1. INTRODUCTION

Govt. Engineering College, Sreekrishnapuram, which made a humble beginning in 1999 in an old building of Sreekrishnapuram Gramapanchayat now occupies the largest single building among Govt. Engineering colleges in the state. While remembering the difficult days of the past, we recognize the fact that we have a lot to achieve from the present comfortable position. We are in the process of consolidation, and only meticulous planning and diligent working will bring good results. This report highlights the several milestones that we have crossed during 2010-11, such as:

- Shifting to the sprawling main building with spacious class rooms and labs
- Establishing several SMART classrooms
- Establishing various sub centers, such as the CCE, NSS, CERD, Industry Institute Interaction Cell, Counseling Cell etc.
- Conducting several invited lectures by distinguished faculty from premier institutions, such as the DoS, IIT, NIT etc.

Details of these achievements follow.

2. INAUGURATION OF THE MAIN BUILDING

The sprawling main building, measuring more than 2 lakh sq.feet, was inaugurated by the Hon. Chief Minister Sri. V.S Achuthanandan on 1 August 2010 in a glittering function attended by several dignitaries including Sri. M.A Baby (Hon. Minister for Education), Sri. Paloli Mohammed Kutty (Hon. Minister for Local Administration), Sri. Jose Baby (Hon. Dy. Speaker), and Dr. Kuncheria.P.Isaac (Director of Technical Education). Smt. K.S Saleem, Hon. MLA, Sreekrishnapuram and Sri. M.B. Rajesh (Hon. MP, Paladin) were also present. In this function, the Edusat Room, Office Wing, and the Central Library were also dedicated to the student community. Sanction for a new M. Tech course in Computational Linguistics in the Dept of Computer Science & Engineering was announced in the function. Rank holders of the previous years were felicitated during the function. Students, parents, staff, and the general public participated in large numbers.

3. DEPARTMENTS AND THEIR ACHIEVEMENTS

The Dept. of CSE has conducted a training program under the STEP4U program, and offered a Short Term Course for faculty in Jan 2011. We have also embarked on the campus networking program, multi gym, hostel construction, Digital Library

subscription, etc. Dept. of ECE has started a course on NI Lab View software through the CCE, and other departments will follow suit.

3.1 Publications by the Faculty and Students

a. Dept. of CSE

1. Dr. K Najeeb: Open source Frame work for verification of Computer Architectural feature using CSP. In Proc. Int. Conference on Embedded Systems (ICES 2010, Bangalore) with Arun A.M, Robert Jesuraj and Santhosh Kumar, 2010 CSE.

2. Dr. K Najeeb: GAP: Genetic Algorithm based Power estimation technique for Behavioral Circuits. In Proc. Int. Conference on Computers, Communication and Intelligence (ICCCI'10)with John Paul and Elson Paul, 2010 CSE.

3. Dr. K. Najeeb: "Analysis of on-chip interconnect delay for 65nm and beyond".Proc. Int. Conference on Recent Innovations in technology ICRIT 2011, RIT Kottyam (with Praveen. V, Neeraj. R, Dayanand V, Ajith T.S, 2011 CSE).

4. Dr. K Najeeb: PASE: Framework for Power Aware Scheduling in Cloud: Communicated to the IEEE Int. Conference on Communication Systems and Network (COMSETS 2011), with Ranjith K, Sriram K.V, Jijo Johnson and Rahul 2011 CSE, Bangalore.

5. Dr. K. Najeeb: "CAT: An open source tool for crosstalk analysis in on-chip buses": International Conference on Advances in Computing and Communications (ACC-2011), Rajagiri School of Engineering Technology, Kochi (with Dayanand V, Praveen. V, Neeraj. R, Ajith T.S, 2011 CSE)-communicated.

6. Dr. K. Najeeb: "Validation of MSI protocol using formal approach". International Conference on Advances in Computing and Communications (ACC-2011), Rajagiri School of Engineering Technology, Kochi (with Ardra P.S, Vrinda V, remya Ramadas, Remya T, Vinitha , 2011CSE)-communicated.

7. Dr. K Najeeb: Framework for Forum Web Page summarization using MAP REDUCE Paradigm for Text Data Mining with Arun A.M, Robert Jesuraj, Santhosh Kumar and Soorya S. 2011 CSE– Communicated to the 5 th International Conference on Communication systems and Network (COMSNETS 2011) Bangalore.

8. Dr. P.C. Reghu Raj: "The World of Actions through words of actions": National Journal *Carmelite*, published by Mount Carmel College, Bangalore (with Dr.P.C.

Jyothirmayi, Dept. of Sanskrit, Mount Carmel College, Bangalore)- communicated.

b. Dept. of ECE

1. A.R. Jayan and P.C.Pandey:"Detection of burst onset landmarks using rate of change of spectral moments". *17th National Conference on Communication NCC2011* , 28 – 30 Jan 2011, Bangalore.

