

Annual Quality Assurance Report (AQAR) of the IQAC

Rajagiri School of Engineering & Technology

Year of the Report: 2010-11

PART - A

The plan of action chalked out by the IQAC in the beginning of the year towards quality enhancement and the outcome achieved by the end of the year.

The period 2010-2011 marked the Decennial Year of RSET. The Decennial Year celebrations were formally inaugurated on March 6, 2010 by Prof. K.V. Thomas, Union Minister of State for Agriculture & Food Production. Rt. Rev. Sebastian Adayanthrath, Auxiliary Bishop of the Ernakulam-Angamaly Archdiocese presided over the inaugural ceremony. The Valedictory Function was on February 10, 2011. Dr. G. Madhavan Nair, Former ISRO Chairman was the Chief Guest on the occasion. Mar Bosco Puthur, Curia Bishop, presided over the same.

The overall plan of action for Internal Quality enhancement during the year 2009-10 is mentioned below:

- To initiate new post graduate courses in Signal Processing(2010-11),Industrial drives and control(2010-11).
- Motivate the faculty to identify their research area and register for PhD
- Encourage the faculty to publish their research papers in National/International journals
- Strengthen the department association activities
- Improve the department library
- Provide opportunities for interacting with eminent people from industry and academia
- Explore avenues for industry-institute interaction
- To organize more number of workshops and training programme
- To encourage the students in Social service activities
- To have more number of programs on Faculty development & training

PART - B

1. Activities reflecting the goals and objectives of the Institution:

- **To initiate new post graduate courses in Signal Processing(2010-11),Industrial drives and control(2010-11)**
 - Two new PG programs were introduced, Signal Processing and Industrial Drives and Control

- **Motivate the faculty to identify their research area and register for PhD**
 - RRCC organized research lectures during the period
 - A Few faculty members have published their papers in International Journals

- **Improve the department association activities**
 - Department association has initiated some activities and few talks on the current trends

- **Provide opportunities for interacting with eminent people from industry and academia:**
 - March 6, 2010 – Prof. Dr. Dr-Ing.habil.H. Muller Steinhagen, Director, Institute of Thermodynamics, German Aerospace Center
 - July 22, 2010 – Mr. S. Unnikrishnan Nair, Project Director, Human Space Flight Mission, ISRO
 - January 17, 2011 – Dr. S.K. Sinha, IISc, Bangalore, delivered a lecture on Power Electronic Controllers

- February 3, 2011 – Prof. Kishore Chatterjee, Electrical Department, IIT Bombay, delivered a lecture on Speed Control Techniques of Induction Motors
- March 1, 2011 – Prof. D. Tukaram, Professor, Electrical Department, IISc, Bangalore, delivered a lecture on Power Electronic Application in Power Systems

- **Explore avenues for industry-institute interaction**
 - MoU was signed with Yokogawa India Ltd on June 22, 2010 to conduct training programmes in Process Control & Instrumentation. The first batch underwent this programme from August 18-November 20, 2010

- **To evolve some MOU's in consultancy work**
 - Few consultancy work has been initiated and has started working on the same

- **To organize more no of workshops and training programme**
 - Workshop on 'Web designing and Networking' for Xth standard students from April 19 to 23, 2010
 - LabVIEW Hands-on Training and Certification Programme in collaboration with Trident TechLabs, Bangalore for the faculty members from April 26 to 29, 2010
 - Preparatory Course cum Career Guidance Programme for Plus Two completed students was conducted from May 10 to 21, 2010
 - Short-term course in 'PIC Microcontroller' from June 16 to 23, 2010
 - Workshop on 'Compiler Construction' from June 21 to July 2, 2010 for faculty members and postgraduate students
 - One-day workshop on Recent trends in the Design, Development, and Conduct of Experiments in state-of-the-art Electrical Machines Laboratories in Engineering Colleges on October 20, 2010

