----------|-------------|------------------------------|-------|----------|-------|------------------------------|--------------------------------------|
|        |   |                       |           |             | Faculty                      | Staff | Students | Total |                              |                                      |
| 1      | Mathematical Tools for Electronic Engineers | Prof. Sreekumari amma | Dec 2013  | 1           | 10                           | 5     | 25       | 40    | 0.25                         | To give awareness in recent advances |

|       |                                     |              |          |   |    |   |    |    |      |                                      |
|-------|-------------------------------------|--------------|----------|---|----|---|----|----|------|--------------------------------------|
| 2     | Modern Trends in Display Technology | Prof .Reshna | Dec 2013 | 1 | 10 | 6 | 24 | 40 | 0.25 | To give awareness in recent advances |
| Total |                                     |              |          |   |    |   |    |    | 0.5  |                                      |

**Name of Department: Computer Science and Engineering**

| Sl. No | Title of the programme | Name of coordinator/s | From – To     | No. of days | Participation (nos) Expected |       |          |       | Planned Expenditure in lakhs | Objectives  |
|--------|------------------------|-----------------------|---------------|-------------|------------------------------|-------|----------|-------|------------------------------|---|
|        |                        |                       |               |             | Faculty                      | Staff | Students | Total |                              |   |
| 1      | Image Registration     | Prof Mohammed Siyad B | November 2013 | 1           | 20                           | 10    | 70       | 100   | 0.4                          | To get new ideas in Image Registration Techniques |
| Total  |                        |                       |               |             |                              |       |          |       | 0.4                          |   |

## 6 External Training programmes (outside the institution)

**Name of Department: Electronics & Communication Engineering**

| Sl. No. | Subject / Area of Training | No. and Name of faculty identified for                      | Duration (Days) | Date     | Name of Network TEQIP Institution / National Trainer Organization/Name of R & D organization / University | (Expected) Expenditure in lakhs | (Expected ) Outcome / Objectives    |
|---------|----------------------------|---|-----------------|----------|---|---------------------------------|-------------------------------------|
| 1       | VLSI Circuits Design       | Dr. Shahul Hammed<br>Pof. Anu Assis<br>Sri.Biju.P           | 7               | Nov 2013 | CDAC<br>Thiruvananthapuram  | 0.9                             | To get awareness in recent advances |
| 2       | Microwave Engg.            | Prof. Sajeena.A<br>Dr. Sheeba.O<br>Prof . Heera Karunakaran | 3               | Nov 2013 | Dept of Electronics,<br>CUSAT   | 0.7                             | To get awareness in recent advances |

|   |  |  |   |          |                 |     |                                     |
|---|--|--|---|----------|-----------------|-----|-------------------------------------|
| 3 | Micro-Electronic Devices                         | Dr. S.Suresh Babu<br>Prof. L.P.Lailamoni<br>Dr.Unni.C    | 3 | Dec 2013 | CEMET.Trichur   | 0.8 | To get awareness in recent advances |
| 4 | Hands on Experience on fabrication of Solar Cell | Dr. Shahul Hameed<br>Prof. Abid Hussain<br>Prof Reshna.S | 3 | Nov 2013 | NIT Calicut.    | 0.8 | To get awareness in recent advances |
| 5 | Mobile Communication                             | Prof. Nishanth.N.<br>Prof. SreeKumari Amma               | 3 | Nov 2013 | BSNL Trivandrum | 0.6 | To get awareness in recent advances |
|   |  |  |   |          | Total           | 3.8 |                                     |

# TKM College of Engineering, Kollam

## TEQIP PHASE – II

### Staff Development Programs

Action plan till 31.12.13

#### A. In house programmes

##### 1. Staff Development Plan for Training in functional area based on TNA (5 days duration)

Name of Department :Civil Engineering

| Sl. No | Title of the course       | Name of coordinator/s | From - To                  | No. of days | Participation (nos) expected |                          |                                  |       | Planned Expenditure in lakhs | Objectives         |
|--------|---------------------------|-----------------------|----------------------------|-------------|------------------------------|--------------------------|----------------------------------|-------|------------------------------|--------------------|
|        |                           |                       |                            |             | Own Institution              | Other TEQIP Institutions | Other AICTE Engineering colleges | Total |                              |                    |
| 1      | Training on Total Station | Prof. R. Hazeena      | 02-12-13<br>to<br>04-12-13 | 3           | 20                           | 10                       | 5                                | 35    | 0.3                          | Updating Knowledge |
| Total  |                           |                       |                            |             |                              |                          |                                  |       | 0.3                          |                    |

##### 2. Staff Development Plan for Training in areas other than functional based on TNA (5 days duration)

Name of Department: Electronics & Communication Engineering

| Sl. No | Title of the course    | Name of Coordinator/s | From - To | No. of days | Participation (nos) expected |                          |                                  | Planned Expenditure In lakhs | Objectives |                                       |
|--------|------------------------|-----------------------|-----------|-------------|------------------------------|--------------------------|----------------------------------|------------------------------|------------|---------------------------------------|
|        |                        |                       |           |             | Own Institution              | Other TEQIP Institutions | Other AICTE Engineering colleges |                              |            |                                       |
| 1.     | Soft Skill Development | Prof .Reshna          | Dec 2013  | 5           | 20                           | 5                        | 5                                | 30                           | 0.75       | Development of Communication Skills n |
| Total  |                        |                       |           |             |                              |                          |                                  |                              | 0.75       |                                       |

### 3. In-house Training Programmes / Continuing Education Programmes planned –Functional Domain (3 to 5 days duration)

Name of Department: Electrical and Electronics Engineering

| Sl. No | Title of the programme | Name of coordinator/s                                  | Date                       | No. of days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure in lakhs | Objectives              |
|--------|------------------------|--|----------------------------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|------------------------------|-------------------------|
|        |                        |  |                            |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                              |                         |
| 1.     | Industrial awareness   | Prof. Mohammed Shanir P. P<br>Prof. Mohammed Mansoor O | 9-12-13<br>to<br>13-12- 13 | 5           | 15                           | 10                       | 10                                | -          | 35    | 0.75                         | Enhancing effectiveness |
| Total  |                        |  |                            |             |                              |                          |                                   |            |       | 0.75                         |                         |

### 4. In-house workshops planned – functional area (2-3 days duration)

Name of Department: Electronics & Communication Engineering

| Sl. No | Title of the programme                              | Name of Coordinator/s                          | Date     | No. of days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure In lakhs | Objectives  |
|--------|---|--|----------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|------------------------------|---|
|        |   |  |          |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                              |   |
| 1      | Modern Trends in Electronic Fabrication Techniques. | Dr. Unni.C<br>Mr. P.Biju<br>Mr. Raseem Hussain | Nov 2013 | 3           | 5                            | 10                       | 10                                | 5          | 30    | 0.5                          | To train technicians in modern practices in Electronic Fabrication. |
| Total  |   |  |          |             |                              |                          |                                   |            |       | 0.5                          |   |

**Name of Department: Chemical Engineering**

| Sl. No | Title of the programme   | Name of coordinator/s               | Date                   | No. of days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure in lakhs | Objectives   |
|--------|--|-------------------------------------|------------------------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|------------------------------|--|
|        |  |                                     |                        |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                              |  |
| 1      | Training on Safety Practices in Laboratory Experiments and Maintenance | Dr.A.S.Abdul Rasheed<br>Dr. Fazil A | 2.12.2013 to 3.12.2013 | 2           | 20                           | 4                        | 6                                 | -          | 30    | 0.3                          | To impart safety habits to the technical staff in laboratory practices |
| Total  |  |                                     |                        |             |                              |                          |                                   |            |       | 0.3                          |  |

**5. Seminars / Expert Lectures planned – Functional area (1-2 days duration)**

**Name of Department: Electronics & Communication Engineering**

| Sl. No | Title of the programme                         | Name of Coordinator/s | From - To | No. of days | Participation (nos) Expected |       |          |       | Planned Expenditure In lakhs | Objectives  |
|--------|--|-----------------------|-----------|-------------|------------------------------|-------|----------|-------|------------------------------|---|
|        |  |                       |           |             | Faculty                      | Staff | Students | Total |                              |   |
| 1      | Rules and protocols in electronic laboratories | Mr.Biju               | Nov2013   | 1           | 10                           | 5     | 15       | 30    | 0.25                         | Awareness on general safety measures to be considered while designing or installing electronic equipments |
| Total  |  |                       |           |             |                              |       |          |       | 0.25                         |   |

**Name of Department: Computer Science and Engineering**

| Sl. No | Title of the programme | Name of coordinator/s | From – To     | No. of days | Participation (nos) Expected |       |          |       | Planned Expenditure in lakhs | Objectives                                  |
|--------|------------------------|-----------------------|---------------|-------------|------------------------------|-------|----------|-------|------------------------------|---|
|        |                        |                       |               |             | Faculty                      | Staff | Students | Total |                              |   |
| 1      | Linux Administration   | Prof Shemeem Ansar A  | November 2013 | 1           | 10                           | 20    | 50       | 80    | 0.4                          | To get awareness in Linux OS administration |
| Total  |                        |                       |               |             |                              |       |          |       | 0.4                          |   |

**5 External Training programmes (outside the institution)**

**Name of Department: Electronics & Communication Engineering**

| Sl. No. | Subject / Area of Training           | No. and Name of staff identified for training in the area | Duration (Days) | Date     | Name of Network TEQIP Institution / National Trainer Organization/ industry | (Expected) Expenditure in lakhs | (Expected) Outcome / Objective                |
|---------|--------------------------------------|---|-----------------|----------|---|---------------------------------|---|
| 1.      | Skill upgradation in Embedded System | All five technical staffs                                 | 3               | Nov 2013 | NIELT, Calicut  | 0.5                             | To get trained in Embedded system development |
| Total   |                                      |   |                 |          |   | 0.5                             |   |



**Name of Department: Mechanical Engineering**

| <i>Sl. No.</i> | <i>Subject / Area of Training</i>                                    | <i>Name of staff identified for training in the area</i>  | <i>Duration (weeks)</i> | <i>Course begins on</i> | <i>Name of Network TEQIP Institution / National Trainer Organization/ industry</i> | <i>(Expected) Expenditure in lakhs</i> | <i>(Expected ) Outcome / Objective</i>   |
|----------------|--|---|-------------------------|-------------------------|--|--|--|
| 1              | Maintenance engineering of machine tools                             | Mr.Alexander  | 2                       | 04/11/13                | Advanced Training Institute.<br>Government of India, Chennai                       | 0.26                                   | To upkeep the machinery in good condition and order with effective maintenance |
| 2              | Supervisory development programme                                    | Mr.Jayakumar.K  | 2                       | 4/11/2013               | Foremen Training Institute,<br>Government of India, Bangalore                      | 0.35                                   | Quality Improvement  |
| 4              | Overhauling and testing of fuel injection pump                       | Mr.Vijayamohan,   | 2                       | 11/11/2013              | Advanced Training Institute.<br>Government of India, Chennai                       | 0.31                                   | To upkeep the machinery in good condition and order with effective maintenance |
| 5              | CNC turning programming & operation                                  | Mr.Abdul Thaha  | 1                       | 11/11/2013              | Foremen Training Institute,<br>Government of India, Bangalore                      | 0.16                                   | Study the new technology and transfer the knowledge to the students            |
| 6              | Electro-pneumatics & electro –hydraulics                             | Mr.Rajesh,<br>Mr.Abdul latheef                            | 1                       | 11/11/2013              | Foremen Training Institute,<br>Government of India, Bangalore                      | 0.31                                   | Study the new technology and transfer the knowledge to the students            |
| 7              | Engineering inspection, testing & precision measurement (mech. Only) | Mr.Radhakrishnan nair,<br>Mr.Sureshababu,<br>Mr.Prasannan | 2                       | 11/11/2013              | Foremen Training Institute,<br>Government of India, Bangalore                      | 0.72                                   | Study the new technology and transfer the knowledge to the students            |
| 8              | Expertise in CATIA v5  | Mr.Viswaraj.K.V,<br>Mr.Dimithraj,<br>Mr.Anver             | 2                       | 18/11/13                | Advanced Training Institute.<br>Government of India, Chennai                       | 0.78                                   | Study the new technology and transfer the knowledge to the students            |

|    |  |                                   |   |            |  |      |  |
|----|--|-----------------------------------|---|------------|--|------|--|
| 9  | CNC programming & simulation               | Mr.Yohannankutty                  | 2 | 25/11/2013 | Foremen Training Institute, Government of India, Bangalore | 0.2  | Study the new technology and transfer the knowledge to the students            |
| 10 | Machine tool maintenance                   | Mr.Reghunatanpillai, Mr.Shibu     | 2 | 25/11/13   | Advanced Training Institute. Government of India, Chennai  | 0.52 | To upkeep the machinery in good condition and order with effective maintenance |
| 11 | Material testing & heat treatment          | Mr.Sukumaran, Mr. Ahamadul Kabeer | 2 | 25/11/2013 | Foremen Training Institute, Government of India, Bangalore | 0.45 | Study the new technology and transfer the knowledge to the students            |
| 12 | Advanced welding technology                | Mr.Riaz, Muhammed Mr.Ashraf.u     | 2 | 25/11/2013 | Foremen Training Institute, Government of India, Bangalore | 0.38 | Study the new technology and transfer the knowledge to the students            |
| 13 | Heat treatment & material testing          | Mr.Dileef, Mr.Naizam              | 2 | 02/12/13   | Advanced Training Institute. Government of India, Chennai  | 0.57 | Study the new technology and transfer the knowledge to the students            |
| 14 | Non destructive testing                    | Mr.Shajahan.S, Mr.Sulaimankunju   | 1 | 09/12/2013 | Foremen Training Institute, Government of India, Bangalore | 0.26 | Study the new technology and transfer the knowledge to the students            |
| 15 | Maintenance engineering of machine tools   | Mr.Abdul latheef                  | 2 | 09/12/13   | Advanced Training Institute. Government of India, Chennai  | 0.31 | To upkeep the machinery in good condition and order with effective maintenance |
| 16 | Auto electrical maintenance                | Mr.Shiyas, Mr.E.Ashraf            | 2 | 09/12/2013 | Advanced Training Institute. Government of India, Chennai  | 0.46 | To upkeep the machinery in good condition and order with effective maintenance |
| 17 | 2d/3d modelling with AUTOCAD/inventor 2013 | Mr.Rajesh, Mr. Alexander          | 2 | 09/12/2013 | Foremen Training Institute, Government of                  | 0.47 | Study the new technology and transfer the knowledge to the                     |

