



Annual Quality Assurance Report (AQAR)

2015 - 2016



Sri Krishna

College of Engineering and Technology

(An Autonomous Institution)

Affiliated to Anna University Chennai

Accredited by NAAC with 'A' Grade

Kuniamuthur, Coimbatore- 08

ANNUAL QUALITY ASSURANCE REPORT 2015-2016

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The Annual Quality Assurance Report (AQAR) of the IQAC**Part – A**

AQAR for the year

2015-2016

I. Details of the Institution

1.1 Name of the Institution

Sri Krishna College of Engineering
and Technology

1.2 Address Line 1

Sugunapuram

Address Line 2

Kuniamuthur Post

City/Town

Coimbatore

State

Tamilnadu

Pin Code

641 008

Institution e-mail address

principal@skcet.ac.in,

Contact Nos.

7402601301 / 9442608156

Name of the Head of the Institution:

Dr.S Annadurai , M.E, Ph.D

Tel. No. with STD Code:

0422-2678001

Mobile:

+91 7402601301

Name of the IQAC Co-ordinator:

Dr.P Ashoka varthanan. Ph.D.,

Mobile:

+91 7402601302

IQAC e-mail address:

iqac@skcet.ac.in

1.3 NAAC Track ID

OR

1.4 NAAC Executive Committee No. &Date:

EC (SC)/05/A&A/072 & March 03, 2015.

*This EC no.is available in the right corner-bottom
of your institution's Accreditation Certificate)*

1.5 Website address:

www.skcet.ac.in

Web-link of the AQAR:

1.6 Accreditation Details

| Sl.No. | Cycle | Grade | CGPA | Year of Accreditation | Validity Period |
|--------|-------|-------|------|-----------------------|-----------------|
| 1 | I | A | 3.42 | 2015 | 5 Years |

1.7 Date of Establishment of IQAC: DD/MM/YYYY

01-04-2015

1.8 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC- Nil**1.9 Institutional Status**University State Central Deemed Private Affiliated College Yes No Constituent College Yes No Autonomous college of UGC Yes No Regulatory Agency approved Institution Yes No Type of Institution Co-education Men Women Urban Rural Tribal Financial Status Grant-in-aid UGC 2(f) UGC 12B Grant-in-aid +Self Financing Totally Self-financing **1.10 Type of Faculty/Programme**Arts Science Commerce Law PEI (PhysEdu) TEI (Edu) Engineering Health Science Management

Others(Specify)

1.11 Name of the Affiliating University (for the Colleges)

| |
|---------------------------------------|
| Anna University, Chennai – 600 025 |
|---------------------------------------|

1.12 Special status conferred by Central/ State Government-- UGC/CSIR/DST/DBT/ICMR etc

Autonomy by State/Central Govt. / University

| |
|------------|
| University |
|------------|

University with Potential for Excellence

| |
|----|
| NO |
|----|

UGC-CPE

| |
|----|
| NO |
|----|

DST Star Scheme

| |
|----|
| NO |
|----|

UGC-CE

| |
|----|
| NO |
|----|

UGC-Special Assistance Programme

| |
|----|
| NO |
|----|

DST-FIST

| |
|----|
| NO |
|----|

UGC-Innovative PG programmes

| |
|----|
| NO |
|----|

Any other (*Specify*)

| |
|----|
| NO |
|----|

UGC-COP Programmes

| |
|----|
| NO |
|----|

2. IQAC Composition and Activities

| | | |
|---|---|----|
| 2.1 No. of Teachers | : | 05 |
| 2.2 No. of Administrative/Technical staff | : | 03 |
| 2.3 No. of students | : | 01 |
| 2.4 No. of Management representatives | : | 01 |
| 2.5 No. of Alumni | : | 01 |
| 2.6 No. of any other stakeholder and community representatives | : | 01 |
| 2.7 No. of Employers/ Industrialists | : | 01 |
| 2.8 No. of other External Experts | : | 01 |
| 2.9 Total No. of members | : | 13 |
| 2.10 No. of IQAC meetings held | : | 02 |

| | | | | |
|--|--------------------|---------------------------------|----------|---------------------------------|
| 2.11 No. of meetings with various stakeholders: | No. | <input type="text" value="02"/> | Faculty | <input type="text" value="02"/> |
| | Non-Teaching Staff | <input type="text" value="2"/> | Students | <input type="text" value="2"/> |
| | Alumni | <input type="text" value="2"/> | Others | <input type="text" value="2"/> |