- Workshop for students on vCloud Computing was organized by CSI & VMware on January 29, 2011
- One-day workshop on Digital Signal Processors & their Applications by CRANES Software, authorized training center of Texas Instruments on February 14, 2011
- 3-day hands-on-training on ARM PROCESSOR in February 2011
- 3-day National Workshop on Network Simulation using NS2, was organized in association with ISTE, Kerala Chapter, & CSI, Kochi Chapter from April 26-28, 2011
- A one-month intensive training programme on Instrument Technology & Control System was organized in May 2011

➤ **To have more number of programs on Faculty development & training**

- Faculty Development Programme on 'Signal Processing in Biomedical Applications' from May 3 to 14, 2010
- FDP talk by Dr. Devadas Menon, IIT Chennai, was organized on May 23, 2011

2. New academic Programs initiated (UG and PG):

- M.Tech in Signal Processing
- M.Tech in Industrial Drives and Control

3. Innovations in curricular design and transaction:

Rajagiri School of Engineering & Technology is affiliated to Mahatma Gandhi University, Kottayam, Kerala. The institute does not have any flexibility of curriculum other than to follow the curriculum by the university to which it is affiliated. Faculty members from the college have contributed significantly to the development of curriculum during syllabus revision meetings conducted by M. G. University.

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However to bridge the gap between the syllabus and the industry needs we conduct invited talks, workshops and seminars. The faculty members are encouraged to use the visual media to transact the same to the students to make it more effective.

4. Inter-disciplinary programs started:

Nil

5. Examination reforms implemented:

A Software to automate the entire examination procedures, PRAGATI was introduced. The PRAGATI has provisions for faculty to opt examination duty on date of convenience, swap duties after option, generating students room allocation list, absentees list & consolidated duty list of faculty. RSET alumni and former faculty Nishant R. (2005-2009 batch) created the software.

6. Candidates Qualified: NET / SET / GATE etc.

| Qualifying Examination | No. of students |
|------------------------|-----------------|
| Gate Examination | 59 |

7. Initiative towards Faculty Development Programs:

| Department | Faculty / Staff Development Programmes | Number of faculty benefitted |
|------------|--|------------------------------|
| CSE | Summer / Winter schools, Workshops, etc. | 33 |
| ECE | Summer / Winter schools, Workshops, etc. | 13 |
| EEE | Summer / Winter schools, Workshops, etc. | 0 |
| IT | Summer / Winter schools, Workshops, etc. | 6 |

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| | | |
|--------------|--|-----------|
| AE | Summer / Winter schools, Workshops, etc. | 12 |
| BSH | Summer / Winter schools, Workshops, etc. | 0 |
| Total | Summer / Winter schools, Workshops, etc | 64 |

8. Total number of seminars / workshops conducted:

- Wavelets & its Application- conducted by RSET Nov-Dec 2011
- 10-hr. FDP on 'Wireless Communication' by Prof. Karthikeyan Chittayil, ECE Dept, 2011.
- FDP on Semiconductors at RSET, 2011
- Three days workshop on LabVIEW at RSET by TRIDENT Labs in 2010
- International Workshop on Embedded Computing and Communication Systems (IWECC 2011) on 22nd and 23rd December, 2011 organized by Department of Electronics and Communication Engineering, Rajagiri School of Engineering and Technology, Kochi, Kerala, India.
- One day Workshop on "Fractals & Applications" at RSET on 18th December, 2010
- One day Workshop on "Fractals & Applications" at RSET on 18th December, 2010.
- Linear Algebra conducted by RSET Nov-Dec 2010
- Op-amp basics - conducted by RSET Nov-Dec 2010.
- Three day workshop on "Technology Trends in Silicon Nanoelectronics & Embedded System Design" at RSET from 23rd to 25th November 2010.
- Clustering algorithms & applications, Semiconductor devices FDP's at RSET during Nov-Dec 2010.
- FACULTY DEVELOPMENT PROGRAMME, NOV - DEC 2010 Control System by Prof.K.R. Varmah.
- Three day workshop on 'Technology Trends in Silicon Nano Electronics & Embedded System Design' at RSET from Nov 23-25,2010
- Semiconductor devices FDP at RSET during Nov-Dec 2010.