|    |   |  |   |            |   |      |   |
|----|---|--|---|------------|---|------|---|
|    |   |  |   |            | India, Bangalore  |      | students  |
| 18 | Expertise in pro-e  | Mr. Muhammed<br>Mr.shafi                       | 2 | 09/12/2013 | Advanced Training<br>Institute.<br>Government of<br>India, Chennai  | 0.26 | Study the new<br>technology and transfer<br>the knowledge to the<br>students            |
| 19 | Ultrasonic testing  | Mr.V.Kabeer,<br>Mr. Jamal                      | 1 | 16/12/13   | Foremen Training<br>Institute,<br>Government of<br>India, Bangalore | 0.26 | Study the new<br>technology and transfer<br>the knowledge to the<br>students            |
| 20 | Cnc milling programming &<br>operation                            | Mr.Johnson,<br>Mr.Abdulrahman                  | 1 | 16/12/2013 | Foremen Training<br>Institute,<br>Government of<br>India, Bangalore | 0.26 | Study the new<br>technology and transfer<br>the knowledge to the<br>students            |
| 21 | Pneumatic & hydraulic<br>controls                                 | Mr.Raju,<br>Mr. shihabudeenkutty,<br>Mr.Sooraj | 2 | 16/12/2013 | Foremen Training<br>Institute,<br>Government of<br>India, Bangalore | 0.45 | Study the new<br>technology and transfer<br>the knowledge to the<br>students            |
| 22 | Supervisory development<br>programme                              | Mr.Jayakumar                                   | 2 | 23/12/2013 | Foremen Training<br>Institute,<br>Government of<br>India, Bangalore | 0.35 | Quality Improvement   |
| 23 | Machine tool maintenance  | Mr.Sulficar ali,<br>Mr.A.Ashraf                | 2 | 30/12/13   | Advanced Training<br>Institute.<br>Government of<br>India, Chennai  | 0.52 | To upkeep the<br>machinery in good<br>condition and order with<br>effective maintenance |
| 24 | Solid works - 2013  | Mr.E.V.Abdul salam                             | 2 | 30/12/13   | Advanced Training<br>Institute.<br>Government of<br>India, Chennai  | 0.31 | Study the new<br>technology and transfer<br>the knowledge to the<br>students            |
| 25 | Maintenance of pneumatic<br>& electropneumatic control<br>systems | Mr.Subin,<br>Mr. Sukumaran                     | 2 | 30/12/13   | Advanced Training<br>Institute.<br>Government of<br>India, Chennai  | 0.52 | To upkeep the<br>machinery in good<br>condition and order with<br>effective maintenance |
| 26 | Cnc programming &<br>simulation                                   | Mr.Muneer.,<br>Mr.C.Abdul salam                | 2 | 30/12/2013 | Foremen Training<br>Institute,                                      | 0.52 | Study the new<br>technology and transfer  |

|  |  |  |  |  |                                   |       |                                  |
|--|--|--|--|--|-----------------------------------|-------|----------------------------------|
|  |  |  |  |  | Government of<br>India, Bangalore |       | the knowledge to the<br>students |
|  |  |  |  |  |                                   | Total | 19.85                            |

## Quality upgradation

**Name of Department: Civil Engineering**

| Sl. No   | Name of faculty | Name programme | Address of the research centre and University | Name and official address of the guide | Date of registration          | Expected expenditure in lakhs |     |
|----------|-----------------|----------------|---|--|-------------------------------|-------------------------------|-----|
| <b>1</b> | Prof.Adarsh.S   | PhD            | IIT,Mumbai                                    | Dr.M.Janga Reddy                       | Presentation for Confirmation | 1.5                           |     |
|          |                 |                |   |  |                               | Total                         | 1.5 |

# Action Plan January 2014 to December 2014:

## Department: Civil Engineering

| <i>Sl. No.</i> | <i>Subject / Area of Training</i> | <i>No. of faculty identified for training in the area</i> | <i>Duration (Days)</i> | <i>Tentative Date</i> | <i>In-house (Own Dept / Other Dept)/ Name of Network TEQIP Institution / National Trainer Organisation</i> | <i>(Expected) Expenditure in lakhs</i> | <i>(Expected) Outcome / Objective</i> |
|----------------|-----------------------------------|---|------------------------|-----------------------|--|--|---------------------------------------|
| 2.             | Water quality management          | 40  | 7                      | April 2014            | In-house   | 0.5                                    |                                       |
| Total          |                                   |   |                        |                       |  | 0.5                                    |                                       |

## Department: Electrical and Electronics Engineering

| <i>Sl. No.</i> | <i>Subject / Area of Training</i>                                    | <i>No. of faculty identified for training in the area</i> | <i>Duration (Days)</i> | <i>Tentative Date</i> | <i>In-house (Own Dept / Other Dept)/ Name of Network TEQIP Institution / National Trainer Organisation</i> | <i>(Expected) Expenditure in lakhs</i> | <i>(Expected) Outcome / Objective</i> |
|----------------|--|---|------------------------|-----------------------|--|--|---------------------------------------|
| 1              | Operation, Dynamics and control of Special Machines and Power Plants | 30  | 5                      | June 2014             | Own Dept, CPRI Bangalore/IISc IIT/   | 0.75                                   | Subject Knowledge upgradation         |
| 2              | Bio Medical Instrumentation  | 20  | 3                      | Oct 2014              | Own Dept/ SCTIMST Thiruvananthapuram/ IIT/IISc   | 0.5                                    | Awareness in recent advances          |
| Total          |  |   |                        |                       |  | 1.25                                   |                                       |

**Department: Mechanical Engineering**

| Sl. No. | Subject / Area of Training | Name of coordinator/s participant | No. of faculty identified for training in the area | Duration (Days) | Tentative Date | In-house (Own Dept / Other Dept)/ Name of Network TEQIP Institution / National Trainer Organisation | Expected Expenditure in lakhs | Expected Outcome / Objectives |
|---------|----------------------------|-----------------------------------|--|-----------------|----------------|---|-------------------------------|-------------------------------|
| 1       | Thermal science            | Dr.Jose Prakash<br>Dr.Reby Roy    | 2  | 5               | -              | International institutions  | 3.2                           | Exposure to int. inst.        |
| 2       | Materials                  | Dr.S.Jose                         | 1  | 3               | May ,2014      | Inst. Of metals, TVM  | 0.045                         | To acquire knowledge          |
| Total   |                            |                                   |  |                 |                |   | 3.245                         |                               |

**Department: Electronics and Communication Engineering**

| Sl. No. | Subject / Area of Training | Name of coordinator/s | No. of faculty identified for training in the area | Duration (Days) | Tentative Date | In-house (Own Dept / Other Dept)/ Name of Network TEQIP Institution / National Trainer Organisation | Expected Expenditure in lakhs | Expected Outcome / Objectives  |
|---------|----------------------------|-----------------------|--|-----------------|----------------|---|-------------------------------|--|
| 1       | VHDL/FPGA                  |                       | 2  | 15              | Dec 2014       | COREL Technologies  | 0.9                           | Hands-on expertise on programming FPGA with HDL for better deliverance of theory subject |
| Total   |                            |                       |  |                 |                |   | 0.9                           |  |

**Department: Computer Science and Engineering**

| Sl. No. | Subject / Area of Training | Name of coordinator/s | No. of faculty identified for training in the area | Duration (Days) | Tentative Date | In-house (Own Dept / Other Dept)/ Name of Network TEQIP Institution / National Trainer Organisation | (Expected) Expenditure in lakhs | (Expected ) Outcome / Objective                         |
|---------|----------------------------|-----------------------|--|-----------------|----------------|---|---------------------------------|---|
| 1       | Cloud Computing            | Prof. Thushara A      | 30   | 5 days          | Nov 2014       | In house (Own Dept.)  | 1.5                             | To get exposure to the latest trends in Cloud Computing |
| Total   |                            |                       |  |                 |                |   | 1.5                             |   |

**Supporting Department: Mathematics & Economics**

| <i>Sl. No.</i> | <i>Subject / Area of Training</i>                                | <i>No. of faculty identified for training in the area</i> | <i>Duration (Days)</i> | <i>Tentative Date</i> | <i>In-house / Name of Network TEQIP Institution / National Trainer Organisation</i> | <i>(Expected) Expenditure In lakhs</i> | <i>(Expected) Outcome / Objective</i>                                      |
|----------------|--|---|------------------------|-----------------------|---|--|--|
| 1              | Quality of higher education and economic development (Economics) | P.Shajahan  | 2                      | -                     | D.D.G.DOSS vaishnav college ,Chennai  | 0.05                                   | To get exposure to the latest trends in education and economic development |
| Total          |  |   |                        |                       |   | 0.05                                   |  |

**Supporting Department: Chemistry**

| <i>Sl. No.</i> | <i>Subject / Area of Training</i> | <i>No. of faculty identified for training in the area</i> | <i>Duration (Days)</i> | <i>Tentative Date</i> | <i>In-house / Name of Network TEQIP Institution / National Trainer Organisation</i> | <i>(Expected) Expenditure</i> | <i>(Expected) Outcome / Objective</i> |
|----------------|-----------------------------------|---|------------------------|-----------------------|---|-------------------------------|---------------------------------------|
| 1              | Spectroscopy                      | JuhainaAhad   | 3                      | December 2014         | CUSAT   | 0.25                          | Analysis of pollutants and compounds. |
| Total          |                                   |   |                        |                       |   | 0.25                          |                                       |

**B (l)(i) (2) Faculty Development Plan for Training in areas other than Subject Domain based on TNA****Department: Civil Engineering**

| <i>Sl. No.</i> | <i>Subject / Area of Training</i>       | <i>No. of faculty identified for training in the area</i> | <i>Duration (Days)</i> | <i>Tentative Date</i> | <i>In-house / Name of Network TEQIP Institution / National Trainer Organisation</i> | <i>(Expected) Expenditure</i> | <i>(Expected ) Outcome / Objective</i>                     |
|----------------|---|---|------------------------|-----------------------|---|-------------------------------|--|
| 1.             | Medical First-Aid                       | 35  | 2                      | Jan 2014              | In house  | 0.1                           | Crisis Management  |
| 2.             | Communication of Science and technology | 25  | 5                      | April 2014            | In house  | 0.25                          | To enhance the science and technology communication skills |
| Total          |   |   |                        |                       |   | 0.35                          |  |

**Department: Electrical and Electronics Engineering**

| <i>Sl. No.</i> | <i>Subject / Area of Training</i>  | <i>No. of faculty identified for training in the area</i> | <i>Duration (Days)</i> | <i>Tentative Date</i> | <i>In-house / Name of Network TEQIP Institution / National Trainer Organisation</i> | <i>(Expected) Expenditure</i> | <i>(Expected ) Outcome / Objective</i>                                  |
|----------------|--|---|------------------------|-----------------------|---|-------------------------------|---|
| 1              | Power System optimization & Modelling of FACTS Controllers using Soft computing techniques | 20  | 3                      | April 2014            | Own Dept,NIT/IIT  | 0.5                           | To help the faculty for their research work & teaching advanced courses |
| Total          |  |   |                        |                       |   | 0.5                           |   |



**Department: Electronics and Communication Engineering**

| Sl. No. | Subject / Area of Training                          | Name of coordinator/s | No. of faculty identified for training in the area | Duration (Days) | Tentative Date | In-house (Own Dept / Other Dept)/ Name of Network TEQIP Institution / National Trainer Organisation | (Expected) Expenditure in lakhs | Expected Outcome / Objectives   |
|---------|---|-----------------------|--|-----------------|----------------|---|---------------------------------|---|
| 1       | Professional Development and Educational leadership |                       | 2  | 3               | May 2014       | IIT,Kharagpur   | 0.5                             | Developing the institution as a hub for upcoming engineering colleges |
| Total   |   |                       |  |                 |                |   | 0.5                             |   |

**Department: Computer Science and Engineering**

| Sl. No. | Subject / Area of Training | Name of coordinator/s | No. of faculty identified for training in the area | Duration (Days) | Tentative Date | In-house (Own Dept / Other Dept)/ Name of Network TEQIP Institution / National Trainer Organisation | (Expected) Expenditure in lakhs | (Expected ) Outcome / Objective                            |
|---------|----------------------------|-----------------------|--|-----------------|----------------|---|---------------------------------|--|
| 1       | Motivation and Counseling  | Prof.Ansamma John     | 30   | 3 days          | Jan 2014       | National Trainer Organisation   | 1                               | Faculty get trained for motivating and counseling students |
| Total   |                            |                       |  |                 |                |   | 1                               |  |

**Department: Chemical Engineering**

| Sl. No. | Subject/Area of Training  | No.of faculty identified for training in the area | Duration (Days) | Tentative Date | In-house/Name of Network TEQIP Institution/National Trainer Organization   | (Expected) Expenditure in lakhs | (Expected) Outcome/ Objective                                      |
|---------|---|---|-----------------|----------------|--|---------------------------------|--|
| 1       | Novel Instrumental and analytical standard testing protocols of water, waste water and industrial effluents | 4   | 5               | June 2014      | In-house: using experts from CSIR and Central/State Pollution Control Labs | 0.5                             | Transform the department into an environmental consultancy centre. |
| Total   |   |   |                 |                |  | 0.5                             |  |

**B (l)(i) (4) In-house Training Programmes / Continuing Education Programmes planned – Subject Domain**

**Department: Civil Engineering**

| Sl. No | Subject / Area of Training                   | From – To        | No. of days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure in lakhs |
|--------|--|------------------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|------------------------------|
|        |  |                  |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                              |
| 1      | Water Resources and Climate Change           | June 10-14, 2014 | 5           | 10                           | 15                       | 10                                | 5          | 40    | 0.5                          |
| 2      | Advances in concrete Technology              | Aug, 2014        | 5           | 10                           | 10                       | 10                                | 10         | 40    | 0.5                          |
| 3      | Soil characterization and Ground Improvement | Oct 2014         | 5           | 10                           | 15                       | 10                                | 5          | 40    | 0.5                          |
| Total  |  |                  |             |                              |                          |                                   |            |       | 1.5                          |

**Department: Electrical and Electronics Engineering**

| Sl. No | Subject / Area of Training                                    | From - To  | No. of days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure |
|--------|---|------------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|---------------------|
|        |   |            |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                     |
| 3      | Inter connection issues with DERs & Power Quality Improvement | April 2014 | 5           | 8                            | 4                        | 4                                 | 4          | 20    | 1                   |
| 4      | Electrical Safety & Quality management                        | July 2014  | 5           | 8                            | 4                        | 4                                 | 4          | 20    | 1                   |
| Total  |   |            |             |                              |                          |                                   |            |       | 2                   |