2.12 Has IQAC received any funding from UGC during the year? Yes No

If yes, mention the amount

2.13 Seminars and Conferences (only quality related)

(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC

Total Nos. International National State Institution Level

(ii) Themes

2.14 Significant Activities and contributions made by IQAC

The Internal Quality Assurance Cell (IQAC) is a primary quality assuring body in the institution. The IQAC promotes curriculum design and development through the curriculum development cell of SKCET. The developed curriculum is evaluated by IQAC and implemented by the departments as per the guidelines formulated by the IQAC. The IQAC formulates templates for course plan, course information, time table, etc. Mandatory courses and value added courses are introduced in the regular time table. The cell prescribes the guidelines for tutor-ward meeting and counselling. Gap in skill sets of faculty and students are identified by IQAC and suitable workshops, seminars, etc prescribed to the departments by the IQAC. The Centre for Professional Development and Training (CPDT) organises several training programmes for improving the teaching and technical competencies of the faculty.

Internal and external audits are periodically conducted by the IQAC to sustain and improve the quality of the academic processes. The IQAC initiates research and development through the core committee by organising various programmes for proposal writing and funding.

Smart Board based teaching learning is implemented during the academic year 2015-2016. Smart books were also prescribed by the IQAC to enable students to student anywhere and everywhere through their mobile phones. The lecture materials are sent to the students through Google classroom and the same is discussed during the class be the faculty. The IQAC has initiated industry centric learning by sending the students to internships in reputed companies.

2.15 Plan of Action by IQAC/Outcome

The outcome of the plans initiated by the IQAC is given below.

| Plan of Action | Achievements |
|--|---|
| Revamp the curriculum through the Curriculum Development Cell | Entire curriculum revamped as per the needs of the industry |
| Establishing a Centre for Faculty Development and Training (CPDT) to train faculty | CPDT established |

| | |
|---|---|
| Introduce Smart class rooms | Smart boards were fixed in every classroom and smart books were given to the students. |
| Paperless Administration and Apps development | Google domain and Apps are utilized for the academic and non-academic Purpose. Google classroom for sharing learning materials is very prominent among all the google apps. |
| Telegram app for information sharing | Implemented. All the faculty and students are members of the telegram group. |

** Attach the Academic Calendar of the year as Annexure.*

2.16 Whether the AQAR was placed in statutory body Yes No

Management Syndicate Any other body

Provide the details of the action taken

The IQAC was established immediately after securing accreditation from NAAC. Periodic meeting are conducted with the stakeholders to formulate guideline and evaluate the outcomes.

The plans and action taken reports of IQAC was discussed during the governing body meeting (the highest decision making body in the institution).

The suggestions provided by the governing body is also implemented by the IQAC.

Part – B

Criterion – I

1. Curricular Aspects

1.1 Details about Academic Programmes

| Level of the Programme | Number of existing Programmes | Number of programmes added during the year | Number of self-financing programmes | Number of value added / Career Oriented programmes |
|------------------------|-------------------------------|--|-------------------------------------|--|
| PhD | 7 | - | 7 | - |
| PG | 9 | - | 9 | - |
| UG | 7 | - | 7 | - |
| PG Diploma | - | - | - | - |
| Advanced Diploma | - | - | - | - |
| Diploma | - | - | - | - |
| Certificate | - | - | - | - |
| Others | - | - | - | - |
| Total | 23 | - | 23 | - |
| Interdisciplinary | - | - | - | - |
| Innovative | - | - | - | - |