- Job Chungath: Enhancing Communication System Efficiency by Wavelet Implementation, accepted for presentation in the Int. Conference on Communication and Signal Processing, Feb 2011, NIT Calicut (with Dr. B. Shankarananda)

2. Ms.Bindu (P) Palakkal: Paper titled "CMOS Wide Band Low Noise amplifier with current reuse and & Noise cancellation" selected for presentation at International conference on Communication & signal Processing to be conducted at NIT Calicut from 10-12 February 2011.

c. Dept. of IT

1. Dr. V .S Sheeba (Professor, IT), S. Swapna Kumar and M.N Nanda Kumar: Energy efficient MAC Protocol (D-MAC) for wireless sensor networks, *Int. Journal of Computer Science, System Engineering and Information Technology*, July-Dec 2010, PP 321-326

2. Dr. V .S Sheeba (Professor, IT), Kumar S.S, Kumar M.N.: Implementation of Hybrid Ad-Hoc Routing Protocol, *Proc. Int. conference on Advances in Recent Technologies in Communication and Computing (ARTCOM*), October 2010, PP 151-154.

3.2 Extension Lectures by the Faculty

1. Dr. K. Najeeb, Associate Professor delivered a talk on Computer Networking to College Teachers at Govt. Victoria College, Palakkad on 24 January 2011.

2. Mr. R. Binu, Asst. Professor delivered a talk on Internet Technologies to College Teachers at Govt. Victoria College, Palakkad on 25 January 2011.

3. Dr. K. Najeeb, Associate Professor delivered a talk on Python Programming to College Teachers at Sree Kerala Varma College, Thrissur on 18 February 2011.

4. Dr. K. Najeeb, Associate Professor engaged one day workshop on Python Programming for M. Sc Physics students on 23 March 2011 at Sree Vyasa NSS College Vadakkanchery.

5. Dr. K. Najeeb, Associate Professor delivered an invited lecture on Perl and Python for B. Tech CSE students of Nehru Institute of Engineering & Technology,Coimbatore on 21 March 2011.

6. Dr. V .S Sheeba (HoD, IT) was a resource person at Jyothi Engg, College Cheruthuruthi, Thrissur for a two day workshop on Signal Processing.

7. Mr.. Vipin Vasu (Lr. IT) was the resource person for the STTP conducted at CET on advanced Networking.

8. Mr. Job Chunkath (Lr. ECE) delivered a talk on VLSI design using Micro wind at, ECE Dept, GEC Thrissur during Short term training program recent trends in VLSI and NANO technology.

3.3 Students' Achievements

- Chandrachudh (III Yr IT) has won 2nd prize in paper presentation in national level Technical symposium- Elegant Elecz'10 held at Tejaa Shankthi Institute of Technology for Women, Coimbatore.

- Gokul K Murali and V. Saran (III Yr IT) has won 3rd prize in Technical Quiz in national level Technical symposium- Elegant Elecz'10 held at Tejaa Shankthi Institute of Technology for Women, Coimbatore.

- Lenu Kannan (Final Yr IT) has won Silver in State Shooting Championship.

- Two Student projects appeared in the July 2010 issue of "Vyavasaya Keralam" magazine published by industries Dept. Govt. of Kerala.

- Harikrishnan R (2010 CSE Batch) won an entry in the prestigious *Google summer of code* contest.

- Shyam Krishnan (Final Yr CSE) won II prize in the National level Kernel Debugging Competition held at Rajagiri College of Engg., Vernacular by the IEEE Students branch during 18-19, September 2010.

- K.V. SreeramSreeram and Ranjith (Final Yr CSE) presented a technical paper on Power-aware scheduling in Cloud computing at NIT Calicut (THATHVA), 22-24 October 2010.

- Akhil Subramaniian S (III Yr CSE) won the I prize for coding and debugging competitions.

- Sandeep A (III Yr CSE) won the II prize for coding and III prize for debugging.

- Sulabh Surendran (III Yr CSE) won the II prize for debugging competition during GHATECH 2011.

- The following final year students are qualified in **GATE– 2011**.

  CSE Department: Abhith M.V, Arathi Asok, Dayanad, Jennis Thomas, Mittu Nalinakshan, Praveen, Rahul B, Ranjith K, Remya T, Sandeep C, Shadiya, Shamnaz Tahir, Sreeram. KV.

  IT Department: Abhilash,, Anoop, Abhilash, Hrishikesh, Jithin Prasad, Nithya, Panchami, Rahul, Richard, Sreeja.

  ECE Department.: Achu Wilson, Aswathi Ashok K K.

- Rubeena T.M and Jithin Chandra of 2009 batch of IT secured IInd and IIIrd ranks respectively in the B. Tech Degree examination conducted by Calicut University in June 2009.

4.SUB CENTERS AND THEIR ACTIVITES

The next few sections list different subunits and their activities.

4.1 Center for Continuing Education

The sub center has started functioning in the college in August 2010, whose activities include:

- Offering training programs for students in order to acquaint them with the emerging trends in technology.
- Offering vocational training programs for outsiders to meet the needs of industry and business.
- Encouraging consultancy activities among faculty members.

A training program on *Lab View Basics* has been offered by the ECE Dept. under continuing education program. The training program coordinated by Sri. Anoop C.S, Lecturer (ECE) has concluded successfully. The next programs scheduled are:

- A course on *MATLAB programming* offered by Sri. Job Chunkath and Prof. AR Jayan (ECE Dept) in April 2011.
- A course entitled *Hands-on training on Databases* offered by Sri. C. Naseer (CSE Dept) has been scheduled for June 2011.