**Department: Mechanical Engineering**

| Sl. No | Subject / Area of Training      | Name of coordinator/s | From - To                          | No. of days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure in lakhs | Objectives  |
|--------|---------------------------------|-----------------------|------------------------------------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|------------------------------|---|
|        |                                 |                       |                                    |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                              |   |
| 1      | Advanced Mechanics of Materials | Dr.S.Jose             | 2 <sup>nd</sup> week of April 2014 | 5 days      | 8                            | 4                        | 4                                 | 4          | 20    | 1.2                          | To equip faculty to handle this subject in the new syllabus |
| Total  |                                 |                       |                                    |             |                              |                          |                                   |            |       | 1.2                          |   |

**Department: Electronics and Communication Engineering**

| Sl. No | Subject / Area of Training                                | Name of coordinator/s | From - To                 | No. of days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure in lakhs |
|--------|---|-----------------------|---------------------------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|------------------------------|
|        |   |                       |                           |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                              |
| 1      | FDP on Design & Development of Organic Electronic Devices | Dr.T A Shahul Hameed  | 19.05. 2014 to 23.05.2014 | 5           | 10                           | 5                        | 13                                | 2          | 30    | 1.5                          |
| Total  |   |                       |                           |             |                              |                          |                                   |            |       | 1.5                          |

**Department: : Computer Science and Engineering**

| Sl. No | Subject / Area of Training                | Name of coordinator/s | From – To  | No. of days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure in lakhs | Objectives  |
|--------|---|-----------------------|------------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|------------------------------|---|
|        |   |                       |            |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                              |   |
| 1      | Image Processing and Geometric Algorithms | Dr. Amarunnishad T M  | April 2014 | 5           | 10                           | 5                        | 10                                | 5          | 30    | 1.5                          | To get exposure to new techniques in Image Processing and Geometric Algorithms area |
| Total  |   |                       |            |             |                              |                          |                                   |            |       | 1.5                          |   |

**Department: Supporting Departments ( Chemistry )**

| Sl. No | Subject / Area of Training      | Name of coordinator | No. of days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure in lakhs |
|--------|---------------------------------|---------------------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|------------------------------|
|        |                                 |                     |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                              |
| 1.     | Nanomaterials (chemical basics) | Juhaina Ahad        | 1 day       | 10                           | 0                        | 0                                 | 0          |       | 0.1                          |
| Total  |                                 |                     |             |                              |                          |                                   |            |       | 0.1                          |

**B(l)(i) (5) In-house workshops planned – Subject Domain**

**Department: Civil Engineering**

| Sl. No | Subject / Area of Training                  | From - To    | No. of days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure in lakhs |
|--------|---|--------------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|------------------------------|
|        |   |              |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                              |
| 1      | Civil Engg/Structural dynamics Lab training | January 2014 | 2           | 10                           | 10                       | 10                                | -          | 30    | 0.25                         |

|       |   |               |   |    |    |    |    |    |      |
|-------|---|---------------|---|----|----|----|----|----|------|
| 2     | Testing of construction materials (for Lab instructors) | Nov, 2014     | 2 | 10 | -- | 20 | 5  | 35 | 0.25 |
| 3     | Geopolymer concrete                                     | 12-12-14      | 1 | 20 | 10 | 30 | 10 | 70 | 0.1  |
| 4     | Water Resources and Climate Change                      | November 2014 | 2 | 10 | -- | 20 | 5  | 35 | 0.25 |
| Total |   |               |   |    |    |    |    |    | 0.85 |

**Department: Electrical and Electronics Engineering**

| Sl. No | Subject / Area of Training        | From - To    | No. of days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure in lakhs |
|--------|-----------------------------------|--------------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|------------------------------|
|        |                                   |              |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                              |
| 1      | Power System Simulation Softwares | October 2014 | 1           | 25                           | 5                        | 5                                 | 0          | 30    | 0.10                         |
| Total  |                                   |              |             |                              |                          |                                   |            |       | 0.10                         |

**Department: Mechanical Engineering**

| Sl. No | Subject / Area of Training   | Name of coordinator/s | From - To | No. of days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure in lakhs | Objectives   |
|--------|------------------------------|-----------------------|-----------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|------------------------------|--|
|        |                              |                       |           |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                              |  |
| 1      | Entrepreneurship development | Dr. C A Shajahan      | Dec 2014  | 2           | 10                           | 10                       | 10                                | 10         | 40    | 1                            | To get awareness regarding preparing project reports and getting financial incentives for starting new ventures. |
| Total  |                              |                       |           |             |                              |                          |                                   |            |       | 1                            |  |

**Department: Electronics and Communication Engineering**

| Sl. No | Subject / Area of Training                | Name of coordinator/s | From – To                | No. of days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure in lakhs |
|--------|---|-----------------------|--------------------------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|------------------------------|
|        |   |                       |                          |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                              |
| 1      | Nanotechnology & Functional Nanomaterials | Unni C                | 11/07/2014 to 12/07/2014 | 2           | 12                           | 5                        | 13                                |            | 30    | 0.5                          |
| Total  |   |                       |                          |             |                              |                          |                                   |            | 0.5   |                              |

**Department: Chemical Engineering**

| Sl. No. | Subject/ Area of Training              | From - To                 | No. of Days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure in lakhs |
|---------|--|---------------------------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|------------------------------|
|         |  |                           |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                              |
| 1       | Hazard Analysis in Chemical Industries | 21/04/ 2014 to 22/04/2014 | 2           | 8                            | 5                        | 10                                | 2          | 30    | 0.75                         |
| Total   |  |                           |             |                              |                          |                                   |            |       | 0.75                         |

**Supporting Department: Chemistry**

| Sl. No | Subject / Area of Training | Name of coordinator | No. of days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure in lakhs |
|--------|----------------------------|---------------------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|------------------------------|
|        |                            |                     |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                              |
| 1.     | NLP for teachers           | Juhaina Ahad        | 1 day       | All staff                    | 0                        | 0                                 | 0          | 200   | 0.1                          |
| Total  |                            |                     |             |                              |                          |                                   |            |       | 0.1                          |

**B (l)(i) (6) Seminars / Expert Lectures planned – Subject Domain**  
**Department: Civil Engineering**

| Sl. No | Subject / Area           | From - To  | No. of days | Participation (nos) Expected |       |          |       | Planned Expenditure in lakhs |
|--------|--------------------------|------------|-------------|------------------------------|-------|----------|-------|------------------------------|
|        |                          |            |             | Faculty                      | Staff | Students | Total |                              |
| 1      | Geotechnical Engineering | March 2014 | 1           | 30                           |       | 120      | 150   | 0.05                         |
| Total  |                          |            |             |                              |       |          |       | 0.05                         |

**Department: Electrical and Electronics Engineering**

| Sl. No | Subject / Area                                    | From - To     | No. of days | Participation (nos) Expected |       |          |       | Planned Expenditure in lakhs |
|--------|---|---------------|-------------|------------------------------|-------|----------|-------|------------------------------|
|        |   |               |             | Faculty                      | Staff | Students | Total |                              |
| 1      | Energy conservation & Renewable Energy sources    | Jan 2014      | 1           | 10                           | 10    | 20       | 40    | 0.10                         |
| 2      | Applications of Nanotechnology in Electrical Engg | August 2014   | 1           | 20                           | 10    | 60       | 90    | 0.10                         |
| 3      | Industrial Instrumentation & Automation           | Sept 2014     | 1           | 10                           | 10    | 20       | 40    | 0.15                         |
| 4      | Advances in Industrial Drives                     | December 2014 | 1           | 10                           | 10    | 20       | 40    | 0.10                         |
| Total  |   |               |             |                              |       |          |       | 0.45                         |

**Department: Mechanical Engineering**

| Sl. No | Subject / Area | From - To | No. of days | Participation (nos) Expected |       |          |       | Planned Expenditure in lakhs |
|--------|----------------|-----------|-------------|------------------------------|-------|----------|-------|------------------------------|
|        |                |           |             | Faculty                      | Staff | Students | Total |                              |
| 1      | Nanotechnology | June 2014 | 2           | 10                           | -     | 140      | 150   | 1                            |

**Department: Electronics and Communication Engineering**

| Sl. No | Subject / Area                      | Name of coordinator/s | From - To  | No. of days | Participation (nos) Expected |       |          |       | Planned Expenditure in lakhs |
|--------|-------------------------------------|-----------------------|------------|-------------|------------------------------|-------|----------|-------|------------------------------|
|        |                                     |                       |            |             | Faculty                      | Staff | Students | Total |                              |
| 1      | Modern Trends in Display Technology | Prof. Reshma          | 22/02/2014 | 1           | 10                           | 6     | 24       | 40    | 0.25                         |
| Total  |                                     |                       |            |             |                              |       |          |       | 0.25                         |

**Department: : Computer Science and Engineering**

| Sl. No | Subject / Area | Name of coordinator/s | From - To | No. of days | Participation (nos) Expected |       |          |       | Planned Expenditure in lakhs | Objectives  |
|--------|----------------|-----------------------|-----------|-------------|------------------------------|-------|----------|-------|------------------------------|---|
|        |                |                       |           |             | Faculty                      | Staff | Students | Total |                              |   |
| 1.     | Latest OS      | Prof. Shameem Ansar   | June 2014 | 2 days      | 5                            | 5     | 50       | 60    | 0.75                         | To give awareness and training to faculty about new Operating Systems |
| Total  |                |                       |           |             |                              |       |          |       | 0.75                         |   |

**Department: Chemical Engineering**

| Sl. No. | Subject/ Area   | From - To      | No. of Days | Participation (nos) expected |       |          |       | Planned Expenditure |
|---------|---|----------------|-------------|------------------------------|-------|----------|-------|---------------------|
|         |   |                |             | Faculty                      | Staff | Students | Total |                     |
| 1       | Fuel Cell Technology  | 22/03/2014     | 1           | 10                           | 6     | 24       | 40    | 0.4                 |
| 2       | Nanotechnology & nano-materials: Application in Chemical Engineering                      | 20/09/2014     | 1           | 4                            | 2     | 34       | 40    | 0.4                 |
| 3       | Recent Developments Catalysis in process Industries                                       | 08/11/2014     | 1           | 4                            | 2     | 34       | 40    | 0.4                 |
| 4       | Chemical Engineering/ Integration of Chemical and Biological Engineering (Expert Lecture) | 15/06/2014     | 1           | 30                           | 10    | 100      | 140   | 0.4                 |
| 5       | Chemical Engineering/Inherent Safety in Process Design                                    | 26/08/2014     | 1           | 30                           | 10    | 100      | 140   | 0.4                 |
| 6       | Chemical Engineering/Heat Transfer Augmentation   | September 2014 | 1           | 30                           | 10    | 100      | 140   | 0.4                 |
| Total   |   |                |             |                              |       |          |       | 2.4                 |



**(B) TARGETS / PLAN (I) FACULTY & STAFF DEVELOPMENT (ii) TECHNICAL STAFF****B (I) (ii) (1) Staff Development Plan for Training in Functional Area based on TNA****Department: Electrical and Electronics Engineering**

| <i>Sl. No.</i> | <i>Subject / Area of Training</i>  | <i>No. of staff members identified for training in the area</i> | <i>Duration (Days)</i> | <i>Tentative Date</i> | <i>In-house (Own Dept / Other Dept)/ Name of Network TEQIP Institution / National Trainer Organisation</i> | <i>(Expected) Expenditure in lakhs</i> | <i>(Expected) Outcome / Objective</i> |
|----------------|--|---|------------------------|-----------------------|--|--|---------------------------------------|
| 1              | Maintenance and trouble shooting of computer system hardware and computer networking | 15  | 3                      | May 2014              | In- house  | 0.1                                    | Improvement of skills                 |
| 2              | Calibration of Equipment   | 15  | 3                      | July 2014             | In- house  | 0.2                                    | Improvement of skills                 |
| <b>Total</b>   |  |   |                        |                       |  | <b>0.3</b>                             |                                       |

**Department: Mechanical Engineering**

| <i>Sl. No.</i> | <i>Subject / Area of Training</i>             | <i>Name of Coordinator/s</i> | <i>No. of faculty identified for training in the area</i> | <i>Duration (Days)</i> | <i>Tentative Date</i> | <i>In-house (Own Dept / Other Dept)/ Name of Network TEQIP Institution / National Trainer Organisation</i> | <i>(Expected) Expenditure In lakhs</i> | <i>(Expected) Outcome / Objective</i> |
|----------------|---|------------------------------|---|------------------------|-----------------------|--|--|---------------------------------------|
| 1              | Quality Control & Management                  | Rajesh.S                     | 2   | 11                     | Sept 2013 & Feb 2014  | FTI Bangalore  | 0.45                                   | To train more staff in the area.      |
| 2              | AutoCAD 2D&3D,SOLIDWORKS,MasterCAM & Inventor | Sabeer Khan                  | 3   | 25                     | Jan 2014/Feb 2014     | ATI ,Chennai   | 1                                      | To train more staff in the area.      |
| <b>Total</b>   |   |                              |   |                        |                       |  | <b>1.45</b>                            |                                       |

**Department: Electronics and Communication Engineering**

| Sl. No. | Subject / Area of Training | Name of Coordinator/s | No. of faculty identified for training in the area | Duration (Days) | Tentative Date | In-house (Own Dept / Other Dept) / Name of Network TEQIP Institution / National Trainer Organisation | Expected Expenditure In lakhs | (Expected Outcome / Objective)                           |
|---------|----------------------------|-----------------------|--|-----------------|----------------|--|-------------------------------|--|
| 1.      | Computer Networking        |                       | 3  | 3               | May 2014       | Technopark, Trivandrum   | 0.75                          | To impart necessary knowledge and skills on installation |
| Total   |                            |                       |  |                 |                |  | 0.75                          |  |

**Department: : Computer Science and Engineering**

| Sl. No. | Subject / Area of Training                          | Name of coordinator/s | No. of staff members identified for training in the area | Duration (Days) | Tentative Date | In-house (Own Dept / Other Dept) / Name of Network TEQIP Institution / National Trainer Organisation | (Expected) Expenditure in lakhs | (Expected ) Outcome / Objective                              |
|---------|---|-----------------------|--|-----------------|----------------|--|---------------------------------|--|
| 1       | Oracle Client Server installation and configuration | Prof. Anamma John     | 10   | 3 days`         | May 2014       | In-house (Own Dept)  | 0.5                             | To acquire a better understanding on database and networking |
| Total   |   |                       |  |                 |                |  | 0.5                             |  |