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→ Two Day workshop on 'Energy Audit Training' conducted by Energy Management Centre, Trivandrum at RSET from Oct 8-9,2009

9. Research projects a) Newly implemented: NIL

b) Completed: NIL

10. Patents generated, if any.

NIL

11. New collaborative research programs:

NIL

12. Grants received from AICTE /University:

NIL

13. Details of research scholars:

| Name of the Scholar | Department, Institution/Organization | Name of guide | Part Time / Full Time |
|----------------------------|---|----------------------|------------------------------|
| Meena V(AEI) | NIT Calicut(AEI) | Dr.G Abhilash(AEI) | Part Time |
| Sonia Paul (BSH) | MG University | Dr. Celine E. | Part Time |
| Ram kumar P.B. (BSH) | CUSAT | Dr. K.V. Pramod | Part Time |
| Sreeja K.U. (BSH) | BITS Pilani | Dr. Vinodkumar P.B. | Part Time |
| Murali T.K.(BSH) | MG University | Dr. Sunny Kurialose | Part Time |
| Shibu P.P. (BSH) | Karpakam University | Dr. Binu M.R. | Part Time |

14. Citation index of Journals, faculty members and impact factor of Papers:

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- Sunny Joseph Kalayathanka· G. Suresh Singh, P. B. Vinodkumar, Sabu Joseph, Jobin Thomas , MADM Models Using Ordered Ideal Intuitionistic Fuzzy Sets, Advances in Fuzzy Mathematics
- Vinod Kumar P.B., Chaos in DNA sequences, Int. J. of Bif.& Chaos, 2011, 5, 67- 91. Fractal analysis of aperiodic signals, IEEE trans. On Signal Processing

15. Honors / Awards to the faculty:

NIL

16. Internal resources generated:

NIL

17. Details of departments getting SAP, COSIST, (ASSIST) DST, FIST, etc. assistance / recognition:

NIL

18. Community services:

| SL NO | Community Services | Date | Agency & Place |
|-------|---|---|---------------------------|
| 1 | Sevana Varam | 2 nd October 2010 | NSS Rajagiri Campus |
| 2 | Blood Donation Campaign | 20 th September 2010 | NSS Rajagiri Campus |
| 3 | Padayatra | 1 st Jan to 15 th Jan2011 | NSS Ernakulam District |
| 4 | Distribution of bicycles and study tables | Jan 2011 | NSS Rajagiri Campus |
| 5 | Campaign against Drug abuse | 6 th Jan 2011 | NSS of RSET unit Aluva |

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| | | | |
|---|-----------------|------------|--|
| 6 | Medical Camp | April 2011 | More than 100 patients in and around kakkanad. Conducted with the help of Medical Trust Hospital |
| 7 | Orphanage Visit | April 2011 | Home of Faith, Kakkanad |

19. Teachers and officers newly recruited:

- Ms. Elizabeth Isaac (CSE Dept.)
- Ms. Nisha Rani D. (CSE Dept.)
- Ms. Mary John (IT Dept.)
- Mr. Sijo Cherian (IT Dept.)
- Dr. Abraham Thomas (AE Dept.)
- Ms. Priya S. (AE Dept.)
- Ms. Shanmuga Priya M (AE Dept.)
- Mr. Rony Antony P. (ECE Dept.)
- Ms. Preethi Bhaskaran (ECE Dept.)
- Ms. Swapna Davies (ECE Dept.)
- Ms. B. Santhi (EEE Dept.)
- Mr. Ginnes K. John (EEE Dept.)
- Mr. Thomas K.P. (EEE Dept.)
- Ms. Caroline Ann Sam (EEE Dept.)
- Ms. Salitha K. (EEE Dept.)
- Mr. Sidheek P.A. (ME Dept.)
- Ms. Anitha Varghese (CE Dept.)
- Mr. Jose Mathew (BSH Dept.)
- Mr. Sijo Thomas (Library)
- Mr. Rijo K. Varghese (Finance)
- Mr. Nithin P. Vijayan (Lab Assistant)
- Ms. Telma Rose P.A. (Lab Assistant)