Dr. R. Gopakumar, Dept. of Civil Engineering is presently the Manager of CCE.

4.2 IEEE Student Branch

The IEEE student branch functioning in this institute was established with thirty student members and three faculty members in 2005. The student branch (SB) is also a Women in Engineering (WIE) affiliate. The members of the SB have actively participated in all events conducted by Kerala Subsection. The student branch has

also taken up the challenge of imparting knowledge to members as well as other interested students, in certain key areas that are not directly addressed through formal engineering/technical education. This activity is organised voluntarily by IEEE members of the faculty for interested students. Introductory sessions on LATEX typesetting, MATLAB where engaged by Dr. P.C. Reghuraj and Mr. Job Chunkath as a part of this effort. The activities of the unit during 2010-11 were centered around the major event GHATECH 2011, a technical festival conducted during 24-26, Feb 2011. This was the first event of its kind in the 12-year history of the college.

4.2.1 Technical Fiesta-Ghatech -2011

The GHATECH-2011 was formally inaugurated by the Chief Guest Mr. Balaji Lakshman on 24th February 2011 at 10.00 am. Prof. Susan Abe, Principal of the Institution presided over the function. A workshop on robotics was conducted by Sri. Balaji Lakshmanan. The workshop was attended by 17 teams of 5 members each. The teams from various colleges like GEC Palakkad, GEC Thrissur, NTTF Thalassery, JTC Kovai etc had participated in the workshop.

The technical festival had an array of informative tech-talks by experts on Micro-Nano-Sciences (Dr. Anirudhan, Asst. Professor, GEC, Kozhikode), DSP and Embedded Systems (Prof. G. Jagadanand, NIT Calicut), Embedded Linux workshop Mr. Jeffery Antony, Bosch, Bangalore), Flow measurement and meters (Mr. E.B. Suresh, SRE FCRI, Kanjikode), and Automobile safety devices (Mr. Geo Vazhappillly).

Different exhibition stalls were put up by the departments in the college along with the strong support and participation from organizations like ISRO, BSNL and CMET. The stalls paved way to delve deeper into the various aspects of technology. The students from various institutions and the general public got very good awareness of technological development.

The ISRO stall included different models and parts of artificial satellites, launch vehicles, rockets etc. It also provided information about the historic achievements in space research and technology in India such as the establishment of ISRO and first Indian satellites. The BSNL stall gave an overview into today's telecommunication technologies such as GSM, GPRS, CDMA, 3G networks, different types of telephones etc. The CMET stall displayed different electronic components and aerosol technologies among many other things. The Robotics Stall contained small robotic

models resembling various insects and remote controllable robots with video transmission facilities.

The students from the departments of the college had setup stalls highlighting their work and departmental facilities. The ECE department had LED displays, a smart home, sound-activated lighting systems, etc. The CSE department gave an introduction about computers, microprocessors, hardware, operating systems, free and open source software's, networking, etc. The IT department set up student's projects, electrical wiring, web designing and networking. Stalls were also put up by Mechanical and Civil Engineering Department; these stalls were useful in giving the much needed insight into the working of many machineries and instruments. The stalls were visited by public and as well as by students of neighboring schools and colleges.

Students from about 15 colleges across Kerala and Tamil Nadu participated in the competitions like robotics competition, Circuit simulation, problem solving, mathematical modeling, technical paper presentation, choosing the Best Manager, school level quiz competition, coding, software debugging, circuit designing, and technical quiz.

4.2.2 IEEE SB Magazine Package

The student branch magazine package subscription is continued to enrich the academic input to the students, with 27 international IEEE magazines being delivered to the library, listed in Table 1.

IEEE Spectrum	IEEE Intelligent	IEEE Circuits&Systems
IEEE Computer Graphics	Transportation Systems	IEEE Control Systems
IEEE Industrial	IEEE Engineering in	IEEE Microwave Magazine
Applications	Medicine & Biology	IEEE Robotics
IEEE Communications	IEEE Network	&Automation
IEEE Aerospace and	IEEE Nano-technology	IEEE Systems
Electronic Systems	IEEE Power&Energy	IEEE Signal Processing
IEEE Contest Gazette	IEEE Security&Privacy	IEEE Wireless
IEEE Electrical Insulation	IEEE Technology &Society	Communication
IEEE Engineering	IEEE Vehicular Technology	IEEE Antennas &
Management Review	IEEE Potentials	Propagation

IEEE Instrumentation &Measurement		IEEE Industrial Electronics

Table 1: List of IEEE Magazines subscribed

At present, the members of the steering committee are:

- Dr. ReghuRaj, Professor-CSE (Advisor)
- Job Chunkath, Lecturer-ECE (SB Counsellor)
- A. R. Jayan. Asst. Professor-ECE (Mentor)
- Nidhin. A, Final Yr ECE (Student branch chairman)

4.3 FOSS (Free and Open Source Software) Unit

Free and Open Source Software Club (FOSS cell) was formed in the college with Dr.K. Najeeb as the Staff Advisor. This is a group of open source software enthusiasts of Govt. Engineering College, Sreekrishnapuram. The main objective is to bring together students and users to explore, discuss and share knowledge on usage of open source software. The unit conducted following programmes on FOSS:

- Conducted a successful training programme on Python programming during the TechFest (24-26 Feb 2011) by Tony Lijo Jose and Syamkrishnan of S8 CSE.
- Training programme for students on Linux installation and basic commands was conducted by Syamkrishnan , Tony Lijo jose and Dr. K. Najeeb (Asst.Professor, CSE).
- Sri. Pramode C.E, a programmer and consultant on FOSS delivered a talk on *how to become a good programmer.*
- It is decided to conduct a hands on session on scripting languages for computational science by Tony Lijo Jose, Syamkrishnan, and Dr. K. Najeeb (Asst.Professor, CSE).