**Department: Chemical Engineering**

| Sl. No. | Subject/Area of Training  | No. of staff identified for training in the area | Duration (Days) | Tentative Date | In-house(Own Dept/Other Dept)/Name of Network TEQIP Institution/National Trainer Organization | (Expected) Expenditure in lakhs | (Expected) Outcome/ Objective   |
|---------|---|--|-----------------|----------------|---|---------------------------------|---|
| 1       | Personality development Training and awareness in students Psychology | 4  | 1               | May2014        | Own Department  | 0.1                             | To impart professional skills in trouble shooting and managing the lab equipments |
| Total   |   |  |                 |                |   | 0.1                             |   |

**B (I) (ii) (2) Staff Development Plan for Training in areas other than Functional Area based on TNA**

**Department: : Computer Science and Engineering**

| Sl. No. | Subject / Area of Training | Name of coordinator/s | No. of staff members identified for training in the area | Duration (Days) | Tentative Date | In-house / Name of Network TEQIP Institution / National Trainer Organisation | (Expected) Expenditure in lakhs | (Expected) Outcome / Objective           |
|---------|----------------------------|-----------------------|--|-----------------|----------------|--|---------------------------------|--|
| 1       | Soft Skill Development     | Prof. Nisa A K        | 10   | 5 days          | June 2014      | National Trainer Organisation  | 1                               | To improve competence in training skills |
| Total   |                            |                       |  |                 |                |  | 1                               |  |

**Department: Chemical Engineering**

| Sl. No. | Subject/Area of Training                          | No. of staff identified for training in the area | Duration (Days) | Tentative Date        | In-house/Name of Network TEQIP Institution/National Trainer Organization | (Expected) Expenditure in lakhs | (Expected) Outcome/ Objective   |
|---------|---|--|-----------------|-----------------------|--|---------------------------------|---|
| 1       | Training in industrial laboratory & R&D practices | 4  | 3               | 7.4.2014 to 11.4.2014 | Outside Industries/ R&D Organizations                                    | 0.2                             | To keep the technical staff abreast of the industrial / R&D Lab practices/environment |
| Total   |   |  |                 |                       |  | 0.2                             |   |

**B(I)(ii) (3) In-house Training Programmes / Continuing Education Programmes planned – Functional Area**

**Department: Mechanical Engineering**

| Sl. No | Subject / Area of Training  | Name of Coordinators   | From – To     | No. of days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure In lakhs | Objectives  |
|--------|-----------------------------|------------------------|---------------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|------------------------------|---|
|        |                             |                        |               |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                              |   |
| 1      | Maintenance and Calibration | Prof. Nizar Hussain. M | November 2014 | 3           | 20                           | 5                        | 5                                 |            | 30    | 1.0                          | To make awareness of Maintenance and calibration of Machines/equipments |
| Total  |                             |                        |               |             |                              |                          |                                   |            |       | 1                            |   |

**Department: : Computer Science and Engineering**

| Sl. No | Subject / Area of Training | Name of coordinator/s | From – To | No. of days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure in lakhs | Objectives                                      |
|--------|----------------------------|-----------------------|-----------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|------------------------------|---|
|        |                            |                       |           |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                              |   |
| 1      | Wireless Networking        | Prof. Manu J Pillai   | Nov 2014  | 2 days      | 20                           | 5                        | 10                                | 5          | 40    | 0.5                          | To get exposure in installing Wireless Networks |
| Total  |                            |                       |           |             |                              |                          |                                   |            |       | 0.5                          |   |

**B(I)(ii) (4) In-house workshops planned – Functional Area**

**Department: Civil Engineering**

| Sl. No | Subject / Area of Training                  | From - To | No. of days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure |
|--------|---|-----------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|---------------------|
|        |   |           |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                     |
| 1      | Civil Engg/Structural dynamics Lab training | Jan 2014  | 2           | 5                            | 5                        | 10                                | 5          | 25    | 0.1                 |
| Total  |   |           |             |                              |                          |                                   |            |       | 0.1                 |

**Department: Electrical and Electronics Engineering**

| Sl. No | Subject / Area of Training | From - To     | No. of days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure |
|--------|----------------------------|---------------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|---------------------|
|        |                            |               |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                     |
| 2      | Programming Languages      | December 2014 | 3           | 15                           | 10                       | 10                                | -          | 35    | 0.10                |
| Total  |                            |               |             |                              |                          |                                   |            |       | 0.10                |

**Department: Mechanical Engineering**

| Sl. No | Subject / Area of Training | Name of Coordinator/s | From - To | No. of days | Participation (nos) expected |                          |                                   |             |       | Planned Expenditure In lakhs | Objectives                       |
|--------|----------------------------|-----------------------|-----------|-------------|------------------------------|--------------------------|-----------------------------------|-------------|-------|------------------------------|----------------------------------|
|        |                            |                       |           |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Indust-ries | Total |                              |                                  |
| 1      | CNC Programming            | Mr K.Jayakumar        | Jan 2014  | 5           | 15                           | 10                       | 10                                | 5           | 40    | 0.3                          | To train more staff in the area. |
| 2      | PLC Programming            | Mr Rajesh.S           | Jan 2014  | 5           | 15                           | 10                       | 10                                | 5           | 40    | 0.3                          | To train more staff in the area. |
| Total  |                            |                       |           |             |                              |                          |                                   |             |       | 0.6                          |                                  |

**Department: Electronics and Communication Engineering**

| Sl. No | Subject / Area of Training                             | Name of Coordinator/s | From - To                | No. of days | Participation (nos) expected |                          |                                   |             |       | Planned Expenditure In lakhs | Objectives   |
|--------|--|-----------------------|--------------------------|-------------|------------------------------|--------------------------|-----------------------------------|-------------|-------|------------------------------|--|
|        |  |                       |                          |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Indust-ries | Total |                              |  |
| 1.     | Hands on training on PCB Design, , Layout and drilling | Mr Biju               | 12.09.2014 to 13.09.2014 | 2           | 4                            | 5                        | 6                                 | --          | 15    | 0.25                         | To impart necessary knowledge and skills in PCB Design |
| Total  |  |                       |                          |             |                              |                          |                                   |             |       | 0.25                         |  |

**Department: : Computer Science and Engineering**

| Sl. No | Subject / Area of Training | Name of coordinator/s | From – To  | No. of days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure in lakhs | Objectives  |
|--------|----------------------------|-----------------------|------------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|------------------------------|---|
|        |                            |                       |            |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                              |   |
| 1      | Computer Maintenance       | Dr. Amarunnishad T M  | April 2014 | 2 days      | 20                           | 5                        | 10                                | 5          | 40    | 0.5                          | To get practical exposure in maintenance of computing systems |
| Total  |                            |                       |            |             |                              |                          |                                   |            |       | 0.5                          |   |

**B(I)(ii) (5) Seminars planned**

**Department: Electrical and Electronics Engineering**

| Sl. No | Subject / Area                                     | From - To   | No. of days | Participation (nos) Expected |       |          |       | Planned Expenditure |
|--------|--|-------------|-------------|------------------------------|-------|----------|-------|---------------------|
|        |  |             |             | Faculty                      | Staff | Students | Total |                     |
| 1.     | Energy conservation and management in Laboratories | August 2014 | 1           | 20                           | 15    | 30       | 65    | 0.10                |
| Total  |  |             |             |                              |       |          |       | 0.10                |

**Department: Electronics and Communication Engineering**

| Sl. No | Subject / Area                                 | Name of Coordinator/s | From - To  | No. of days | Participation (nos) Expected |       |          |       | Planned Expenditure In lakhs | Objectives  |
|--------|--|-----------------------|------------|-------------|------------------------------|-------|----------|-------|------------------------------|---|
|        |  |                       |            |             | Faculty                      | Staff | Students | Total |                              |   |
| 1.     | Rules and protocols in electronic laboratories | Mr.Biju               | 13.02.2014 | 1           | 10                           | 5     | 15       | 30    | 0.1                          | Awareness on general safety measures to be considered while designing or installing electronic equipments |
| Total  |  |                       |            |             |                              |       |          |       | 0.1                          |   |

**Department: : Computer Science and Engineering**

| Sl. No | Subject / Area        | Name of coordinator/s | From - To | No. of days | Participation (nos) Expected |       |          |       | Planned Expenditure in lakhs | Objectives                                |
|--------|-----------------------|-----------------------|-----------|-------------|------------------------------|-------|----------|-------|------------------------------|---|
|        |                       |                       |           |             | Faculty                      | Staff | Students | Total |                              |   |
| 1      | Security in Computing | Prof. Thushara A      | May 2014  | 2 days      | 5                            | 10    | 45       | 60    | 0.5                          | To get awareness in Security in Computing |
| Total  |                       |                       |           |             |                              |       |          |       | 0.5                          |   |

**Department: Chemical Engineering**

| Sl. No. | Subject/ Area                   | From - To  | No. of Days | Participation (nos) expected |       |          |       | Planned Expenditure |
|---------|---------------------------------|------------|-------------|------------------------------|-------|----------|-------|---------------------|
|         |                                 |            |             | Faculty                      | Staff | Students | Total |                     |
| 1.      | Environmental Impact Assessment | 15/02/2014 | 1           | 6                            | 4     | 60       | 70    | 0.1                 |
| Total   |                                 |            |             |                              |       |          |       | 0.1                 |

## Administrative staff

### B (I) (ii) (1) Staff Development Plan for Training in Functional Area based on TNA

#### Library

| Sl. No. | Subject / Area of Training | Name of coordinator/s | No. of staff members identified for training in the area | Duration (Days) | Tentative Date | In-house (Own Dept / Other Dept)/ Name of Institution / National Trainer Organisation | (Expected) Expenditure in lakhs | (Expected) Outcome / Objective |
|---------|----------------------------|-----------------------|--|-----------------|----------------|---|---------------------------------|--------------------------------|
| 1       | Digital libraries          | Dr Manzoor Babu V     | 3  | 6               | May 2014       | IIM Kozhicode   | 0.3                             | Setting up of digital library  |
| Total   |                            |                       |  |                 |                |   | 0.3                             |                                |

### B (I) (iii) (2) Staff Development Plan for Training in areas other than Functional Area based on TNA College office

| Sl. No. | Subject / Area of Training                            | No. of staff members identified for training in the area | Duration (Days) | Tentative Date        | In-house / Name of Network TEQIP Institution / National Trainer Organisation | (Expected) Expenditure In lakhs | (Expected) Outcome / Objective  |
|---------|---|--|-----------------|-----------------------|--|---------------------------------|---|
| 2       | Thorough Training in Computer based office automation | 15   | 30              | Jan 1 to Mar 31, 2014 |  | 0.5                             | Enable all admin staff to perform duty other than traditional methods also. |
| total   |   |  |                 |                       |  | 0.5                             |   |

### B(I)(ii) (3) In-house Training Programmes / Continuing Education Programmes planned – Functional Area

#### College office

| Sl. No | Subject / Area of Training         | From - To             | No. of days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure in lakhs |
|--------|------------------------------------|-----------------------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|------------------------------|
|        |                                    |                       |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                              |
| 1      | Leadership and Management Training | Jan 1 to Mar 31, 2014 | 30          |                              |                          |                                   |            |       | 1                            |
| Total  |                                    |                       |             |                              |                          |                                   |            |       | 1                            |



**B(I)(ii) (4) In-house workshops planned – Functional Area**

| Sl. No | Subject / Area of Training          | From - To                | No. of days | Participation (nos) expected |                          |                                   |            |       | Planned Expenditure In lakhs | Objectives                             |
|--------|-------------------------------------|--------------------------|-------------|------------------------------|--------------------------|-----------------------------------|------------|-------|------------------------------|--|
|        |                                     |                          |             | Own Institution              | Other TEQIP Institutions | Other AICTE rec Engg Institutions | Industries | Total |                              |  |
| 2      | Koha Library Automation software    | 03.01.2014 to 04.01.2014 | 2 days      | 10                           | 5                        | 15                                | 0          | 30    | 0.5                          | Automation of Libraries                |
| 3      | Greenstone Digital Library software | 21.05.2014 to 24.05.2014 | 4 days      | 7                            | 5                        | 13                                | 0          | 25    | 0.5                          | Managing institutional digital library |
| Total  |                                     |                          |             |                              |                          |                                   |            |       | 1                            |  |

**B(I)(ii) (5) Seminars planned**

| Sl. No | Subject / Area | From - To              | No. of days | Participation (nos) Expected |       |          |       | Planned Expenditure in Lakhs in | Objectives   |
|--------|----------------|------------------------|-------------|------------------------------|-------|----------|-------|---------------------------------|--|
|        |                |                        |             | Faculty                      | Staff | Students | Total |                                 |  |
| 1      | Digital divide | 25-4-2014 to 26-042014 | 2 days      | 40                           | 10    | 50       | 100   | 1                               | Creating awareness about digital divide and Managing the emerging situations |
| Total  |                |                        |             |                              |       |          |       | 1                               |  |

## A. Conferences Planned – Subject Domain

### B. Name of Department: Electrical and Electronics Engineering

| Sl. No       | Title of the conference   | Name of organizing secretary | From – To  | No. of days | Number of participants ( expected) |                          |                             |                   |               |           | Planned Expenditure in lakhs |
|--------------|---|------------------------------|--|-------------|------------------------------------|--------------------------|-----------------------------|-------------------|---------------|-----------|------------------------------|
|              |   |                              |  |             | Own Institution                    | Other TEQIP Institutions | AICTE rec Engg Institutions | R&D organizations | Outside India | Total     |                              |
| 1            | Emerging Trends in Electrical Engineering   | Prof. M. Deepthi             | May 14 <sup>th</sup> to 16 <sup>th</sup> 2014      | 3           | 20                                 | 20                       | 30                          | 10                | 5             | 85        | 6                            |
| 2            | Recent Research in Control, Instrumentation and Power Electronics Application to Electrical Engineering | Prof. V. Gayathri            | November 12 <sup>th</sup> to 14 <sup>th</sup> 2014 | 3           | 20                                 | 20                       | 30                          | 10                | 5             | 85        | 6                            |
| <b>Total</b> |   |                              |  |             |                                    |                          |                             |                   |               | <b>12</b> |                              |