1.2 (i) Flexibility of the Curriculum: CBCS/~~Core~~/~~Elective option~~ / ~~Open options~~ (ii) Pattern of programmes:

| Pattern | Number of programmes |
|-----------|----------------------|
| Semester | 23 |
| Trimester | - |
| Annual | - |

1.3 Feedback from stakeholders*

| | | | | | | | | |
|--------------------------|--------|-------------------------------------|---------|-------------------------------------|----------------------|-------------------------------------|----------|-------------------------------------|
| | Alumni | <input checked="" type="checkbox"/> | Parents | <input checked="" type="checkbox"/> | Employers | <input checked="" type="checkbox"/> | Students | <input checked="" type="checkbox"/> |
| <i>(On all aspects)</i> | | | | | | | | |
| Mode of feedback: | Online | <input checked="" type="checkbox"/> | Manual | <input checked="" type="checkbox"/> | Co-operating schools | <input type="checkbox"/> | | |
| | | | | | | | | (for PEI) |

**Please provide an analysis of the feedback in the Annexure*

1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.

The College strictly follows the guidelines of AICTE, UGC and Anna University (affiliated University) while developing and restructuring the curricula. The College has incorporated Choice Based Credit System (CBCS), for shifting the focus from the teacher-centric to student-centric education. CBCS allows the students to choose inter-disciplinary, intra-disciplinary courses and skill oriented papers. The curriculum has been revised based on the feedback obtained from stakeholders such as industrialists, alumni, and parents of the students and academicians from outside Colleges. The Curriculum is designed with a perfect balance among Humanities (HS), Basic Sciences (BS), Engineering Sciences (ES), Professional Core (PC), Professional Soft Core (PSC), Professional Electives (PE), Open Electives (OE), Project Work (PW) and Mandatory Courses (MC) as per the guidelines of AICTE / ANNA University & UGC, and due weightage is given to individual course credits as well as number of credits required for the award of degree. The Curriculum extends hands for practical oriented topics and there is a scope for learning the content beyond the syllabus. The College follows the guidelines issued by the statutory regulatory bodies through Board of Studies, Academic Council and Governing Body of the College during curriculum revision.

The Curriculum & Syllabi are revised every year. Choice Based Credit System (CBCS) is followed from 2016 regulations onwards. Salient features of the 2015 and 2016 regulations are as follows.

- More choices for students to attend specialization in a particular field
- Horizontal mobility: Electives from other department to specialize in a domain which is different from his/her parent domain.
- Additional credits for certification courses / value added courses.
- Continuous assessment of practical courses.
- Credits for Industrial training/participation in International exhibition & Seminar
- Importance to life skills & development.

1.5 Any new Department/Centre introduced during the year. If yes, give details.

Centre for Professional Development and Training (CPDT) of Sri Krishna Institutions has been established to organize programmes for in-house faculty members and also to the faculty members of other Institutions. The centre was inaugurated on 30-07-2015.

OBJECTIVE:

The objective of the CPDT is to make the members of the faculty competent enough on par with those of premier institutions across the globe. CPDT will also organize tailor-made training programmes for specific institutions.

The training programs shall encompass the following portfolios:

- Advanced Knowledge in Domain Areas
- Teaching Methods in different Technology Contexts
- Students Assessment Methods and Materials

- E-Content Creation
- Academic and Personal Counselling
- Research Methods and Tools in Science and Technology
- Managing Autonomous Colleges
- NBA, NAAC & Quality Initiatives
- Management of Higher Educational Institutions
- Industry – Institute Interaction

Annexure 1.3 Feedback from Stakeholders**DEPARTMENT OF MECHANICAL ENGINEERING: Highlights of changes made in R2015 and R2016**

| S.No. | Description | Nature of the suggestion provider | Suggestion provider name and Designation |
|-------|---|-----------------------------------|--|
| 1. | Machine drawing and manual drawing must be drafter and computer based. | Alumni | Mr S.S Vignesh Propreitor, SNS Hitech Engineers |
| 2. | OOPS , Data structures may also be taught to students for placement purpose | Student | Mr Shankar Narayanan IV Mech – B, 2011-2015 Batch. |