4.4 The Alumni Association

The Alumni Association tries to foster the umbilical chord relationship between the alumni and their Alma mater for mutual benefits. The alumni have always lent a helping hand to improve the placement opportunities for the junior batches of students. They have helped to subscribe various magazines, and in other developmental activities. The contribution of the alumni has been significant in the conduct of GHATEC 2011, the first technical festival of the college. Sri. Lepeesh Parat (2005 ECE), who is the CEO of Zesty Beanz, Calicut has won the prestigious ISBA

award for the best Entrepreneur among the Technology-Business Incubators of the country in the ICT sector.

Staff-in-Charge: Smt. Rani L (Dept. of ECE).

4.5 The College Union

The College Union conducts regular extra curricular events in arts, sports and cultural arenas, which contribute to the integrated personality development of the students. It helped the Calicut University Union to conduct of A-zone Festival at GEC Sreekrishnapuram.

Chairman: Sri. K. Shameer, Final Year CSE, Staff Advisor: Dr. Bimal Lazer.

4.6 The Intellectual Property Rights Cell

As part of increasing awareness on Intellectual Property Rights including Patents and Designs, Patent Information Center, Kerala is providing assistance in establishing IPR Cells in all the Government Engineering colleges of the state. With the assistance from the above body, an IPR cell was formed in our college with Sri Gopi C. (Dept. of ECE) as the Coordinator. The cell has the following objectives.

- To Create Awareness among students and the faculty in the college as well as in the nearby colleges about the significance of IPR and the necessity of protecting intellectual property.
- To increase the number of inventions/creations from the engineering colleges.
- To provide guidance to students in filing their IPR and thereby increasing the IP output of the academic community.

The Cell was formally inaugurated by the Principal Prof. Susan Abe on 23rd September 2010 which was followed by a one day seminar on *Introduction to Intellectual Property Rights.* Dr. P.C. Reghu Raj, HOD (CSE), Prof. Mrinalini C. P, HOD (ECE) and Dr. Sheeba V.S, HOD (IT) graced the occasion with their presence along with other staff and students from the respective departments.

4.7 Grievance Cell

In order to solve various problems and complaints of the students and hence to provide a good academic atmosphere in the college campus, Grievance cell is functioning in our college. The students can give their complaints `to the Chairman of the Grievance cell. The executive committee will discuss the complaints and find an immediate solution for the same. Sri K. Vasudevan, Associate Professor & HOD of Mathematics, Dr. Reghu Raj (HoD, CSE), Prof. C.P Mrinalini (HoD, ECE), Dr. V. S.

Sheeba (HoD, IT), Dr. Bimal Lazer (Staff advisor, College union), Sriram K.V (Final year CSE) and Anupama. S (Final year ECE) are members of the executive committee. Remedial measures have been taken for the complaints received so far in the Grievance cell.

4.8 The Parent Teachers Association

The PTA of GEC, Sreekrishnapuram has been active and creative in providing support for the various activities of the students and the college in general. The major contributions made by PTA during 2010-11 are listed below:

- Provided financial aid for purchasing books to the libraries of various departments (Rs. 60094)
- The EDUSAT room was furnished by the PTA (Rs. 187069)
- Financed the shifting of items from old building to the new building
   (Rs. 110116)
- Provided the financial and logistic support to the inaugural function of the main building (Rs. 52135)
- Financed the purchase of furniture for the college canteen (Rs. 97043)
- The PTA has started the operation of a reprographic facility for the students at a nominal rate (Rs. 72536)
- With the help and support of the PTA, the college has set up a counseling center for students. The professional counselor who is appointed visits the college every month (Rs. 6000).
- The PTA has provided financial assistance for the conduct of A-Zone arts festival of Calicut University in the campus (Rs. 105000)
- It has also made major contribution to Ghatech 2011 (Rs. 100000 lakh).
- A cleaning staff was appointed on daily wages by the PTA (Rs. 3000 pm).
- The work of remodeling the existing workshop buildings to boy's hostel is also sponsored   by the PTA (Rs. 15000).
- Honorarium to Pump Operator (Rs. 11000)
- Leveling of playground (Rs.34700)

PTA also has lent its helping hand in providing financial aid to the needy students of the college. Moreover, the PTA awards various prizes like:

- Best outgoing student in each branch
- Mathematics Topper in each branch

- Semester toppers in each branch

In addition to the above, the PTA has done its best to provide moral and financial assistance to the college and students in all occasions where needed. The Faculty members in charge of the PTA are Dr. K. Najeeb (Secretary) and Smt. Reena Nair (Treasurer)

4.9 Counseling Cell

There are students who are unable to concentrate in their studies due to some psychological problems. Proper guidance and counseling enable them to move in the right track. In order to help such students a counseling cell is functioning in this college Prof. K. Vasudevan, HoD, Mathematics, is the coordinator of the counseling cell. The service of Dr. M.C. Varghese, one of the members of PTA Executive committee, is available in the college once in a month as a counselor. PTA is giving all kinds of financial support for the smooth functioning of the cell. Two more counselors (Dr. Mathukutty, and Dr. Molu P.C.) have extended their help to the needy students numbering about 50 so far. An awareness program on counseling for the teachers was conducted on 17th March, 2011.