### Name of Department: Mechanical Engineering

| Sl. No       | Title of the conference  | Name of organizing secretary         | From – To  | No. of days | Number of participants ( expected) |                          |                             |                   |               |          | Planned Expenditure in lakhs |
|--------------|--|--------------------------------------|------------|-------------|------------------------------------|--------------------------|-----------------------------|-------------------|---------------|----------|------------------------------|
|              |  |                                      |            |             | Own Institution                    | Other TEQIP Institutions | AICTE rec Engg Institutions | R&D organizations | Outside India | Total    |                              |
| 1            | International conference on Recent Advances in Mechanical and Production Engg. | Dr.M.Jose Prakash<br>Dr. KE.Reby Roy | Sept. 2014 | 2           | 15                                 | 10                       | 25                          | 5                 | 5             | 60       | 6                            |
| <b>Total</b> |  |                                      |            |             |                                    |                          |                             |                   |               | <b>6</b> |                              |

**Name of Department: Electronics & Communication Engineering**

| Sl. No | Title of the conference   | Name of organizing secretary | From – To | No. of days | Number of participants ( expected) |                          |                             |                   |               |       | Planned Expenditure in lakhs |
|--------|---|------------------------------|-----------|-------------|------------------------------------|--------------------------|-----------------------------|-------------------|---------------|-------|------------------------------|
|        |   |                              |           |             | Own Institution                    | Other TEQIP Institutions | AICTE rec Engg Institutions | R&D organizations | Outside India | Total |                              |
| 1      | International conference on Communication and Information Technology. | Dr.Gopakumar K               | Aug 2014  | 3           | 5                                  | 10                       | 45                          | 5                 | 5             | 70    | 6                            |
| Total  |   |                              |           |             |                                    |                          |                             |                   |               |       | 6                            |

**Name of Department: Computer Science and Engineering**

| Sl. No | Title of the conference   | Name of organizing secretary | From – To | No. of days | Number of participants ( expected) |                          |                             |                   |               |       | Planned Expenditure in lakhs |
|--------|---|------------------------------|-----------|-------------|------------------------------------|--------------------------|-----------------------------|-------------------|---------------|-------|------------------------------|
|        |   |                              |           |             | Own Institution                    | Other TEQIP Institutions | AICTE rec Engg Institutions | R&D organizations | Outside India | Total |                              |
| 1      | International Conference on Advanced Research in Computing, Communication and Information Science | Dr. D Chithraprasad          | June 2014 | 3           | 10                                 | 15                       | 25                          | 10                | 10            | 70    | 6                            |
| Total  |   |                              |           |             |                                    |                          |                             |                   |               |       | 6                            |

**Name of Department: Chemical Engineering**

| Sl. No | Title of the conference  | Name of organizing secretary | From – To      | No. of days | Number of participants ( expected) |                          |                             |                   |               |       | Planned Expenditure in lakhs |
|--------|--|------------------------------|----------------|-------------|------------------------------------|--------------------------|-----------------------------|-------------------|---------------|-------|------------------------------|
|        |  |                              |                |             | Own Institution                    | Other TEQIP Institutions | AICTE rec Engg Institutions | R&D organizations | Outside India | Total |                              |
| 1      | International conference on advances in chemical and bioprocess engineering" | DR.K.B.Radha krishnan        | 19 ,20 Sept.14 | 2           | 5                                  | 5                        | 20                          | 10                | 10            | 50    | 6                            |
| Total  |  |                              |                |             |                                    |                          |                             |                   |               |       | 6                            |

**Quality upgradation****Name of Department: Civil Engineering**

| Sl. No | Name of faculty | Name programme | Address of the research centre and University | Name and official address of the guide | Date of registration          | Expected expenditure in lakhs |
|--------|-----------------|----------------|---|--|-------------------------------|-------------------------------|
| 1      | Prof.Adarsh.S   | PhD            | IIT,Mumbai                                    | Dr.M.Janga Reddy                       | Presentation for Confirmation | 1.5                           |
| Total  |                 |                |   |  |                               | 1.5                           |

**Name of Department: Electronics & Communication Engineering**

| Sl. No | Name of faculty | Name programme | Address of the research centre and University            | Name and official address of the guide         | Date of registration | Expected expenditure in lakhs |
|--------|-----------------|----------------|--|--|----------------------|-------------------------------|
| 1      | Prof Reshna S   | Ph.D.          | College of Engineering, Trivandrum/ University of Kerala | Dr. M.Jayaraju<br>Director,<br>ANERT,Trivadrum | 27.04.2013           | 1                             |
| Total  |                 |                |  |  |                      | 1                             |

# TKM College of Engineering, Kollam

## TEQIP PHASE – II

### Enhancement of Research & Development and Institutional Consultancy Activities

#### A. Seed money to faculty

Research Guidance committee has been formed with Senior Research advisor(SRA) and application has been invited for seed money.

Last date for submitting the application is 04-11-13

| Sl.No | particulars  | Numbers | Expected expenditure<br>1.5 lakhs per proposal |
|-------|--|---------|--|
| 1     | Proposals already received/expected to be received | 15      | 22.5 lakhs                                     |

#### Details of faculty planned to publish paper in Journal (under TEQIP)

##### Department: Civil Engineering

| Sl. No. | Name of Faculty   | Subject / Title   | Journal                                      | Vol / Date | Planned Expenditure in lakhs | Referred (Y/N) |
|---------|-------------------|---|--|------------|------------------------------|----------------|
| 1       | Prof Saraswathy B | Performance based seismic evaluation  | Journal of Acoustics and Vibration           |            | 0.1                          | Y              |
| 2       | Prof A Nizad      | Strength and durability study on cement mortar using ceramic sand           | Construction and Building Materials Elsevier |            | 0.1                          | Y              |
| 3       | Prof A Nizad      | Strength and durability study on Self compacting concrete using Copper slag | Construction and Building Materials Elsevier |            | 0.1                          | Y              |
| Total   |                   |   |  |            | 0.3                          |                |

**Department: Mechanical Engineering**

| Sl.No | Name of Faculty       | Subject / Title   | Journal  | Vol / Date                  | Planned Expenditure in lakhs | Refereed (Y/N)         |
|-------|-----------------------|---|--|-----------------------------|------------------------------|------------------------|
| 1.    | Dr. C A Shajahan      | Industrial engineering  | International journal of scientific research                   |                             | 0.03                         | Yes                    |
| 2.    | Dr. Jose Prakash.M    | Performance studies on refrigeration system using nanorefrigerants          | International Journal of Mechanical Engineering and Technology | 2013                        | 0.27                         | Y<br>Impact factor 0.5 |
| 3     | Dr. Jose Prakash.M    | Nanofluids/refrigerants   | IJAER  | 2013                        | 0.15                         | Y                      |
| 4     | Dr.N.K.Mohammed Sajid | Refrigeration and Air conditioning  | IJAER  | 2013-14                     | 0.15                         | Y                      |
| 5     | Dr.S.Jose             | TEQIP – Will it hit the Bulls Eye? Issues related to Motivation of faculty. | Indian Journal for Technical Education                         | To be submitted by Dec 2013 | 0.025                        | Y                      |
| Total |                       |   |  |                             | 0.625                        |                        |

**Department: Electrical Engineering**

| Sl.No | Name of Faculty    | Subject / Title  | Journal   | Vol / Date | Planned Expenditure ( In lakhs) | Referred (Y/N) |
|-------|--------------------|--|---|------------|---------------------------------|----------------|
| 1     | R.Sheeba           | Bees Colony Intelligence in Optimization: An Application to PSS Design | IREMOS  | -          | 0.12                            | Y              |
| 2     | Dr. Bijuna Kunju K | Solar Powered LED for Street Lighting                                  | International Journal of Advanced Research Engineering & Technology | Nov. 2013  | 0.15                            | Y              |
| Total |                    |  |   |            | 0.27                            |                |

**Department: Electronics and Communication Engineering**

| Sl.No | Name of Faculty      | Subject / Title                        | Journal   | Vol / Date | Planned Expenditure IN LAKHS | Refereed (Y/N) |
|-------|----------------------|--|---|------------|------------------------------|----------------|
| 1.    | Dr.T.A.Shahul Hameed | Nano Technology                        | International Journal of Applied Engineering research | Dec 2013   | 0.06                         | Y              |
| 2.    | Dr.T.A.Shahul Hameed | Organic Electronics- Device Simulation | IJSSST  | Mar 2014   | 0.08                         | Y              |
| 3     | Dr.K.Gopakumar       | Chaos                                  | IJCA  | May 2013   | 0.06                         | Y              |
| 4     | Dr.K.Gopakumar       | Chaos                                  | IJAER   | Sept 2013  | 0.06                         | Y              |
| 5     | Prof.Abid Hussain    | Soft Computing                         | IJAER   | Aug 2014   | 0.06                         | Y              |
| 6     | Prof.Abid Hussain    | Soft Computing                         | IJFLS   | Dec 2013   | 0.06                         | Y              |
| 7     | Prof.Anu Assis       | VLSI                                   | IJAER   | Sept 2014  | 0.06                         | Y              |
| 8     | Dr.Sheeba O.         | Biomedical Signal Processing           | IJSSST  | Dec 2013   | 0.08                         | Y              |
| 9     | Prof.Preetha Basu    | Signal Processing                      | IJCA  | May 2013   | 0.06                         | Y              |



|       |                   |                        |       |          |      |   |
|-------|-------------------|------------------------|-------|----------|------|---|
| 10    | Prof.Preetha Basu | Signal Processing      | IJAER | Nov 2013 | 0.06 | Y |
| 11    | Prof.Nishant N.   | Wireless<br>Networking | IJSST | Dec 2013 | 0.08 | Y |
| Total |                   |                        |       |          | 0.72 |   |

**Department: Computer Science and Engineering**

| Sl.No | Name of Faculty    | Subject / Title      | Journal  | Vol / Date | Planned Expenditure in lakhs | Referred (Y/N) |
|-------|--------------------|----------------------|--|------------|------------------------------|----------------|
| 1     | Dr. D Chitraprasad | Data mining          | IEEE   | Nov 2013   | 0.5                          | Y              |
| 2     | Dr. D Chitraprasad | Geometric algorithms | Computational geometry: Theory and Application       | April 2014 | 0.5                          | Y              |
| 3     | Dr Amarunishad T M | Image Processing     | International Journal on Signal and Image Processing | Dec 2013   | 0.5                          | Y              |
| Total |                    |                      |  |            | 1.5                          |                |

**Department: Chemical Engineering**

| Sl.No | Name of Faculty           | Subject / Title | Journal   | Vol / Date | Planned Expenditure in lakhs | Referred (Y/N) |
|-------|---------------------------|-----------------|---|------------|------------------------------|----------------|
| 1.    | Dr. N E Jaffar            | Process Control | IEEE Explore Digital Library  | March 2013 | 0.06                         | Y              |
| 2     | Dr. K.B.<br>Radhakrishnan | Heat Transfer   | IJHMT/Int. Comm. In Heat Transfer or any other International Journals | 2014       | 0.06                         | Y              |
| Total |                           |                 |   |            | 0.12                         |                |

**Consultancy activities planned****Department: Mechanical Engineering**

| Sl.No | Name of faculty coordinating the consultancy project | Expenditure                 |  |                                |   | Total in lakhs |
|-------|--|-----------------------------|--|--------------------------------|---|----------------|
|       |  | Securing sponsored projects | Commercialization of research products | Patenting of research products | Travel cost, hospitality and to consultant for delivering Expert lectures |                |
| 1     | Dr.Jose Prakash.M                                    | 0.1                         |  |                                | 0.2   | 0.3            |
| 2.    | Dr.Reby Roy  | 0.1                         |  |                                | 0.2   | 0.3            |
| Total |  |                             |  |                                |   | 0.6            |

**Department: Electronics Engineering**

| Sl.No | Name of faculty coordinating the consultancy project | Expenditure                 |  |                                |   | Total in lakhs |
|-------|--|-----------------------------|--|--------------------------------|---|----------------|
|       |  | Securing sponsored projects | Commercialization of research products | Patenting of research products | Travel cost, hospitality and to consultant for delivering Expert lectures |                |
| 1     | Dr.T.A.Shahul Hameed                                 | 1.5                         | 1.5                                    | 0.5                            | 0.5   | 4.0            |
| Total |  |                             |  |                                |   | 4.0            |

**TKM College of Engineering, Kollam**  
TEQIP PHASE – II  
**Incremental operating COST**

**Details of Faculty planned for paper presentation in National / International conferences**  
**Department: Civil Engineering**

| Sl. No. | Name of Faculty         | Subject / Area  | Host Institution / Title of Conference   | Date                 | Planned Expenditure In lakhs | Inter-national (Y/N) |
|---------|-------------------------|---|--|----------------------|------------------------------|----------------------|
| 1       | Prof. Ramaswamy K P     | Concrete Technology   | ICMSC-2013<br>(T.K.M College of Engineering)   | Dec 12-14, 2013      | 0.1                          | Y                    |
| 2       | Dr. Seema K. Nayar      | Water Engineering   | International Centre for Research and Development, Colombo, Srilanka/<br>International Conference on Environment and Energy 2013 | December 16-17, 2013 | 0.5                          | Y                    |
| 3       | Dr.B.Sunil Kumar        | Civil Engg./Sustainable Buildings                               | Promoters: UNEP, iiSBE, FIDIC, CIB<br>Title: World Conference on Sustainable Building (World SB14, Barcelona)                    | 2014                 | 0.5                          | Y                    |
| 4       | Prof. Adarsh S.         | Artificial Intelligence Applications in Engineering Disciplines | Indian International Conference on Artificial Intelligence (IICAI 2013 Siddaganga Institute of Technology Tumkur)                | Dec 18-20, 2013      | 0.1                          | Y                    |
|         |                         | Climate change Impact Assessment and Water Management           | ICICECAS 2014 International Conference on Environment, Climate and Atmospheric Sciences UAE, Dubai                               | March 05-06, 2014    | 0.5                          | Y                    |
| 5       | Prof Chinsu Mereena Joy | Civil, Structural Engineering                                   | ICCESE 2014 : International Conference on Civil, Environmental and Structural Engineering Berlin,                                | May 22-23, 2014      | 0.5                          | Y                    |

|       |                      |   |   |                      |     |   |
|-------|----------------------|---|---|----------------------|-----|---|
|       |                      |   | Germany   |                      |     |   |
| 6     | Prof Haseena R       | Concrete Technology   | R. N. Raikar Memorial International Conference, Mumbai, India   | Dec 20-21, 2013      | 0.1 | Y |
| 7     | Dr. M Nazeer         | Concrete Technology   | ICCMATS 2014 International Conference on Construction Materials Engineering, Structural Performance and Durability, University of the Witwatersrand, Johannesburg, South Africa | Sep 8-10, 2014       | 0.5 | Y |
| 8     | Prof Saraswathy B    | Composite structures  | Atlanta, Georgia (USA), or Stony Brooks University (USA)/ International Conference on Mechanics of Composites (MECHCOMP2014)  | 8-11 June 2014       | 0.5 | Y |
| 9     | Dr.Sudhi Mary Kurian | How Feedback can Improve the Management of Quality and Safety in Construction | University of Liverpool,UK  | July13-16, 2014      | 0.5 | Y |
| 10    | Dr Lalu Mangal       | Offshore Technology   | Offshore Technology Conference, Convention Centre (KLCC) in Kuala Lumpur, Malaysia. Kuala Lumpur Malaysia   | 25-28 March 2014     | 0.5 | Y |
| 11    | Dr. Seema K Nayar    | International Conference on Environment & Energy                              | International Centre for Research & Development   | Dec – 16 and 17,2013 | 1   | Y |
| 12    | Prof,Adarsh . S      | Wavelet Model Tree  | IIT,Madras  | Dec'6-9,2013         | 0.1 | Y |
| Total |                      |   |   |                      | 5.4 |   |