DEPARTMENT OF INFORMATION TECHNOLOGY: Highlights of changes made in R2015 and R2016

| S.No. | Description | Nature of the suggestion provider | Suggestion provider name and Designation |
|-------|---|-----------------------------------|---|
| 1. | Parallel Algorithms included in the subject Design and Analysis of Algorithms. | Academic expert | Dr.Latha Parameswaran, Professor and Head, Department of Computer Science and Engineering, Amrita University, Coimbatore. |
| 2. | Service Oriented Architecture, Cloud Computing to be included as a professional soft core subjects | Academic expert | Dr.G.Sudha Sadasivam, Professor and Head, Department of Computer Science and Engineering, PSG College of Technology, Coimbatore. |
| 3. | IoT, Aurdino Processor included in the Subject Microprocessors and Micro Controllers. | Academic expert | Dr.G.Sudha Sadasivam, Professor and Head, Department of Computer Science and Engineering, PSG College of Technology, Coimbatore. |

| | | | |
|----|---|----------------|--|
| 4. | Data Structures and Algorithms Advanced Data Structures The above subjects are included as separate subjects as students expressed that the Data Subject as a single subject is vast. | Student member | M. Georgina Merlin, K Sabari Geethan. Sri Krishna College of Engineering and Technology, Coimbatore. |
| 5. | Java Programming included in 5 th Semester so that it will be helpful to do for them to do projects effectively. | Student member | M. Georgina Merlin, K Sabari Geethan. Sri Krishna College of Engineering and Technology, Coimbatore. |

DEPARTMENT OF MECHATRONICS ENGINEERING: Highlights of changes made in R2015

| S.No. | Description | Nature of the suggestion provider | Suggestion provider name and Designation |
|-------|--|---------------------------------------|--|
| 1. | Inclusion of Electrical CAD in Mechatronics Drawing Lab | Academic expert | Dr. R .Parameshwaran, Professor and Head, Department of Mechatronics Engineering, Kongu Engineering College, Perundurai. |
| 2. | Inclusion of Embedded C Programming and Embedded Testing in Microelectronics and Controller Laboratory. | Alumni member | Mr.Gowtham Sithaarth, CEO, Linga Technologies, Tirupur |
| 3. | Reliability Engineering was added in electives list | Academic expert | Dr.Mala John, Professor, Electronics Department, MIT, Chennai. |
| 4. | A New subject named "Autonomous Guidance System" was added in the core. | Alumni member | Mr. Sudharshana Venkatraman |
| 5. | Critical and Creative thinking subject has been added to kindle the thinking capabilities of the students. | Benchmarked from premier institution. | University of Singapore. |

Highlights of changes made in R2016

| S.No. | Description | Nature of the suggestion provider | Suggestion provider name and Designation |
|-------|--|-----------------------------------|---|
| 1. | Basic Mechatronics Engineering subject was included in the first semester to bridge the gap between XII students and core engineering. | Brainchild of the department. | All the staff members |
| 2. | Micro and Nano Robotics subject has been offered in open elective. | Student | Mr.Koushik Ragavendran, III MCT A, SKCET, Coimbatore. |
| 3. | A New subject named “Vehicle Dynamics” was added in the program elective. | Alumni member | Mr.Muthiah |
| 4. | An integrated subject for “SCADA” has been introduced in the program elective. | Parent of the student | Managing Director, Foundry, Coimbatore. |