20. Teaching – Non-teaching staff ratio: 1:3

Total no: of Permanent Teachers = 148 (Prof.=21, Asso. Prof. = 2,

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Asst. Prof. = 60, Lecturers = 65)

Total no: of Non-Teaching Staff = 63 (Technical =30, Admn. Staff = 33)

21. Improvements in the library services:

- Central Library is fully computerized and is kept open from 8.00 A.M to 8.30 P.M on all working days and 9.30 A.M to 4 P.M on Sundays and Holidays. Apart from Central Library, we have department library also.
- The online access of e-journals and internet browsing facility in the Digital Library with the improved infrastructure made available for the above timing.
- The library provided computerized circulation of books, OPAC search facility etc.
- OPAC Library provides the options for searching new arrivals, collections, journals, E-resources, Dictionary etc.
- The library provided Digital Database with NPTEL Video Lectures and Institutional Repository.
- RSET Institutional Repository includes the collections of Competitive Examination Question Papers, Conference Proceedings, Department Publications, Faculty Collections, Internal Examination Question Papers - Post Graduate, Master's Thesis Reports - Post Graduate, University Question Papers - Post Graduate and University Question Papers - Under Graduate.

22. New books / journals subscribed and their value:

| Year : 1st April 2010 - 31st March 2011 | | | |
|--|--------------------|-----------------------|------------------|
| Sl. No. | Particulars | Quantity(Nos.) | Value(RS) |
| 1 | Text Books | 1820 | 440398.3 |
| 2 | Reference Books | 463 | 753276.7 |
| 3 | Journals | 39 | 116119 |
| 4 | E-Journals | 241(IEEE/IET-IEL) | 386750 |
| 5 | CD & Video | 58 | - |

23. Courses in which student assessment of teachers is introduced and the action taken on student feedback:

Student feedback on all the theory and the lab courses are taken at the semester end and the same will be available for the corresponding faculty online. HOD will be able to see the feedback of all the faculty and corrective measures are suggested to the faculty.

24. Unit cost of education:

Rs.63999/-

25. Computerization of administration and the process of admissions and examination results, issue of certificates:

Automation of the admission process done from distribution of application form, segregation, rank list generation to allotment. Application forms are available both offline and online. Examination results are obtained from university website and later on certificates are issued through college.

26. Increase in the infrastructural facilities:

- CODD Lab was set up with an area of 63.81 sq. m in CSE department.
- A new Lab was set up with a total area of 70 sq. m and consisting of 30 computers for the PG students in ECE department.
- Maintenance is done in different departments under various heads at total cost of 32.35 lakhs.

27. Technology Upgradation:

- A total of 12 Desktop computers were purchased in various departments.
- Five important equipments (> 1 lakh) were purchased in various departments during the year 2010-11.
- One computer lab is added in CSE department.
- Purchase of softwares and equipments include Or CAD Up gradation, ASIC Flow Manometer for Design flow tools from Mentor Graphics, Embedded system boards including FPGA and Beagle Boards. Also a workstation DELL T3500 was purchased.

- The Department staff members have separate accounts to save their data and they may use internet and intranet any time free of cost.
- RSET Intranet Services includes New Books @ Library, OPAC @ Library, RSET Institutional Repository, NPTEL Course materials, NPTEL Video lectures, Digital Library, RSET Course materials, PRAGATI-EXAMINATION SOFTWARE, Rajagiri Student Management System etc.
- The institution has a total of 12 Mbps line for internet.
- Laptops were provided to the selected faculty members.