**Department: Mechanical Engineering**

| Sl No | Name of faculty       | Subject/Area                 | Host institution/Title of conference  | Date  | Planned expenditure in lakhs | International (Y/N) |
|-------|-----------------------|------------------------------|---|---|------------------------------|---------------------|
| 1     | Dr. Rijo Jacob Thomas | Cryogenic Engineering        | Cryogenic Engineering Conference (CEC/ICMC) 2013, Anchorage, Alaska, USA  | 17 <sup>th</sup> to 21 <sup>st</sup> June 2013. | 2.4                          | Y                   |
| 2     | Nizar Hussain. M      | Industrial Engineering/ ICT  | <b>International Conference on Information Systems (ICIS 2013), to be held in Milano, Italy</b>                         | <b>December 15-18, 2013.</b>                    | 2.0                          | Y                   |
| 3     | Dr. Jose Prakash.M    | Computational Fluid Dynamics | International Conference on Computational Fluid Dynamics Berlin, Germany  | May 22-23, 2014                                 | 1.5                          | Y                   |
| 4     | Dr. Jose Prakash.M    | Mechanical Engineering       | International Conference on Mechanical and Mechatronics Engineering Singapore   | July 04-05, 2014                                | 1                            | Y                   |
| 5     | Dr. K.E. Reby Roy     | Two-Phase flow               | ASME, 4th Joint US-European Fluids Engineering Summer Meeting,  | August 3-7, 2014, Chicago, USA                  | 2.25                         | Y                   |
| 6     | Nizar Hussain. M      | Industrial Engineering       | <b>Fourth International Conference on Industrial Engineering and Operations Management (IEOM 2014) Bali, Indonesia,</b> | <b>January 7-9, 2014</b>                        | 1.25                         | Y                   |
| 7     | Dr. C A SHAJAHAN      | Industrial management        | International Academic Conference Dubai   | 20&21 st January 2014                           | 1.5                          | Yes                 |
| 8     | P.Mohammed Iqbal      | Gas hydrates                 | Intelligent Energy International Conference and Exhibition, Dubai,UAE   | 28-30 October 2013                              | 0.75                         | Y                   |
| 9     | Dr. K K Abdul         | Computational Fluid          | International Conference on   | May 22-23,                                      |                              | Y                   |

|       |                      |  |   |  |      |   |
|-------|----------------------|--|---|--|------|---|
|       | Rasheed              | Dynamics   | Computational Fluid Dynamics<br>Berlin, Germany     | 2014                                     |      |   |
| 10    | Dr.Jose<br>Prakash.M | 15th international heat<br>transfer conference   | IHCT<br>Kyoto,Japan                                 | 14-08-14<br>15-08-14                     | 1.5  | Y |
| 11    | Dr.Jose<br>Prakash.M | 12 <sup>th</sup> ASME international<br>conference on<br>nanochannels,microchannels   | ASME<br>Chicago, Illinois                           | 03-08-14<br>to<br>07-08-14               | 2.7  | Y |
| 12    | Dr.S.Jose            | 3 <sup>rd</sup> International<br>Conference on Materials for<br>the Future – Innovative<br>Materials, Processes,<br>Products and Applications –<br>'ICMF 2013' | Government Engineering<br>College, Thrissur, Kerala | November 6-<br>8, 2013.                  | 0.15 | Y |
| 13    | Dr.S.Jose            | International Conference on<br>"Precision, Meso, Micro<br>and Nano Engineering<br>(COPEN-8)"   | NIT Calicut   | 13-15 <sup>th</sup><br>December<br>2013. | 0.20 | Y |
| 14    | Dr.Jose<br>Prakash.M | ICHTA 2013 international<br>conference on heat transfer<br>and applications  | World Academy of science<br>UAE                     | 02-12-13<br>03-12-13                     | 0.8  | Y |
| Total |                      |  |   |  | 19.5 |   |

### Department: Electrical Engineering

| Sl.No | Name of Faculty     | Subject / Area          | Host Institution / Title of<br>Conference | Date          | Planned<br>Expenditure<br>In lakhs | International<br>(Y/N) |
|-------|---------------------|-------------------------|---|---------------|------------------------------------|------------------------|
| 1.    | Dr. K. Bijuna Kunju | Power System Management | INDICON 2014, IIT Bombay                  | December 2014 | 0.2                                | Y                      |
| Total |                     |                         |   |               | 0.2                                |                        |

**Department: Electronics and Communication Engineering**

| Sl No | Name of faculty       | Subject/Area              | Host institution/Title of conference  | Date                      | Planned expenditure in lakhs | International (Y/N) |
|-------|-----------------------|---------------------------|---|---------------------------|------------------------------|---------------------|
| 1     | Dr.Sheeba O.          | Biomedical Engineering    | 3 <sup>rd</sup> World Conference on Science and Engineering, Singapore                          | 23 <sup>rd</sup> Aug 2013 | 1.5                          | Y                   |
| 2     | Dr.Shahul Hameed T.A. | Organic /Nano Electronics | International Conference on Electronics and Communication Engineering, Switzerland              | May 7-8, 2014             | 1.5                          | Y                   |
| 3     | Prof.Nishant N.       | Wireless Communication    | 15 <sup>th</sup> Intl Conference on Communication Technology, China                             | Nov 17-19                 | 1.5                          | Y                   |
| 4     | Prof. Nishanth N      | Wireless Network          | IEEE International Conference on Communication(ICCC 2013), Trivandrum                           | Dec 15-17,2013            | 0.2                          | Y                   |
| 5     | Prof. Nishanth N      | Information Technology    | 3 <sup>rd</sup> International conference on signal Processing and Information technology, Dubai | Dec 26-27,2013            | 2                            | Y                   |
| 6     | Dr.S.SureshBabu       | Image processing          | IEEE International Conference on Control,Comm'n & Computing, Trivandrum, India                  | Dec13-15 , 2013           | 0.10                         | Y                   |
| 7     | Dr SureshBabu         | Signal Processing         | ACEEE conference, Dubai   | Dec 26-27, 2013           | 1.0                          | Y                   |
| Total |                       |                           |   |                           | 7.8                          |                     |

**Department: Computer Science and Engineering**

| Sl.No | Name of Faculty    | Subject / Area       | Host Institution / Title of Conference  | Date      | Planned Expenditure in lakhs | International (Y/N) |
|-------|--------------------|----------------------|---|-----------|------------------------------|---------------------|
| 1     | Dr.D Chitraprasad  | Geometric Algorithms | 9th International colloquium on graph theory and combinatorics. France                            | June 2014 | 1.5                          | Y                   |
| 2     | Dr Amarunishad T M | Image Processing     | International Conference on Informatics Engineering and Information Science, Kaulampur, Malayasia | Nov 2013  | 1.5                          | Y                   |
| Total |                    |                      |   |           | 3                            |                     |

**Department: Chemical Engineering**

| Sl.No | Name of Faculty       | Subject / Area                           | Host Institution / Title of Conference   | Date                     | Planned Expenditure in lakhs | International (Y/N) |
|-------|-----------------------|--|--|--------------------------|------------------------------|---------------------|
| 1.    | Dr. A S Abdul Rasheed | Process Safety                           | 2014 Spring Meeting and 10th Global Congress on Process Safety, New Orleans, Louisiana | March 30 - April 3, 2014 | 2                            | Y                   |
| 2     | Dr. K B Radhakrishnan | Environmental Engineering and Management | International conf. on Chemical Engg and Technology (ICCET 2014)                       | March 14-15, 2014        | 2                            | Y                   |
| 3     | Dr. K B Radhakrishnan | Heat Transfer                            | 15th International Heat Transfer Conference (IHTC-15), Kyoto, Japan                    | 10-15 Aug 2014           | 2                            | Y                   |
| Total |                       |  |  |                          | 6                            |                     |



**TKM COLLEGE OF ENGINEERING KOLLAM-5**  
**ACTIVITIES PROPOSED UNDER ACADEMIC AND NON ACADEMIC REFORMS IN TEQIP-II UPTO DECEMBER 2014**

**1. Committee to review the performance appraisal of faculty by students**

As part of the academic reforms, the evaluation of faculty performance on a periodic basis should be implemented. It is well known that in TKM College of Engineering, there is a well established system for this. But, TEQIP-II provides an opportunity to self evaluate the merits and demerits of this existing system to evolve a better option or modified system for the evaluation of faculty performance by students. It is proposed to appoint a committee of teachers for doing this exercise.

The committee will be asked to prepare the report after listening to the suggestions of all the stakeholders namely students, teachers at various levels of seniority and parents. The committee will be asked to submit the draft report in January 2014 and it will be circulated for comments from the stakeholders. The final report will be approved and implemented as part of the academic reforms.

**2. Brainstorming Session on the Improved Students Performance Evaluation**

It is proposed to conduct a one day Brainstorming session on the improved student's performance evaluation in February. The details of the program are as follows.

|                        |  |
|------------------------|--|
| Venue                  | : TKM College of Engineering Auditorium  |
| Date                   | : February second week   |
| Participants           | : All faculty of the college   |
| <b>Keynote Speaker</b> | <b>: Dr. Achuthsankar S Nair, Head, Department of Computational Biology and Bioinformatics<br/>University of Kerala, Kariavattom, Trivandrum</b> |
| Expenditure            | : 15000/-  |
| Deliverables           | : Awareness on the exercise of autonomy  |
| Stakeholder group      | : Faculty  |

3. Accreditation Fees : Rs.2200000/-

4. Expenses for the preparedness for Autonomy : Rs.50000/-

|  |                |
|--|----------------|
| Grand Total (planned upto December 2014) | : Rs.2265000/- |
| Amount spent upto October 31,2013        | : Rs.30000/-   |
| Total                                    | : Rs.2295000/- |

**TKM COLLEGE OF ENGINEERING KOLLAM**  
**Industry Institute Interaction Cell**

**Statements of Expenditure**

| Amount Actually spent as on date<br>31.10.2013 | Planned to be3 spend till December 2014 | Total     |
|--|---|-----------|
| 2,811,800                                      | 1,335,000                               | 5,481,800 |

**ACTION PLAN WITH BUDGETING FOR THE REMAINING PERIOD UPTO 31<sup>st</sup> DECEMBER 2014**

**BoG Approved**

| No | Activity         | Title  | Proposed by    | Expert/Industry involved   | For whom  | Tentative Date | Budget   |
|----|------------------|--|----------------|--|---|----------------|----------|
| 1  | Invited Lecture  | Improving Employability of Students                  | Dr. LaluMangal | Prof Gicy M Koor, Professor, Manipal Institute of Technology, Manipal, Karnataka | Faculty/ Students of Civil Engineering Department | Nov-13         | 27,000   |
| 2  | Industrial visit | One day industrial visit                             | K Bijuna kunju | LDC Ernakulam  | 25 faculties                                      | Nov-13         | 60,000   |
| 3  | Industrial visit | One day industrial visit Power station Muzhiyar      | Baiju R Naina  | Power station Muzhiyar   | 120 students,10 faculties and 4 technical staff   | Nov-13         | 1,00,000 |
| 3  | Industrial visit | One day industrial visit at 220KV Substation Kundara | Shahina TN     | 220KV Substation Kundara   | 120 students,10 faculties and 4 technical staff   | Nov-13         | 40,000   |

|   |                         |   |                     |  |   |        |        |
|---|-------------------------|---|---------------------|--|---|--------|--------|
| 4 | One Day Workshop        | Academic-Industrial Interface                           | Dr. Amarnishad T M  | Wg Cdr (Rtd) Simon. K. John, Additional Director, Military Engine Certification, Regional Centre for Military Airworthiness (Engines), CEMILAC, Ministry of Defense (R&D), Govt. of India, Bangalore | Faculty/ Final year Students of All Departments | Nov-13 | 80,000 |
| 4 | Industrial Visit        | Cochin Refineries                                       | Prof.Nizar Hussain  | Cochin Refineries  | 12 faculty                                      | Nov-13 | 35000  |
| 5 | Industrial Visit        | Cochin Shipyard   | Prof. Ashfak A.     | Cochin Shipyard  | 10 faculty                                      | Nov-13 | 25000  |
| 6 | Industrial Visit        | SILK, Cherthala   | Prof. Aju Kumar     | SILK, Cherthala  | 15 faculty                                      | Nov-13 | 35000  |
| 7 | Industrial Visit        | Carborandum Ltd, Kochi                                  | Prof. Rakesh Pillai | Carborandum Ltd, Kochi   | 10 faculty                                      | Nov-13 | 25000  |
| 8 | Visit to R& D Institute | Fluid Control Research Institute, Palakkad              | Dr.D.Roshan Kumar   | Fluid Control Research Institute, Palakkad   | 5 Faculty                                       | Nov-13 | 40000  |
| 9 | MOU                     | Research related to acoustic features of coir products. | Dr.B. Premlet       | Experts from Coirboard and related research centres.   | Coir industry                                   | Nov-13 | 80,000 |