4.10 Industry-Institute Interaction Cell

In order to improve the exposure of students to various Industries related to their discipline, an Industry Institute Interaction Cell was formed earlier in the college. After moving into the sprawling new campus, activities of the cell were revitalized by increasing the participation from the staff and student community. Accordingly the cell was re-organized with Sunny.T.D. (Lr. ECE) as the coordinator assisted by Gopi. C (Lr. ECE), Raseek. C (Lr. CSE) and Vinayachandran (Lr. IT) from the faculty side representing each department. Two students from every class were identified to co-ordinate the activities of the cell among the student community.

Discussions were held with IBM to arrange for summer internship for students from our college. It has been agreed in principle by IBM to accept few students in their subsequent summer program for students, which may extend up to 3 months. Similar discussions are going on with few other industries to arrange industrial training programs of shorter duration for the fourth semester students.

4.11 National Service Scheme Activities

Faculty-in-Charge: Sri. Anish Kumar, Dept. of Civil Engineering

October 1 :- As part of celebration of National Blood Donation Day, a blood group detection camp was conducted in co-ordination with Public Health Centre, Kadampazhipuram. Blood group of 50 students who were willing to donate blood was detected.

October 14 :- As part of the world sight day, an eye donation campaign was conducted and the proforma for eye donation pledge was distributed among the NSS volunteers, which was collected after obtaining consent from their relatives.

November 24-28:- Two NSS volunteers attended the State Level camp on *Environment Enrichment* at Attapadi Hill Development Society, Agali.

December 10-12:- Two NSS volunteers attended the Harithavanam follow up camp at SNVHS School, Adimali.

December 12:- A poster competition was conducted on the topic "Plastic free campus/ world" in view of declaring the campus as "plastic free".

December 26-January 1:- Conducted special camp in the adopted village. 50 students participated in the camp.

As part of the special camp, Govt. Ayurveda Dispensary at Mannampatta was renovated a panchayath pond near Mannampatta was cleaned off weeds and mud. The front yard of our college was also cleaned off bushes and debris.

4.12 Career Guidance and Placement Unit

The career Guidance and Placement Unit (CGPU) is established in the college to impart placement oriented training, to provide assistance for finding suitable employments through campus interview and other methods, to provide useful guidance to members aspiring for higher studies. The major activities of the CGPU during 2010-11 were as follows:

- The CGPU organized one day seminar on "I am an Entrepreneur" Campaign by Technology Business Incubator (TBI) of Technopark, in association with department of Science and Technology (DST) and Dept. of Scientific and Industrial Research(DSIR), Training programs were con-ducted for final year students on soft skills. A total of 110 students from the 3 branches attended six days program conducted as 2 batches.
- The CGPU invited two companies namely, Software Associates and ZBeansTech, both software companies of Calicut having branches abroad, to conduct recruitment drive at our campus.

- Facilitated the students to attend the combined recruitment drive conducted at Govt. Engineering College, Thrissur as well as N.S.S. College of Engineering, Palakkad.
- Gave assistance for mass recruitment drives conducted by multinational companies at various places. Even though less than 20 students were placed through the cell, now around 50 students of 2010 batch got placement in companies such as TCS, Poornam Software Solutions, Wipro, IBM, Accenture etc.
- Arranged long term training program (80 hours) for final years students. This training was intended to improve Aptitude test skills, Reasoning abilities, and soft skills. Around 50 students attended the course and classes were engaged by professionals in the area.
- Placements: This year our students attended combined recruitment drives conducted by leading IT companies such as Infosys, Accenture, Nest, etc., and a total of 40 placement offers have been received till date. The branch-wise selection details are as given in Table 2:

Company	CSE	ECE	IT	Total
Infosys	7	3	1	11
UST– Global	5	1	5	11
Accenture	6	3	3	12
Nest, TVM	4	0	2	6
Total	22	7	11	40

Table 2. Placement Statistics 2011

A few more students also got placement through agencies like Keltron, Shreds etc.

4.13 Center for Engineering Research and development (CERD)

A Satellite Center of CERD was be established at Govt. Engineering College Sreekrishnapuram in June 2010 along with other Government Engineering colleges in the state to carry out research and development activities in the process of making the college a center of excellence. It is envisaged that CERD will provide centralized computational and other common research facilities, access to information sources, conduct training, seminars, symposium and lecture series in

emerging areas and research initiation. Dr. P.C. Reghu Raj, Professor (Computer Science&Engineering) is appointed as the Coordinator of the unit.