28. Computer and internet access and training to teachers and students:

COMPUTER AND INTERNET ACCESS

- All faculty members are provided with Laptops on seniority basis.
- All students have separate login accounts to store their data in the college server.
- Separate accounts are given to all the staff members to save their data and use internet and intranet any time free of cost.
- All the staff rooms are equipped with a computer and printer with internet and intranet access.
- Entire campus is Wi-Fi enabled and all computer labs have Internet access. All the staff members can access it at any time.
- The Wi-Fi facility is available in the college hostels also.
- The institution has a total of 12 Mbps line for internet.

TRAINING TO TEACHERS AND STUDENTS

- 10-hr. FDP on 'Wireless Communication' by Prof. KarthikeyanChittayil, ECE Dept,2011
- FDP on "Stochastic Optimization" on May 2011.
- 11-16 may 2011 software adaptation on multicore platforms.
- 18, 24-27, 30 may 2011 project management.
- Three day training on 'Innovate ARM 926 kits' at RSET from Feb17-19,2011 by Innovate Software Solutions PvtLtd,Bangalore

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- 5-day (10-hour) course on Project Management at RSET - 18-May-2011 to 30-May-2011 - Prof. K. S. Mathew (DCS) , RSET
- 10-hr. FDP on 'Wireless Communication' by Prof. KarthikeyanChittayil, ECE Dept,2011
- Post Doc Fellow, UKIERI project in collaboration with University of Kent, UK, Jan – Dec 2011, Participated as co - investigator in the British Council funded collaborative research project under the UK India Education and Research Initiative (UKIERI) on "Integrated Smart Antennas for Next Generation Millimeter-Wave Wireless Communication". (DDK)
- Chaired the sessions on Digital system design, International symposium on Electronic System Design (ISED 2011). (JA)
- A Session on "Cognitive radio opportunities and Challenges" in the FDP on "System level Modeling, Design and Analysis: A Practical Approach" at CUSAT , kochi, during 6-17 June, 2011. (JJ)
- One day workshop on "Embedded System Design", on 20th April, 2010 at PG Center, RECT-IGNOU, Rajagiri Valley Campus, Kakkanad, Kochi, India.
- 6-17 December 2010 Linux Administration System.
- One day Workshop on " Fractals & Applications " at RSET on 18th December , 2010
- Two weeks Staff Development Programme on Signal Processing in Biomedical Applications from May 3rd – 14th, 2010 organized by Department of Electronics and Communication Engineering, Rajagiri School of Engineering and Technology, Kochi, Kerala, India.
- 10-hr. FDP on 'Control Theory' by Prof. RajendraVerma, EEE Dept,2010.
- Three day training on 'Innovate ARM 926 kits' at RSET from Feb17-19 by Innovate Software Solutions PvtLtd,Bangalore
- Fractals Application, Semiconductor Device Technology &Modelling, Semiconductor Devices FDP`s at RSET.
- AICTE sponsored SDP on 'Digital System Design Using Verilog HDL' organized by VLSI Design Group at DOEACC CENTRE Calicut from April 19- 30 ,2010