|    |                            |  |                               |  |  |        |        |
|----|----------------------------|--|-------------------------------|--|--|--------|--------|
| 10 | Workshop                   | Recent trends in Nano Materials                  | Dr.SureshBabu,<br>Dr.Unni     | Dr.AjayGhosh, Dr.Shyju<br>Dr.Jayaraj NIIST, IIST,CUSAT   | Staff & Students   | Nov-13 | 90,000 |
| 11 | Workshop                   | Simulation tools of RF & Microwave               | HeeraKarunakaran<br>Dr.Sheeba | AWR Corporation Bangalore  | Staff & Students   | Nov-13 | 55000  |
| 12 | Hands on Training          | PCB Design                                       | Dr.Gopakumar                  | ORCAD  | Staff & Students   | Nov-13 | 15,000 |
| 13 | One day Workshop           | Parallel Computing (FN Session) VIV (AN Session) | Dr. LaluMangal                | Prof K Murali, Professor,<br>Department of Ocean Engineering, IIT Madras, Chennai                      | Faculty/ Students of Civil Engineering Department                            | Dec-13 | 68,500 |
| 14 | One day Workshop           | Embedded System                                  | Dr. K. Gopakumar              | Mr. Bhasi S., Divisional Engineer, RTTC, BSNL, Trivandrum. Ms. Bindu K.R., SDE. BSNL RTTC, Trivandrum. | Faculty/ Students of ECE   | Dec-13 | 50,150 |
| 15 | One day Seminar            | “ Endosulphan- A Saviour or a Saboutier”         | Dr. K.B. Radhakrishnan        | Experts from various industries, scientists, representatives of NGO’s and academic institutions        | Faculty /students All Departments  | Dec-13 | 150000 |
| 16 | 5 days industrial training | Electrical wing, Indian Railways, Trivandrum     | Mohammed Mansoor.O            | Two experts from Railway   | Three faculties and two technical staff of Electrical Engineering Department | Dec-13 | 60000  |

|    |                            |   |                        |  |   |        |        |
|----|----------------------------|---|------------------------|--|---|--------|--------|
| 17 | Invited Talk               | Cyber Security  | AbidHussain            | NabeelKoya CDAC,<br>Trivandrum                                   | Staff& Students                                       | Dec-13 | 12,000 |
| 18 | Workshop                   | Embedded System   | Dr.Gopakumar           | Tata Elxsi   | Students  | Dec-13 | 30,000 |
| 19 | Training                   | Telecommunication<br>System   | AbidHussain            | BSNL   | Students  | Dec-13 | 25,000 |
| 20 | Workshop                   | 2 days workshop on<br>"Introduction to PLC"                         | Shaleena               | Experts from respective<br>companies from reputed<br>institution | Students(50 nos)<br>and 30 faculties                  | Dec-13 | 60,000 |
| 21 | Industrial<br>visit        | Industrial visit at 220KV<br>Substation Edamon                      | HanySF                 | 220KV Substation Edomon  | 120 students,10<br>faculties and 4<br>technical staff | Dec-13 | 50,000 |
| 22 | Visit to R& D<br>Institute | Naval Physical and<br>Oceanographic<br>Laboratory (NPOL) ,<br>Kochi | Dr.S.Jose              | Naval Physical and<br>Oceanographic Laboratory<br>(NPOL) , Kochi | 3 Faculty   | Dec-13 | 10000  |
| 23 | Visit to R& D<br>Institute | SHAR, Andhra Pradesh  | Prof.A.Sudheer         | SHAR, Andhra Pradesh   | 5 faculty   | Dec-13 | 90000  |
| 24 | Visit to R& D<br>Institute | LPSC, Valiamala   | Prof. Agesh<br>Markose | LPSC, Valiyamala   | 12 faculty  | Dec-13 | 25000  |

|    |                     |   |                        |   |  |        |        |
|----|---------------------|---|------------------------|---|--|--------|--------|
| 25 | Industrial Training | Lakshmi Machine ToolsCoimbatore   | Rajesh S               | Advanced Technology Centre  | 14 Technical staff                           | Dec-13 | 85000  |
| 26 | Invited Talk        | Ship Technology   | Prof. Muhammed Zakkeer | Prof. Pyarilal Dept of Ship Technology, CUSAT   | 10 faculty 40 students                       | Dec-13 | 15000  |
| 27 | Consultancy         | Development of a consultancy cell on noise studies in industries and road traffic | Dr.B. Premlet          | Prof. A. Ramachandraiya Acoustics lab, IIT Madras, Chennai And Experts from GIS centre, Bangalore | Faculty and students                         | Dec-13 | 80,000 |
| 28 | Workshop            | Construction of noise map with GIS  | Dr.B. Premlet          | Experts from IIT, GIS centre  | Town planners and practicing civil engineers | Dec-13 | 60,000 |
| 29 | Invited Talk        | Estimation & Detection  | Nishanth               | Dr.Sameer NIT Calicut   | Students                                     | Jan-14 | 9,000  |
| 30 | Training            | Network Simulator NS2   | Nishanth               | NIT, Suratkal   | Students                                     | Jan-14 | 8,000  |
| 31 | Training            | Telecommunication System  | AbidHussain            | BSNL  | Staff  | Jan-14 | 80,000 |
| 32 | Training            | Computer Networking   | Nishanth               | Nest, Trivandrum  | Students                                     | Jan-14 | 15,000 |

|    |                     |   |                      |  |  |        |        |
|----|---------------------|---|----------------------|--|--|--------|--------|
| 33 | Invited Talk        | Image Processing in MRI Scan                                      | AbidHussain          | Dr.Afsar, Travancore Scans                         | Students   | Feb-14 | 12,000 |
| 34 | Invited Talk        | Networking  | Nishanth             | NIT Suratkal                                       | Staff & Students                                       | Feb-14 | 12,000 |
| 35 | Industrial Visit    | HAL Bangalore   | AbidHussain          | HAL Bangalore                                      | Staff  | Mar-14 | 28,000 |
| 36 | Industrial Visit    | Toyota Kirloskar Motor Private Limited, Bangalore                 | Dr.A.Sadiq           | Toyota Kirloskar Motor Private Limited, Bangalore  | 4 Faculty Mechanical Dept.                             | May-14 | 30800  |
| 37 | Industrial Training | Defiance Technologies, Bangalore                                  | Dr.S.Jose            | Dr.Y.Arun Roy Vice President                       | 3 Faculty 5 students                                   | May-14 | 50000  |
| 38 | Factory Visit       | MOU   | Dr.S.Jose            | Er.Hemalatha, JGM,(Design), HMT, Kalamassery       | 10-15 Faculty of Mech Dept                             | Jul-14 | 20000  |
| 39 | One day workshop    | Recent trends in biomedical instrumentation                       | Muhammed Shanir P.P. | Resource persons from SCT, Pappanamkodu,Trivandrum | Faculty/ Students of Electrical Engineering Department | Jul-14 | 21350  |
| 40 | One day workshop    | Applications of modern semiconductor devices in electrical drives | Muhammed Shanir P.P. | Experts from CDAC Trivandrum                       | Faculty/ Students of Electrical Engineering Department | Jul-14 | 21350  |

|    |                  |  |                     |  |   |        |        |
|----|------------------|--|---------------------|--|---|--------|--------|
| 41 | One day workshop | Applications of Fluke Power Quality analyser           | Mohammed Mansoor.O  | Experts from Fluke Trivandrum  | Faculties and students of Electrical Engineering Department | Jul-14 | 25000  |
| 42 | Invited Lecture  | Issues and Challenges in Project Implementation        | Dr. Seema K Nayar   | Dr. Jayakumar, CEO, Pondicherry Port & SEZ, SPL Infra Ltd, Bangalore                               | Faculty/ Students of Civil Engineering Department           | Jul-14 | 32,000 |
| 43 | One Day Workshop | Software Development Process                           | Dr. Chithraprasad D | Mr. Kishore Kumar, CTO, OSPYN Technologies, Technopark, TVM  | Faculty/ Students of CSE Department                         | Aug-14 | 27,000 |
| 44 | Invited Lecture  | GIS and its applications in Transportation Engineering | Dr. LaluMangal      | Dr Samson Mathew, Professor, NIT,Trichy  | Faculty/ Students of Civil Engineering Department           | Aug-14 | 32,500 |
| 45 | One Day Workshop | Software Development Process                           | Dr. Chithraprasad D | Mr. Kishore Kumar, CTO, OSPYN Technologies, Technopark, TVM  | Faculty/ Students of CSE Department                         | Aug-14 | 27,000 |
| 46 | Invited Lecture  | VHDL programming                                       | Dr. K. Gopakumar    | Sri Ravindra Kumar R, Project Director & Head, VLSI-ASIC Hardware design Centre, CDAC, Trivandrum. | Faculty/ Students of ECE                                    | Aug-14 | 25,150 |
| 47 | One day workshop | Evaluation of annoyance and health hazards             | Dr.B. Premlet       | Experts from industry and medical fields   | Public  | Aug-14 | 40,000 |
| 48 | Invited Lecture  | Image Processing                                       | Dr. Amarnishad T M  | Dr. V K Govindan, Professor & DEAN Academic, NIT Calicut   | Faculty/ Students of CSE Department                         | Sep-14 | 21,750 |



|    |                    |   |                            |  |   |        |        |
|----|--------------------|---|----------------------------|--|---|--------|--------|
| 49 | One Day Workshop   | Open Source Framework for Research & Engineering  | Prof. Manu J Pillai        | Dr Sajeer G P, Professor, Dept. of CSE, Saintgits College of Engineering, Kottayam     | Faculty/ Students of CSE Department                                 | Sep-14 | 27,000 |
| 50 | Invited Lecture    | Image Processing  | Dr. Amarnishad T M         | Dr. V K Govindan, Professor & DEAN Academic, NIT Calicut                               | Faculty/ Students of CSE Department                                 | Sep-14 | 21,750 |
| 51 | One Day Workshop   | Open Source Framework for Research & Engineering  | Prof. Manu J Pillai        | Dr Sajeer G P, Professor, Dept. of CSE, Saintgits College of Engineering, Kottayam     | Faculty/ Students of CSE Department                                 | Sep-14 | 27,000 |
| 52 | Industrial Lecture | Safety in Oil/Gas transportation  | Dr. K.B. Radhakrishnan     | Mr. Venugopal Nayar Controller of Explosives, Chennai and Andhrapradesh Region Chennai | Faculty /students Department of Chemical Engineering                | Sep-14 | 30000  |
| 53 | Two day training   | KEL Kundara   | Prof. Lissamma Panjickaran | Two experts from KEL Kundara   | 6 faculty +4 staff+40 students of Electrical Engineering Department | Sep-14 | 49500  |
| 54 | Technical talk     | One days technical talk on"Operation and maintenance of substation/generating station equipments" | Prof. Lissamma Panjickaran | Experts from KSEB  | Students(60 nos)  | Sep-14 | 30,000 |
| 55 | Workshop           | 3 days workshop on "Introduction to matlab and Simulink-Control system approach"                  | Mohammed Mansoor.O         | Experts from Mathworks and from reputed institution                                    | Students(50 nos) and 30 faculties                                   | Sep-14 | 90,000 |

|    |                     |   |                     |  |   |        |        |
|----|---------------------|---|---------------------|--|---|--------|--------|
| 56 | Workshop            | 2 days workshop on "Introduction to simulation software PSIM and Power world.                         | Muhammed Shanir PP  | Experts from respective companies or from reputed institution        | Students(50 nos) and 30 faculties                           | Sep-14 | 60,000 |
| 57 | MOU                 | MOU with BSNL   | Shanir PP           | BSNL   | EEE, ECE, CSE Depts   | Sep-14 | 150000 |
| 58 | Seminar             | Safety in fireworks   | Dr. B. Premlet      | Dr. Rajendran, VSSC And controller explosives                        | Industries related to fireworks and fireworkers             | Sep-14 | 50,000 |
| 59 | Consultancy         | Noise reduction program for KMML, Chavara.  | Dr.B. Premlet       | KMML, Chavara. A case study by Faculty, Research scholar and student | For the industry  | Sep-14 | 30,000 |
| 60 | Industrial training | Numerical Relays  | Dr. K. Bijuna Kunju | Two experts from Alind, Mannar                                       | Faculties and students of Electrical Engineering Department | Oct-14 | 42000  |
| 61 | Two Days Workshop   | Familiarization of Simulation software SEQUEL   | R. Sheeba           | Two experts from IIT Bombay  | Faculties and students of Electrical Engineering Department | Oct-14 | 59000  |
| 62 | Technical Seminar   | One day technical talk on "Basics of Electric traction" and " Electric traction in india-an overview" | Mohammed Mansoor.O  | Experts from Indian railways/IIT/NIT                                 | Students(50 nos) and 30 faculties                           | Oct-14 | 60,000 |

|    |                  |   |                    |  |                      |        |        |
|----|------------------|---|--------------------|--|----------------------|--------|--------|
| 63 | Workshop         | Research related to the development of solar cells. | Dr.B. Premlet      | Experts from Pondicherry central university and CUSAT. | Faculty and students | Oct-14 | 40,000 |
| 64 | Industrial Visit | Kerala Automobiles                                  | Prof. Roshan Kumar | Kerala Automobiles                                     | 15 faculty           | Nov-14 | 30000  |

**TOTAL      2,811,800**

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| No | Activity          | Title   | Proposed by       | Expert/Industry involved | For whom  | Tentative Date | Budget  |
|----|-------------------|---|-------------------|--------------------------|---|----------------|---------|
| 1  | One Day Workshop  | Academic-Industrial Interface                       | Dr.Abdul Rasheed  |                          | Faculty/ Final year Students of All Departments | Sep-14         | 80,000  |
| 2  | Industrial Visit  | Mangalore Refinery                                  | K.B.Radhakrishnan |                          | 12 faculty                                      | Oct-14         | 95000   |
| 3  | National Workshop | 3 days workshop on Innovation in Engineering Design | Prof. Ashfak A.   | Experts from IIT, IISc   | 10 faculty, 30 students                         | Oct-14         | 125000  |
| 4  | Industrial visit  | Visit to Reliance Petroleum, Gujarat                | Fazil A           |                          | 5faculties and 4 technical staff                | Nov-14         | 140,000 |
| 5  | National Workshop | Workshop for IIIC coordinators                      | Prof. Aju Kumar   | All IIIC coordiantors    | All IIIC coordiantors from TEQIP colleges       | Nov-14         | 235000  |

|              |                  |                                    |                  |  |                                    |        |                  |
|--------------|------------------|------------------------------------|------------------|--|------------------------------------|--------|------------------|
| 6            | MOU              | SILICON MICRO SYSTEMS              | Dr.S.Jose        |  | Mech Dept                          | Nov-14 | 200000           |
| 7            | MOU              |                                    |                  |  | CSE Dept                           | Nov-14 | 200000           |
| 8            | MOU              | Pentagon Educational Services      | Dr.S.Jose        | MOU on publication of conference proceedings | All Depts                          | Nov-14 | 100000           |
| 9            | Industrial visit | Visit to Maruti Udyog Ltd, Chennai | TS Krishna Kumar | Chennai                                      | 5 faculties                        | Dec-14 | 160,000          |
| 10           | Industrial visit | Visit to HAL, Bangalore            | Nizar Hussain    |  | 10 faculties and 4 technical staff | Dec-14 | 2,00,000         |
| <b>TOTAL</b> |                  |                                    |                  |  |                                    |        | <b>1,335,000</b> |