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING:**Highlights of changes made in R2016**

| S.No. | Description | Nature of the suggestion provider | Suggestion provider name and Designation |
|-------|--|-----------------------------------|---|
| 1. | Inclusion of Power Generation Systems in “Basics of Electrical and Electronics Engineering” Subject | Academic Expert | Dr. S. Subha Rani, Professor and Head, Department of ECE, PSG College of Technology, Coimbatore |
| 2. | Inclusion of Bio-medical Instrumentation systems in “Measurements and Instrumentation” Subject | Academic Expert | Dr. N. B. Balamurugan, Associate Professor/ECE, Thiagarajar College of Engineering, Madurai |
| 3. | Inclusion of application oriented controllers such as washing machine control and traffic light control in “Microprocessor Interfacing and Microcontrollers” Subject | Industry Expert | Mr. P. Senthilkumar , Group Manager, Robert Bosch, Coimbatore |

| | | | |
|----|--|-----------------|---|
| 4. | Inclusion of more computerized based papers | Academic Expert | Dr. N. B. Balamurugan, Associate Professor/ECE, Thiagarajar College of Engineering, Madurai |
| 5. | To study the subject and its corresponding lab in the same semester | Alumni member | Dr. S. Mohandass. Assistant Professor/ECE PSG College of Technology, Coimbatore |
| 6. | To add the certification courses in their curriculum | Academic Expert | Dr. S. Subha Rani, Professor and Head, Department of ECE, PSG College of Technology, Coimbatore |
| 7. | Inclusion of compulsory In-Plant training with assessments | Industry Expert | Mr. P. Senthilkumar , Group Manager, Robert Bosch, Coimbatore |
| 8. | Courses like LIC, Signals and Systems, Control Systems, Computer Architecture, Computer Networks & Antenna and Wave Propagation must be part of program core in ECE Curriculum | Academic Expert | Dr. N. B. Balamurugan, Associate Professor/ECE, Thiagarajar College of Engineering, Madurai |
| 9. | Inclusion of electronics emerging areas like IOT in curriculum | Alumni member | Dr. S. Mohandass. Assistant Professor/ECE PSG College of Technology, Coimbatore |

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING: Highlights of changes made in R2015 and R2016

| S.No. | Description | Nature of the suggestion provider | Suggestion provider name and Designation |
|-------|---|-----------------------------------|---|
| 1. | Software testing & Agile Software Development is included in the elective | Academic expert | Dr.Latha Parameswaran, Professor and Head, Department of Computer Science and Engineering, |

| | | | |
|----|---|-----------------|---|
| | | | Amrita University, Coimbatore. |
| 2. | Advanced Data Structures can be included as a professional soft core subject so that the students can gain deeper knowledge | Academic expert | Dr.G.Sudha Sadasivam, Professor and Head, Department of Computer Science and Engineering, PSG College of Technology, Coimbatore. |
| 3. | Advanced Java Programming is included in 6 th Semester | Student member | Sri Krishna College of Engineering and Technology, Coimbatore. |

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING: Highlights of changes made in R2016

| S.No | Description | Nature of the suggestion provider | Suggestion provider name and Designation |
|------|--|-----------------------------------|--|
| 1. | Embedded Systems Subject has been moved from elective to core subject Instead of Thermal Fluid Mechanics, department core subject on power system has been introduced | Alumni Member | Mr.Shanmuga Sundharam, Design Engineer, Robert Bosch, Coimbatore. |

Criterion – II

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

| Total | Asst. Professors | Associate Professors | Professors | Others |
|-------|------------------|----------------------|------------|--------|
| 322 | 239 | 52 | 31 | - |

2.2 No. of permanent faculty with Ph.D.

| |
|----|
| 46 |
|----|

2.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year

| Asst. Professors | | Associate Professors | | Professors | | Others | | Total | |
|------------------|----|----------------------|---|------------|---|--------|---|-------|----|
| R | V | R | V | R | V | R | V | R | V |
| 81 | 81 | 1 | 1 | 3 | 3 | 0 | 0 | 85 | 85 |