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- Three day workshop on 'Technology Trends in Silicon Nano Electronics & Embedded System Design' at RSET from Nov 23-25,2010
- Faculty Development Programme on Teaching Excellence & Methodology, conducted by ISTE in GEC, Thrissur. During 21-6-2010 to 26-6-2010
- FDP on 'Linear Algebra' conducted by RSET Nov-Dec 2010
- FDP on 'Op-amp basics' - conducted by RSET Nov-Dec 2010
- Session on 'Stop sleep walking through life' by Prof. (Dr.) Devdas Menon, Professor, IIT Madras, Feb 2010
- Two Week AICTE sponsored FDP on 'System Simulation Tools' at Govt. Engineering College, Kannur, 2010
- Short Term Training Program on 'Neural Network and Fuzzy System' at KJSIEIT, Sion, Mumbai from January 4-8, 2010.
- A Session on "Digital Image processing and its applications " in the FDP on Signal processing in Biomedical Applications, at RSET during 3-14 May 2010 (JJ)
- Handled sessions for the Latex Documentation Software for the S8 & PG students, January 2010 (RJ)
- Matlab Workshop for final year BTech students, December 2010 (RJ,SG,HA)
- A one day workshop on 'Lab Safety Measures' at RSET on Jan 16, 2010 (SG , AT)
- A Talk on the topic 'Embedded System- A Software Prospective' in the workshop 'Technology Trends in Silicon Nano Electronics & Embedded System Design' held at RSET from Nov 23-25,2010 (AT)
- Quiz Competition conducted in the Banner of IETE student Forum, March 2010 (SWG)
- Presented a seminar "Heart Rate Detection using pulse Dopplerradar" in FDP conducted by Electronics and communication engg. Dept. ,Nov 2010 (SWG)
- A Department Seminar on the topic "Optical Tweezers"held at RSET in 2010. (AM)
- Internal FDP on "OpAmp basics" from 23rd November to 3rd December, 2010.
- 21June to 2July2010 staff development program on compiler construction.
- 25-26,29,30 November 2010,1-3,6-8 December 2010 distributed computing environments.

29. Financial aid to students:

| | Number of students | Amount |
|---|---------------------------|---------------|
| Financial support from institution | 45 | Rs. 1892200 |
| Financial support from government | 112 | Rs. 18,72,061 |
| Financial support from other sources | 4 | Rs. 384000 |
| Number of students who received International/National recognitions | | |

30. Activities and support from the Alumni Association:

Each department has a faculty advisor for coordinating alumni activities

Alumni association

- a. Arrange periodic meetings of alumni
- b. Ensure alumni registration
- c. Prepare alumni news letter
- d. Maintain records of alumni & the meets that take place
- e. Proposing annual budget

31. Activities and support from parent-teacher Association:

PTA has an executive committee comprising the parents of students' branch wise and year wise and the representatives of the faculty including Director and the Principal

Committee meets at least twice in a year to discuss all matters of interest

32. Health services:

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The Medical Trust Hospital, Kochi operates the medical centre functioning in the campus, which has a full time nurse and a doctor whose services are available from 2pm to 4pm on Mondays, Wednesdays, Fridays and Saturdays.

33. Sports activities:

The athletically inclined students can take advantage of the cricket and football fields, basketball, volleyball, badminton and tennis courts and the jogging track on the campus. There is also provision for indoor games including table tennis. The campus has a health club and fitness centre.

Details of Department of Physical Education

| Sl.No | Name of the Area | Plinth Area in Sq.Mtrs |
|--------|---|------------------------|
| 1) | Basketball Courts with Floodlight Facility | 2050 Sq.Mtrs |
| 2) | Football Field | 5850 Sq.Mtrs |
| 3) | Cricket Ground | 9000 Sq.Mtrs |
| 4) | Volleyball Courts | 400 Sq.Mtrs |
| 5) | Throw ball Court | 200 Sq.Mtrs |
| 6) | Tennis Court | 600 Sq.Mtrs |
| 7) a. | Fitness Centre Gents | 500 Sq.Mtrs |
| b. | Fitness Centre Ladies | 500 Sq.Mtrs |
| 8) | Play Ground consist of 200mtrs Athletic Track, Long Jump Pit, Shot-put, Discus Throw pits and Javelin sector. | 6000 Sq.Mtrs |
| 9) a. | Department Room | 40 Sq.Mtrs |
| b. | Sports Store | 40 Sq.Mtrs |
| 10) a. | Indoor Badminton Court | 1000 Sq.Mtrs |
| b. | Table Tennis Area | 175 Sq.Mtrs |