**TKM COLLEGE OF ENGINEERING ,KOLLAM**  
**EQUITY ACTION PLAN**

**Statements of Expenditure**

| Amount Actually spent as on October 2013 | Amount Planned to spent during Nov 2013 - Dec 2014 | Total               |
|--|--|---------------------|
| 3.137 lakhs                              | 43.97 lakhs  | <b>47.107 lakhs</b> |

**(I) PROGRAMS CONDUCTED UNDER THE EQUITY ACTION PLAN, JUNE-OCTOBER 2013**

| Sl. No. | Name of Programme  | BOG Approval | Date of conduction of the programme | No. of students attended | Expenditure (Rupees) | Outcome  |
|---------|--|--------------|-------------------------------------|--------------------------|----------------------|--|
| 1       | AutoCAD training for the V semester Civil Engg. Students   | Approved     | June 2013 – August 2013             | 138                      | 70000                | The students wanted to learn the software since for practical applications the drawings are made using AUTOAD rather than manual drawing. In the present semester they are learning the building drawing. So the students got benefited from this training programme in fully understanding the subject. |
| 2       | Diagnostic test for the Final year students in English, numerical aptitude and Logical reasoning | Approved     | 25-07-13 to 27-07-13                | 500                      | 6600                 | The weak students who are in need of the improvement in communication skill and other soft skills are identified. From the results we could specifically identify the aspects  |

|   |   |          |                      |    |       |  |
|---|---|----------|----------------------|----|-------|--|
|   |   |          |                      |    |       | in which they need more attention.   |
| 3 | A bridge course in mathematics for the lateral entry students of III semester                   | Approved | 01-07-13 to 31-07-31 | 50 | 21600 | Fundamental concepts of Engg. Maths is given to the students. This will help them in understanding the III semester mathematics. The syllabus for the bridge course was formulated so that the first year mathematics is fully covered. Students gave the feedback that this programme was very effective. |
| 4 | Motivational Talk   | Approved | 31-07-13             | 50 | 2000  | This talk, was highly motivating to the students who want to prepare for the Engineering Services Examination.   |
| 5 | Special coaching in C++ for the III semester ECE students who are weak in Computer Programming. | Approved | 20-07-13 to 31-08-13 | 35 | 27000 | The students who have studied biology in the plus two level got benefited from this special training course  |
| 6 | Induction programme for the I year students   | Approved | 13-08-13 to 14-08-13 |    | 99600 | This programme helped the newly admitted students by motivating and guiding them in many aspects to face the challenges in engineering education   |

|   |   |          |                          |     |                       |   |
|---|---|----------|--------------------------|-----|-----------------------|---|
| 7 | Diagnostic test for the I year  | Approved | 21-08-13                 | 620 | 13000                 | The weak students at the entry level(Plus 2) in mathematics , physics, problem solving & English are identified. For Chemical Engg. Students a diagnostic test on chemistry is conducted for identification of weak students. |
| 8 | Bridge course for the I year students as per the results of diagnostic test.                          | Approved | September – October 2013 | 320 | 70000                 | Subject knowledge upgradation at the entry level to make them fit for engineering education.  |
| 9 | An intensive training programme on Data structures and pointers in Cfor the VII semester ECE students | Approved | September 2013           | 40  | 3900                  | Enhancing the employability rates.  |
|   |   |          |                          |     | <b>Total (Rupees)</b> | <b>313700</b>   |

**(II) TARGETS / PLAN EQUITY ACTION PROGRAMMES, (OCTOBER – DECEMBER 2013)**  
**(Programmes Initiated/ Ongoing, Approved by BOG )**

| <b>Sl. No.</b>        | <b>Action</b>   | <b>Tentative month/Date</b>        | <b>(Expected) Expenditure (Rupees)</b> | <b>Objective / (Expected ) Outcome</b>  |
|-----------------------|---|------------------------------------|--|---|
| 1                     | Soft skills and communication skill development programme for the VII semester students | November/December 2013 (Initiated) | 5,00000                                | To improve usage of English for written and oral communication and other soft skills          |
| 2                     | Remedial Classes for the weak students III semester (All branches together)             | October to December 2013 (Ongoing) | 1,00000                                | To help in knowledge upgradation in the subject area, this will enhance the transition rate.  |
| 3                     | Remedial Classes for the weak students V semester (All branches together)               | October to December 2013(Ongoing)  | 1,00000                                | To help in knowledge upgradation in the subject area, which will enhance the transition rate. |
| 4                     | Remedial Classes for the weak students VII semester(All branches together)              | October to December 2013(Ongoing)  | 1,00000                                | To help in knowledge upgradation in the subject area,which will enhance the transition rate.  |
| 5                     | Specialist classes for the first year students  | October to December 2013(Ongoing)  | 30,000                                 | To support the first year students in difficult subjects.                                     |
| <b>Total (Rupees)</b> |   |                                    | <b>830,000</b>                         |   |



**(III) EQUITY ACTION PLAN - PROGRAMMES, PLANNED FOR (JUNE-SEPTEMBER 2013),  
(Approved By the BOG & To be conducted by 31<sup>st</sup> December 2013)**

| <b>Sl. No.</b> | <b>Action</b>  | <b>(Expected) Expenditure (Rupees)</b> | <b>Objective / (Expected ) Outcome</b>   |
|----------------|--|--|--|
| 1              | An intensive training programme on “Total Station” for the V semester Civil Engineering students                     | 1,00000                                | To help the students to get awareness in using the state of the art technology/ equipment.           |
| 2              | Special coaching in C++ for the IV semester students (Mechanical & production), who are weak in Computer Programming | 1,00000                                | To improve the programming skills of students those, who have studied biology in the plus two level. |
| 3              | Special coaching in C++ for the VI semester( Civil and EEE), who are weak in Computer Programming                    | 1,00000                                | To improve the programming skills of students those, who have studied biology in the plus two level. |
| 4              | Training programme on memory improvement   | 70000                                  | To improve memory skills, which will help the students in the learning process.                      |
| 5              | Motivational Talk for the ECE students on Engineering services Examination   | 10000                                  | To help in the preparation for IES and other national level competitive examinations                 |
| 6              | Motivational Talk for the EEE students on Future of an Electrical Engineer   | 10000                                  | To motivate the students in choosing the proper employment in Electrical engineering.                |
| 7              | An intensive training programme on JAVA, SQL & C for the VII semester ECE students                                   | 100000                                 | To enhance the employability rates.  |
| 8              | A course on Practical applications of Control Systems for the VIII semester EEE students                             | 30000                                  | To help the students to understand the practical applications of control systems.                    |
| 9              | An intensive training programme on power system analysis for the VIII  | 30000                                  | To help the students to have better understanding in analysis.                                       |

|                |   |                |  |
|----------------|---|----------------|--|
|                | semester EEE students   |                |  |
| 10             | Motivational programme for the III semester students<br>(All students)                  | 75000          | Awareness in recent advances in the subject areas of the respective branch and the importance of curriculum. |
| 11             | Soft skills and communication skill development programme for the III semester students | 100000         | To improve usage of English for written and oral communication and other soft skills                         |
| 12             | Soft skills and communication skill development programme for the V semester students   | 100000         | To improve usage of English for written and oral communication and other soft skills                         |
| 13             | A course on virtual laboratory as per the need analysis                                 | 30000          | To help the students to do the lab experiments, virtually, on a 24x7 basis                                   |
| Total (Rupees) |   | <b>7,55000</b> |  |

**(IV) TARGETS / PLAN EQUITY ACTION PROGRAMMES, (JANUARY 2014 – MARCH 2014)**  
**(Programmes to be approved by the BOG and To be conducted)**

| <b>Sl. No.</b> | <b>Action</b>  | <b>(Expected) Expenditure (Rupees)</b> |
|----------------|--|--|
| 1              | An intensive training programme on “STADD-Pro V8i” for the VIIIsemester Civil engineering students (2010 Admissions) | 1,00000                                |
| 2              | Invited Talks for Civil Engg Branch ( S1, S3, S5 & S7 students)  | 12,000                                 |
| 3              | Project Planning Software training   | 1,00000                                |
| 4              | Invited Talks for Mechanical Engg& Production Engg Branch ( S1, S3, S5 & S7 students)                                | 15000                                  |
| 5              | AutoCAD training for the EEE Students  | 1,00000                                |
| 6              | Software Training programme for EEE students   | 25, 000                                |
| 7              | Introduction to JAVA programming and application development using advanced concepts of JAVA for CSE Branch          | 25000                                  |
| 8              | Antroid workshop for CSE Branch  | 10,000                                 |
| 9.             | Computer Hardware maintenance, networking and trouble shooting for CSE Branch  | 10000                                  |
| 10             | Workshop on LINUX for CSE Branch   | 10,000                                 |
| 11             | Workshop on pressure vessel testing and fabrication for Chemical Engg Branch   | 25,000                                 |
| 12             | “CHEMGUARD” training programme for Chemical Engg Branch  | 40000                                  |
| 13.            | ASPEN Training programme for Chemical Engg Branch by experts from KRL  | 25000                                  |
| 14             | Remedial Classes for the weak students I& II Semester (All branches together)  | 70000                                  |
| 15             | Remedial Classes for the weak students IV Semester (All branches together)   | 50000                                  |

|                       |  |               |
|-----------------------|--|---------------|
| 16                    | Remedial Classes for the weak students VI Semester(All branches together)              | 50000         |
| 17                    | Remedial Classes for the weak students VI Semester(All branches together)              | 50000         |
| 18                    | Training in in simulation tool for product design and PCB fabrication for ECE students | 25000         |
| 19                    | Training on JAVA and Data structure for ECE students                                   | 30000         |
| 20                    | Management skill development programme for ECE students                                | 10000         |
| <b>Total (Rupees)</b> |  | <b>782000</b> |

**(V) TARGETS / PLAN EQUITY ACTION PROGRAMMES, (APRIL 2014 – SEPTEMBER 2014)**  
**(Programmes to be approved by the BOG and To be conducted)**

| <b>Sl. No.</b> | <b>Action</b>  | <b>(Expected) Expenditure (Rupees)</b> |
|----------------|--|--|
| 1              | An intensive training programme on “STADD-Pro V8i” for the Civil engineering students (2011 Admissions)  | 2,00000                                |
| 2              | MATLAB Training for Civil engineering students (2011 Admissions)   | 25000                                  |
| 3              | AutoCAD training for the V semester Civil Engg. Students ( 2012 Admission)                               | 75000                                  |
| 4              | Training on Piping Design (QA/QC) for for Mechanical Engineering students                                | 60000                                  |
| 5              | Management training for EEE students   | 25000                                  |
| 6              | Training programme on Robotics and MEMS for EEE students   | 25, 000                                |
| 7              | Software training for EEE students   | 75,000                                 |
| 8              | Soft skills and communication skill development programme for the III semester students (2013 Admission) | 100000                                 |
| 9              | Soft skills and communication skill development programme for the V semester students (2012 Admission)   | 100000                                 |
| 10             | Soft skills and communication skill development programme for the VII semester students (2011 Admission) | 5,00000                                |
| 11             | Intensive training/ Finishing school programme for the passed out students                               | 5,00000                                |

|    |   |        |
|----|---|--------|
| 12 | Special coaching in C++ for the III semester ECE students who are weak in Computer Programming (2013 Admission) | 40000  |
| 13 | Induction programme for the I year students (2014 admission)  | 100000 |
| 14 | Diagnostic test for the I year (2014 Admission)   | 15000  |
| 15 | Bridge course for the I year students as per the results of diagnostic test.                                    | 70000  |
| 16 | An intensive training programme on power system analysis for the VIII semester EEE students                     | 15000  |
| 17 | Invited talks in various fields of Electronics Engg   | 10000  |
| 18 | Expert lecture to give awareness about higher education for ECE students  | 10000  |
| 19 | Training programme in Simulink for ECE students   | 20000  |
| 20 | Expert lecture on optical communication for ECE students  | 10000  |
| 21 | Expert lecture on improving confidence level to ECE students  | 5000   |
| 22 | Workshop on nondestructive testing methods  | 15000  |
| 23 | Workshop on awareness of industrial machinery   | 15000  |
| 24 | Workshop HTML-5 for CSE students  | 10000  |
| 25 | Training on Operating system and Network programming for CSE students   | 10000  |
| 26 | Training on network security issues and optimization techniques for CSE students                                | 5000   |
| 27 | Training on Design and analysis of Algorithms for CSE students  | 10000  |
| 28 | Introduction to soft computing techniques for CSE students  | 10000  |

|                       |                 |
|-----------------------|-----------------|
|                       |                 |
| <b>Total (Rupees)</b> | <b>20,30000</b> |

**(VI) TARGETS / PLAN EQUITY ACTION PROGRAMMES, (OCTOBER 2014 – DECEMBER 2014)**

| <b>Sl. No.</b> | <b>Action</b>   | <b>(Expected) Expenditure (Rupees)</b> |
|----------------|---|--|
| 1              | Remedial Classes for the weak students I& II Semester (All branches together)                           | 70000                                  |
| 2              | Remedial Classes for the weak students III semester (All branches together)                             | 50000                                  |
| 3              | Remedial Classes for the weak students V semester (All branches together)                               | 50000                                  |
| 4              | Remedial Classes for the weak students VII semester(All branches together)                              | 50000                                  |
| 5              | An intensive training programme on “Total Station” for the Civil engineering students (2012 Admissions) | 1,00000                                |
| 6              | Special coaching for competetive examinations   | 1,00000                                |
| 7              | Expert lecture series for the EEE students  | 10,000                                 |
| 8              | Training on DSP kit for the EEE students  | 10000                                  |
| 9              | Training on Neuro linguistic programming for the EEE students   | 10,000                                 |
| 10             | Training on data mining techniques for the CSE students   | 10,000                                 |
| 11             | Introduction to advanced data structures for the CSE students   | 10,000                                 |
| 12             | Three days training on heat exchange network for chemical Engg students                                 | 15000                                  |

|                       |   |               |
|-----------------------|---|---------------|
| 13                    | Training programme to motivate effective research | 5000          |
| <b>Total (Rupees)</b> |   | <b>490000</b> |