2.4 No. of Guest and Visiting faculty and Temporary faculty

| |
|---|
| 0 |
|---|

| |
|---|
| 5 |
|---|

| |
|---|
| 0 |
|---|

2.5 Faculty participation in conferences and symposia:

| No. of Faculty | International level | National level | State level |
|------------------------------|---------------------|----------------|-------------|
| Attended Seminars/ Workshops | 31 | 67 | 0 |
| Presented papers | 30 | 82 | 0 |
| Resource Persons | 3 | 18 | 18 |

2.6 Innovative processes adopted by the institution in Teaching and Learning:

- ICT based technology for teaching , student support service is promoted.
- All the class rooms are installed with the Interactive Smart Board facility to enhance the teaching and learning methodology.
- The lecture materials are recorded and sent to the students through google classroom.
- Internships to all students in leading industries like Amazon, Hundai.

Faculty are motivated to view NPTEL videos and to take up online courses. The College is equipped with 50 Mbps leased line and Wi-Fi internet connectivity. The campus and the hostel are Wi-Fi enabled to facilitate e learning.

Thus the college encourages a 24/7 e-Learning. It also uses ICT in teaching learning process through google classroom. This virtual classroom can be accessed by students and staff any time anywhere. The students and the faculty are expected to have up-to-date information of the subject. Faculty members update their knowledge by referring to the recent editions of the reference books, journals and periodicals, reports etc. They regularly attend refresher courses, seminars, workshops, and conferences. These new methods and techniques have created interest among students to learn more and more. By providing these facilities, teachers feel encouraged to make use of these innovations in teaching-learning process.

Association and professional club activities provide ample opportunities for the students to explore new ideas and present it before their fellow class mates. Hands on training in certain courses will help the students to experience the concepts get implemented. This helps the student to gain confidence and improves knowledge. The best faculty members

are recognized for their teaching performance by means of rewards and certificates at the end of the semester. The faculties are also awarded for their research work and publication of Text Books..

Students who have arrears in end semester exams can apply for photocopy after getting sign from the Head of the Department and submit the same to CoE. Based on the screening process by a senior faculty member expert in the corresponding subject, students can apply for revaluation.

Choice Based Credit System is followed for both UG and PG programmes. Students are provided with optional groups in their discipline in which they can choose groups of their own interest and specialize in it. UG students are provided with open electives in which they can choose subjects of their interest in other discipline. Additional credit system is followed through which the student can choose courses apart from their own discipline and extra credits are provided for them. For the present students Capstone model of evaluation for Continuous Internal Assessment is introduced. A Capstone matrix has been prepared for testing the various skill sets required for learning each course and continuous evaluation is done based on the modular accessing method.

2.7 Total No. of actual teaching days during this academic year

180

2.8 Examination/ Evaluation Reforms initiated by the Institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions)

Photocopy

2.9 No. of faculty members involved in curriculum**Restructuring/revision/syllabus development****as member of Board of Study/Faculty/Curriculum Development workshop**

All the faculty members are involved in curriculum restructuring and syllabi revision

2.10 Average percentage of attendance of students

85%

2.11 Course/Programme wise distribution of pass percentage:

| Title of the Programme | Total no. of students appeared | Division | | | | |
|------------------------|--------------------------------|---------------|-------|-------|-------|--------|
| | | Distinction % | I % | II % | III % | Pass % |
| B.E CIVIL | 66 | 37.9 | 43.9 | 7.5 | NA | 89.3 |
| B.E.C.S.E | 140 | 58 | 29 | 5 | - | 98.57* |
| B.E ECE | 210 | 41.9 | 49.52 | 8.57 | - | 99.54 |
| B.E EEE | 136 | 36.76 | 59.55 | 2.94 | - | 99.26 |
| B.E MCT | 143 | 15.38 | 74.83 | 3.49 | - | 93.70 |
| B.E MECHANICAL | 220 | 33.18 | 58.63 | 3.18 | - | 95.0 |
| B.TECH IT | 138 | 24.64 | 60.14 | 12.32 | - | 97.1 |
| MBA | 113 | 6.2 | 86.7 | 6.2 | | 99.1 |
| MCA | 70 | 34.3 | 65.7 | - | - | 100 |
| M.E PED | 9 | 44.44 | 55.56 | - | - | 100 |
| M.E ED | 10 | 30 | 70 | - | - | 100 |
| M.E CAD CAM | 9 | 33.33 | 66.66 | - | - | 100 |
| ME CS | 15 | 43.75 | 56.25 | - | - | 100 |
| ME AE | 16 | 46.66 | 53.33 | - | - | 100 |
| M.E.C.S.E | 20 | 40 | 60 | - | - | 100 |
| M.E.S.E | 13 | 92 | 8 | - | - | 100 |