34. Student achievements and awards:

| Sl. No | Name | Event name | Conducted/ Organized by | Position secured |
|---------------|--------------|---|--|-------------------------|
| 1 | Akash Mathew | IEDEC 2012 | International Society of Quality Electronic Design | Paper Selected |
| 2 | Akash Mathew | System Design Challenge | Dyuthi'12, GEC Thrissur | Second |
| 3 | Akash Mathew | Line Tracer Race | Naulilus 2K10, FISAT | Third |
| 4 | Abel Paul | General Quiz | Takshak 11, MAC | Third |
| 5 | Febin Philip | All kerala inter collegiate Encon Club Quiz | BPCL, Kochi Refinery | First |
| 6 | Febin Philip | Technical Quiz | Bodhi '12, VCET | Third |
| 7 | Febin Philip | All kerala inter collegiate Encon Club Quiz | Department of Physics , Sacred heart college and energy Conservation Society | First |
| 8 | Febin Philip | Technical Quiz | Bodhi '11, VCET | First |
| 9 | Febin Philip | Whats the funda | National level symposium conducted by IEEE student branch of Govt. Model Engineering College | Second |
| 10 | Febin Philip | System Design Challenge | Dyuthi'12, GEC Thrissur | Second |

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| | | | | |
|----|--|---|----------------|--------------|
| 11 | 1.Suvarna Bhaskaran 2.Reji Johny 3.Neelima Jimmy 4.Leetha James 5.Sruthi E Thomas 6.Jincy Joseph 7.Jan Priya James 8.Aysha Rashid 9.Serene Joy 10.Vinitha Raju 11.Brinda D Cheeran | Workshop on cloud computing conducted by VMWARE | National level | Participated |
| 12 | Rose Mary Roy | National level Techno-Managerial symposium | | Participated |
| 13 | Vivek Xavior Raju | Fugeniz-National level Techno-Management fest | SNGCE | Participated |
| 14 | Jinet Alphonsa Jose | Tech fest(Paper Presentation) | FESAT | Participated |
| 15 | Jinet Alphonsa Jose | Tech fest(Paper Presentation) | TOC_H | Participated |

35. Activities of the Guidance and Counseling unit:

The student welfare officer (SWO) of the college provides counseling services to the students with personal and psycho-social problems. The students are advised to

approach the SWO on their own if they require counseling services. Further, any teacher can refer the students to the SWO, if they feel the need. As a rule of thumb, academically backward students are usually referred to explore for stress factors in the students' life and to help them out in coping with the stress factors or resolving the stressful situations. Depending upon the nature of problems, the students are given different types of therapy like cognitive behavior therapy, assertive training, social skills training, supportive therapy etc. The students are free to call up the SWO any time and discuss issues over telephone or through texting as well. In order to establish rapport with the students, the SWO is allotted 4 – 5 sessions with the first year students every year.

No.of students benefitted

| |
|----|
| 81 |
|----|

36. Placement services provided to students:

The placement cell keeps track of openings within the country and abroad and brings in companies for campus recruitment. It prepares students for recruitment by providing training through aptitude tests, Group discussions and mock interviews. The objectives of the training cell are to help students develop their personality and equip them with additional skills necessary to succeed in the workplace. Courses offered by the cell are mandatory pre requisite for on campus placements. The areas of focus will include

- Self and Context Awareness
- Communication skills
- Decision making and Action Planning
- Team skills
- Values and Ethics
- Engineering and Professional skills

Training in the English language and communication skills receives priority in the RSET educational experience. Students are given practical and theoretical training in the language and communication theory in the first two years of the undergraduate programme, which is in addition to the university-prescribed course in communication skills. The RSET Language Lab, managed by the Department of Basic Sciences & Humanities, provides language tutorials for students who voluntarily opt for Remedial English classes. The exercises give the students exposure to a variety of listening and speaking drills, helping them to overcome language deficiencies, and improve their command over the language.