4.13.1 Activities of CERD@GEC Sreekrishnapuram

There is considerable amount of relevant work being carried out in the departments that is worth financial support. The thrust areas are Virtualization technologies and cloud computing, Power minimization in VLSI, Signal Processing, etc. Unfortunately, none of these works have taken the shape of solid proposals in the required format and framework expected by CERD. One major problem is that CERD will not fund purchase of computing equipments whereas all the major projects in this institution are compute-intensive. We minimize spending on software purchase by relying heavily on FOSS environment, and if CERD can relax the stringent conditions on computer purchase, we can submit project proposals without much delay. However, two of our student projects have been featured in the *Vyavasayakeralam* magazine (July 2010 issue) published by the Industries Dept of the State Govt. Moreover, 8 papers have been produced in the Dept. of Computer Science & Engg in 2010-11 and 10 papers were published during 2009-10 by faculty members and students.

4.13.2 Programs

In line with the stated objectives and programs of CERD, the satellite center at GEC Sreekrishnapuram has organized the following programs/activities:

- Introductory Talk on the objectives and programs of CERD (Dr .B. Anil, Director, CERD, Trivandrum on 8 July 2010.
- Submitted two student project proposals, one each from the Dept. of Computer Science & Engineering and the Dept. of Electronics & Communication Engg, which have been sanctioned assistance of Rs. 40000/- and Rs. 20000/- respectively (Table 4).
- A Faculty project under the seed money scheme has been submitted by Dr. R. Gopakunar, Dept. of Civil Engineering.

4.13.3 Key Areas Identified:

Following are some of the areas identified for active research:

Implementation of Grid Computing Platforms, Visualization Tools design, Multi core Architecture, Linguistic techniques for Ontological databases, information

retrieval, data mining, etc., Wavelets and Digital Signal Processing, QoS in Computer Networks, etc.

Scheme	Project Title	Investigators	Amount	Status
Student Project	Design of an Operating System Scheduler for the ARM Processor	Reena Nair, Lecturer(CSE Dept), Student investigators Tony Lijo Jose, Jennis Thomas, Biju Daniel, Nibas P .P. and Linju Baby John	40000	Fund received, purchase process initiated
Student Project	Ultrasonic Dog Repellent	Bindu Palakkal, Lecturer(ECE Dept), Student Investigators (Final Year Electronics & Communication Engg) Sarithlal M K Sreeraj T V Sarath Kumar S Vinu A V	20000	Fund received, purchase process initiated
Faculty Research Project (Seed Money Scheme)	Development of an algorithm for Canal Automation using Fuzzy logic and its implementation	Dr. R. Gopakumar, Dept. of Civil Engineering	200000	Submitted to CERD, Trivandrum

Table 4: Project Proposals submitted to CERD

5. PROGRAMS

Several useful programs were conducted during 2010-11 as detailed in the next few sections.

5.1 Visiting Faculty Programme

The Visiting Faculty Program at Govt. Engineering College, Sreekrishnapuram during 2010-11 started on 30-8-2010. Twenty five invited talks were held for different semesters with the faculty from reputed academic institutions and industry. The programs were received well by the students in general. Moreover, the faculty members had fruitful interactions with the invited speakers. The programs were

organized by a committee with Dr. P. C. Reghu Raj (Professor, Dept. of Computer Science& Engg) as the Coordinator.

The following faculty members assisted him in the conduct of the program:

1. Smt. Reena Nair, Asst. Professor(Computer Science& Engg)
2. Smt. Rani L, Asst. Professor (Electronics&Communication Engg)
3. Dr. V.S . Sheeba, Professor (Information Technology)

5.1.1 Program Schedule

The Visiting Faculty program was held as per the schedule shown in Table 5.

Table 5. Program Schedule

No	Date	Speaker	Audience	Topic
1	30-8-2010	Prof. K.S.Sureshkumar EED, NIT Calicut	II Yr CSE	Operational Amplifiers
2	31-8-2010	Prof. K.S.Sureshkumar EED, NIT Calicut	II Yr IT	Operational Amplifiers
3	15-9-2010	Prof. Lyla B Das ECED, NIT Calicut	III Yr CSE	Assembly Language Programming
4	16-9-2010	Dr. K. Muralikrishnan, CSED, NIT Calicut	II Yr CSE	Graph Algorithms
5	17-9-2010	Dr. Murali krishnan, CSED, NIT Calicut	II Yr IT	Graph Algorithms
6	22-9-2010	Prof. Lyla B Das ECED, NIT Calicut	III Yr CSE	Assembly Language Programming
7	23-9-2010	Prof. Lyla B Das ECED, NIT Calicut	III Yr CSE	Assembly Language Programming
8	23-9-2010	Dr. S.D. Madhu Kumar CSED, NIT Calicut	II Yr CSE	Tree Algorithms
9	24-9-2010	Dr. S.D. Madhu Kumar CSED, NIT Calicut	II Yr IT	Tree Algorithms
10	27-9-2010	Dr. P.P. Deepthi, ECED, NIT Calicut	IV Yr IT	Cryptography
11	1-10-2010	Dr. P.P. Deepthi, ECED, NIT Calicut	IV Yr CSE	Cryptography
12	29-10-2010	Prof.K.S.Sureshkumar EED, NIT Calicut	S3 ECE	Filters
13	1-11-2010	Prof.K.S.Sureshkumar EED, NIT Calicut	S3 ECE	Filters
14	24- 11-2010	Dr. V.V. Unnikrishnan, Assoc. Professor, Govt. Med. College Thrissur	I Yr ECE	How to Professional Skills for Engineering Students
15	25-11-2010	Dr. V.V. Unnikrishnan, Assoc. Professor, Govt. Med. College Thrissur	I Yr ECE	Professional Skills for Engineering Students
16	30-11-2010	Dr. S. Mridula, School of Engg, CUSAT Cochin	IV Yr ECE	Microwave & Antenna Theory