2.12 How does IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes:

The IQAC accomplishes the following strategies in order to improve the institutional quality. The college carries out an academic appraisal every semester for all the departments. As per IQAC procedure the attendance records of the students, faculty log book, internal mark statements, answer papers and course plans are being reviewed. A study on incremental academic growth for the students has been conducted by IQAC in order to take special actions. External academic audit and Cross functional internal audit are regularly conducted. The suggestions of the audit committee are discussed and corrective measures are taken. The IQAC, along with the Centre for Professional Development and Training (CPDT) organises several faculty development programs based on the needs and requirements of the teaching community.

2.13 Initiatives undertaken towards faculty development

| Faculty / Staff Development Programmes | Number of faculty benefitted |
|--|------------------------------|
| Refresher courses | 22 |
| UGC – Faculty Improvement Programme | 4 |
| HRD programmes | 31 |
| Orientation programmes | 77 |
| Faculty exchange programme | 0 |
| Staff training conducted by the university | 1 |
| Staff training conducted by other institutions | 151 |
| Summer / Winter schools, Workshops, etc. | 196 |
| Others | 23 |

2.14 Details of Administrative and Technical staff:

| Category | Number of Permanent Employees | Number of Vacant Positions | Number of permanent positions filled during the Year | Number of positions filled temporarily |
|----------------------|--------------------------------------|-----------------------------------|---|---|
| Administrative Staff | 11 | 0 | 0 | 0 |
| Technical Staff | 43 | 0 | 9 | 0 |

Criterion – III

3. Research, Consultancy and Extension

3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution

The IQAC has a separate research advisory board to promote R & D activities within the institution. The board comprises of senior professors, Scientist from DRDO, Dr A Sivadhanu Pillai, eminent academicians and technocrats from industries. Frequent meetings are conducted and faculty members are guided to apply for funding from various organizations. Incentives are given for publications and funded projects.

3.2 Details regarding major projects

| | Completed | Ongoing | Sanctioned | Submitted |
|---------------------|-----------|---------|------------|-----------|
| Number | - | 2 | 1 | 2 |
| Outlay in Rs. Lakhs | - | 21.5 | 17.10 | 43.33 |

3.3 Details regarding minor projects

| | Completed | Ongoing | Sanctioned | Submitted |
|---------------------|-----------|---------|------------|-----------|
| Number | 3 | 1 | - | 18 |
| Outlay in Rs. Lakhs | 4.8 | 3.2 | - | 74.92 |

3.4 Details on research publications

| | International | National | Others |
|--------------------------|---------------|----------|--------|
| Peer Review Journals | 99 | 1 | - |
| Non-Peer Review Journals | 42 | - | - |
| e-Journals | 2 | - | - |
| Conference proceedings | 103 | 38 | - |

3.5 Details on Impact factor of publications:

Range Average h-index Nos. in SCOPUS

3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations:

| Nature of the Project | Duration Year | Name of the funding Agency | Total grant sanctioned | Received |
|--|---------------|----------------------------|------------------------|----------|
| Major projects | - | - | 38.6 | 21.5 |
| Minor Projects | 1 Year | DST , AICTE, UGC | 8 | 8 |
| Interdisciplinary Projects | 1 Year | Southern Railways | - | - |
| Industry sponsored | 1 Year | Southern Railways | - | - |
| Projects sponsored by the University/ College | - | - | - | - |
| Students research projects (<i>other than compulsory by the University</i>) | 3 | DST,IEDC | 2.996 | 2.996 |
| Any other(Specify) | 2015-2016 | IEEE | 0.32 | 0.32 |
| Total | | | 49.916 | 32.816 |