Students were recruited by top companies like

- Accenture
- Arbitron
- Birla Soft
- Bosch
- Caritor
- ChaYoWo Games
- Citigroup
- Convergys
- CTS
- Ernst & Young
- Federal Bank
- HCL
- Hexaware Technologies
- HP
- Huawei Technologies
- IBS
- i-Flex
- iGate
- Indian Navy
- Infosys
- Keane
- L&T Infotech
- Microsoft
- Mphasis
- NeST
- Reubro International
- Sasken
- SourceBits

- South Indian Bank
- Standard Chartered
- Subex
- Sun Tec
- Tata Elxi

| Placement year | No. of students placed | No of offers received | Average % of placement | Average no. of offers per student |
|----------------|------------------------|-----------------------|------------------------|-----------------------------------|
| 2010 | 327 | 432 | 88 | 1 |

37. Development programs for non-teaching staff:

To improve the skill of the support staff, the college deputed the members of the staff to undergo training and workshops organized by other institutions, universities and govt. organizations.

In house training programmes are also arranged by various departments to cater the needs of the support staff.

38. Healthy practices of the institution:

- Rajagiri software development unit is functional to fulfill all the software needs of RSET.
- The RSET website and associated framework for automating the **Rajagiri Students Management System (RSMS)**, RSET Digital library, RSET payroll management system ,RSET online examination system and exam automation system (**PRAGATI**) has been upgraded for smooth functioning of the institutional regular academic activities .
- Institutional repository (**GYAN**) as intranet facility is accessible to students and faculty.
- Rajagiri incubation centre (RIC) provides RSET alumni and students with facilities that help them design and develop the working models of their innovative ideas and concepts.
- Coaching classes are conducted for students for GATE examinations.

- College also organizes the training programmes, workshops and guest lectures in various domains to the students by experts from industry and academia.
- Institution regularly conducts career development programmes to enhance student skills
 - Company Specific Training Programme
 - Soft skill training programme.
- The college coordinates research activities in view of institutional projects and consultancy works through various groups within the department specialized in different core engineering.
 - To enhance research potential in faculty members and students.
 - Skill enhancement for improving student employability / for higher education.
- Remedial classes for below- average students are held periodically.
- The college organized technical symposium 'Abhiyanthriki' and arts festival Bharatham to boost the co-curricular and extra-curricular activities of the students.
- The college conducts poster presentation for first year students to enrich them with innovative ideas in different core engineering disciplines.
- The Honesty Shoppe successfully functioning in the college campus has essential stationary items which students may purchase by depositing the listed price in the money box.

NSS & Nature Club activities to support environmental awareness

- 5 days NSS programme in association with Rajagiri out reach, Kalamassery.
 - Suchitwa Bodhana Yajnam –Always.
 - (Exhibition, inter school competitions, street play & padayatra)
- Students participate in quiz competitions sponsored by BPCL and ENCON club.
- Made green campus by planting more than 50 saplings every year

Energy Conservation

- The college has been conscious about the energy conservation for which it constituted Energy Conservation and ENCON club to promote energy conservation awareness among students and society.

- College also promotes procurement and installation of efficient electrical systems to save electricity.

Use of Renewable Energy

- The College has a tie-up with Renewable Energy Centre MITHRADHAM Chunangamveli, which promotes solar energy awareness among student community.

39. Linkages developed with National / International, academic / Research bodies:

40. Any other relevant information the institution wishes to add:

PART - C

*** Plans of the Institution for the Next Year**

- Form study groups of students for improving the learning skills
- Faculty should identify topics of social relevance for student projects
- Insist on each M.Tech Student to produce at least a conference paper and a journal paper
- More Industry Institute interaction to strengthen and motivate the faculty
- For new courses in revised syllabus, arrange workshops for faculty
- Continue the Professional Association activities
- Prepare teachers and students lab manual
- Continue Organizing conferences/Workshops/Seminars
- Motivate Project/ Consultancy work
- Continue conducting Short term Courses