17	2 -12-2010	Dr. Dinil M. Divakaran, CSED, IIT Mandi	Final Yr CSE &IT	Switch Architectures
18	7-12-2010	Dr. P.P. Deepthi, ECED, NIT Calicut	Final Yr ECE	Information Theory & Coding
19	19-1-2011	Mr. Ciju Rajan, IBM Bangalore	III Yr CSE& IT	Kernel Programming
20	19-1-2011	Mr. Suzuki, IBM Bangalore	III Yr CSE& IT	Kernel Programming
21	21-1-2011	Mr. E.P. Vivek, Mirafra Tech, Bangalore	II Yr CSE	Hardware Description Languages
22	25-2-2011	Mr. G. Jagadanand, EED, NIT Calicut	IV Yr ECE	Digital Signal Processors
23	24-2-2011	Dr. P. Anirudhan, MED, GEC Kozhikode	I Yr CSE ,IT,ECE	Micro-Nano Sciences
24	25-2-2011	Mr. Jeffrey Antony, Bosch, Bangalore	IV Yr CSE, IT	Open Hardware and FOSS Electronics Tools
25	10-3-2011	Dr. Hiran Ramakrishnan, Dept. of Space, Chandigarh	Final Yr ECE	Semiconductor Fabrication Technologies

5.1.2 List of Institutions who deputed their Faculty

The list of institutions who were generous to lend support to the program by extending the services of their faculty/staff is shown below:

- National Institute of Technology, Calicut
- Indian Institute of Technology, Mandi
- Cochin University of Science & Technology
- IBM Bangalore
- Dept. of Space (Chandigarh facility)
- Mirafra Technologies, Bangalore
- Bosch, Bangalore
- Govt. Medical College, Thrissur
- Govt. Engineering College, Kozhikode

5.1.3 Contact Details of the Speakers

Table 6 gives the contact details of the speakers who delivered invited lectures at GEC Sreekrishnapuram during 2010-11.

Table 6. Contact Details of the Speakers

Name of the Faculty	Affiliation	Email/Homepage	Tel/Mob.

Prof. K.S. Suresh kumar	EED, NIT Calicut	sureshks@nitc.ac.in	9496917467
Prof. Lyla B Das	ECED, NIT Calicut	lbd@nitc.ac.in	9447415558
Dr. P.P. Deepthi	ECED, NIT Calicut	deepthi.aleena@rediff mail.com	9446501205
Prof. G. Jagadanand	EED, NIT Calicut	jagadanand@nitc.ac.i n	9447923071
Dr. Muralikrishnan	CSED, NIT Calicut	kmurali@nitc.ac.in	9995713251
Dr. S.D. Madhukumar	CSED, NIT Calicut	madhu@nitc.ac.in	9447353393
Mr. E.P. Vivek	Mirafra Technologies, Bangalore	vivekep@gmail.com	
Dr. Anirudhan	MED, GEC Kozhikode	anirudhanp@gmail.co m	
Dr. Hiran Ramakrishnan	Scientist, Dept. of Space, Chandigarh		0904121741 4
Mr. Jeoffrey Antony	Bosch, Bangalore	http://jeffrey.co.in	9944146173
Dr. P.V. Unnikrishnan	Dept. of Physiology, Govt. Medical College Thrissur		
Dr. S. Mridula	Dept. of Electronics, School of Engg., CUSAT	mridula@cusat.ac.in	
Dr. Dinil M. Divakaran	Dept. of Computer & Electrical Engg, IIT Mandi, HP	dinil@iitmandi.ac.in	0190523794 1

5.1.4 Expenditure Statement

- Allotment : Rs.200000/-
- Amount advanced: 120000/-
- Total number of programs held: 25
- Total Expenditure:Rs. 120892/-
- Percentage spending: 60.4 %

5.2 Training Programs Organized

1. Department of Computer Science & Engg. organized a short term training program on *Open source framework for advanced technology development* from 17-22, January. Dr. K. Najeeb and Prof. A. Salim (Dept. of CSE) were the Coordinators. Dr. P.C. Reghu Raj, Head Dept. of CSE inaugurated the program on 17 Jan 2011. Experts from Industry and faculty members from premier institutions engaged sessions on various open source related topics.

2. Department of Computer Science & Engg. organized a short term training program on *Data Entry Operations* under the STEP4U scheme for empowering the backward class students. Under this scheme, 15 students belonging to SC/ST category were successfully trained on data entry operations. The certificates to the participants were distributed by Prof. Susan Abe. Dr. P.C. Reghu Raj, Professor, Dept. of CSE was the Coordinator of the program.

3.Training on Linux platform was given to the first batch of office staff by the Dept. of Computer Science & Engg. (Coordinator: Dr. K. Najeeb).

6. NEW FACILITIES AND FEATURES INTRODUCED

6.1 Computerized Record Room

Dr. Kuncheria P Isaac, the Director of Technical Education visited our institution on 22 March 2011. He formally inaugurated the computerized record room in the office of Govt. Engineering College, Sreekrishnapuram at 10 AM on 22 March 2011. The system was designed by Sri. Sijo S. Vadakkan, former Computer Programmer of the institution with major inputs from Sri. M. Nithianandan (Sr. Superintendent), GEC Sreekrishnapuram. The system has facilities to search and locate any of the more than 20000 files quickly based on year, section, keywords, person etc. In the context of wide-spread use of the RTI Act, this software will be an asset to the institution. GEC Sreekrishnapuram has thus become the first among the Govt. Engineering colleges to install such a system. The function was attended by the Principal Prof. Susan Abe, Heads of Departments, teaching and nonteaching staff of the Institution. For details, contact Sri. M. Nithianandan (Ph: 9447620547, email: anandajyothy@gmail.com)

6.2 Inauguration of the Gymnasium

The Director of Technical Education Dr. Kuncheria P. Isaac formally inaugurated the Gymnasium established at a cost of ` 10 lakhs in the campus of Govt. Engineering

College, Sreekrishnapuram at 10.30 AM on 22 March 2011. The project was conceived and implemented by Dr. Bimal Lazer, Asst. Professor, Dept. Of Physical Education of the institution. The facility thus fulfills a long standing demand of the students of the institution. The function was attended by the Principal, Prof. Susan Abe, Heads of Departrments, teaching and nonteaching staff of the institution, and the enthusiastic students.

6.3 Release of the News Letter

The Director of Technical Education Dr. Kuncheria P Isaac formally released the first issue of the Campus Newsletter at 11 AM on 22 March 2011 in a function held in the Edusat room. In his speech, Dr. Isaac congratulated the Editorial team led by Prof. C.P. Mrinalini (HOD, ECE) and Prof. V.P. Celistina (Asst. Professor, EEE) for their excellent job in bringing up the Newsletter. The function was attended by teaching, nonteaching, ministerial staff and students representatives. Dr. P.C. Reghu Raj, Prof. C.P. Mrinalini, Sri. M. Nithianandan, Sri. Gopalakrishnan and Sri. Akhil A also spoke on the occasion. Smt. Reena Nair proposed the vote of thanks.

7. OTHER PROJECTS

7.1 Campus Networking

A campus-wide data network is being set up with about 350 data end points with enough infrastructure to support a full-fledged campus wide wireless umbrella. The network will be running on 1 GB of data transfer rate with a strong fiber backbone. All the data points are terminated to manage layer 2 switches which are in turn connected to fully managed layer 3 switches. The network is implemented with PoE (Power over Ethernet) switches to support VoIP phones without the need of any additional power supply. The work of a fully functional data cum network operations center is also in progress. Once the network is set up the whole campus will be provided with a single point authentication, access to Internet and various application servers.

7.2 Remodelling of Old buildings

Work related to remodelling of the old electronics block and conversion of old workshops into accommodation facility for staff and students has been taken up.

7.3 New Buses

Two new college buses have been ordered to start service in the next academic year.

8. FINANCIAL DETAILS: PLAN PROGRESS

Head of Account	Allotment Received	Surrendered	Net amount available	Expenditure as on 31/03	Balance	Progress (%)
17 MW	5 Lakhs	5 lakhs	5 Lakhs	5 Lakhs	Nil	100
19 M&E	40 Lakhs	Nil	40 Lakhs	39,99,199	801	99.98
24 M&S	10 Lakhs	Nil	10 Lakhs	9,18,316	81684	91.83
34 OC	45 Lakhs	Nil	45 Lakhs	44,99,081	919	99.98
34 OC(3) OI	90,000	28,000	62,000	61,193	807	98.7
90 OC-Plan	10 Lakhs	Nil	10 Lakhs	9,96,361	3639	99.64
34 OC (3)OI	20 Lakhs	70,000	1,30,000	1,26,548	3452	97.34
75 M&S	15 Lakhs	Nil	15 Lakhs	14,99,475	525	99.97
		Grand Total	**1,26,92,000**	**1,26,00,173**	**91,827**	**99.28**

Table 7. Plan Progress Details

The details of plan progress (**99.28% as on 31/ 3/ 1**1)are shown in Table 7.

9. ANNUAL SPORTS & GAMES MEET 2011

Annual sports and games meet 2010-11 was conducted in a grand manner on 26-27 March. Games like Table Tennis, Shuttle badminton, Cricket, Volley ball and Football were conducted on 26 March. Athletics events were conducted on 27 March. Abbobacker Sidhique (S4 ECE) was selected as the individual champion in Men's section and Sali R of S6 IT in women's section. Final year students won the Games championship.

10 CONCLUSION

At the end of the financial year 2010-11, we have reasons to be satisfied on many counts: First, the institution is on a sound footing on its journey towards excellence in terms of human and infrastructural resources. Secondly, it has started to get noticed in the professional arena, as exemplified by the good number of publications and recognition won by staff and students. Thirdly, we were able to maintain a peaceful atmosphere conducive for meaningful academic work. When new programs begin in the near future, there are further chances to improve our position in the academic field. We will strive hard to realize our vision of excellence through the wings of science and technology, in the service of humanity.