3.7 No. of books publishedi) With ISBN No. Chapters in Edited Books ii) Without ISBN No. **3.8 No. of University Departments receiving funds from**

UGC-SAP CAS DST-SERB
 DPE DBT Scheme/funds

3.9 For colleges

AUTONOMY CPE DBT Star Scheme
 INSPIRE CE Any Other (specify)
 AICTE UGC

3.10 Revenue generated through consultancy **3.11 No. of conferences organized by the Institution**

| Level | International | National | State | University | College |
|---------------------|---------------|----------------|-------|------------|---------|
| Number | - | 14 | - | - | - |
| Sponsoring agencies | - | Self supported | - | - | - |

3.12 No. of faculty served as experts, chairpersons or resource persons

3.13 No. of collaborations:

International National Any other

3.14 No. of linkages created during this year **3.15 Total budget for research for current year in lakhs:**

From funding agency From Management of University/College
 Total

3.16 No. of patents received this year

| Type of Patent | | Number |
|----------------|---------|--------|
| National | Applied | 1 |
| | Granted | - |
| International | Applied | - |
| | Granted | - |
| Commercialised | Applied | - |
| | Granted | - |

3.17 No. of research awards/ recognitions received by faculty and research fellows of the Institute in the year

| Total | International | National | State | University | Dist | College |
|-------|---------------|----------|-------|------------|------|---------|
| - | - | 2 | - | - | - | 6 |

3.18 No. of faculty from the Institution

Who are Ph.D.Guides?

Students registered under them

3.19 No. of Ph.D. awarded by faculty from the Institution

3.20 No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)

JRF SRF Project Fellows Any other

3.21 No. of students Participated in NSS events:

University level State level
National level International level

3.22 No. of students participated in NCC events:

University level State level
National level International level

3.23 No. of Awards won in NSS:

University level State level
National level International level

3.24 No. of Awards won in NCC:

University level State level
National level International level

3.25 No. of Extension activities organized

University forum College forum
NCC NSS Any other

3.26 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility

- National Service scheme in association with IIF Chapter SKCET organized several programmes like Blood donation camp, Tree Plantation and rally during the month of August 2015.
- NSS Volunteers participated and Volunteered in the “Coimbatore Peace festival” organised by Shanthi Ashram at PSGIMS during the month of August 2015
- A Rally was organized during the month of October 2015 in memory of former president Dr.APJ Abdul kalam birthday. Around 200 Volunteers participated in the rally.
- Blood Donation camp was organized by NSS of SKCET at Sri Krishna Hall during the month of November 2015.Around 50 volunteers donated blood.
- Election awareness rally was organized during the month of March 2016 from Kuniamuthur Corporation office to SKCET campus in association with Election Commission and district collectorate.
- Our College has been honoured with a Certificate of Appreciation by Indian Red Cross society during the month of April 2016.
- NSS Volunteer Mr.Chandrasekar (Final Year Mechanical Engineering Department Student) has been awarded with Certificate and shield by the College for his outstanding participation in NSS activities for the past three years.

Criterion – IV

4. Infrastructure and Learning Resources

4.1 Details of increase in infrastructure facilities:

| Facilities | Existing | Newly created | Source of Fund | Total |
|---|----------------|-----------------|----------------|--------------------|
| Campus area | 45.57 Acres | - | - | 45.57 Acres |
| Class rooms | 105 | - | Management | 80 |
| Laboratories | 68 | - | - | 68 |
| Seminar Halls | 2 | - | Management | 2 |
| No. of important equipment's purchased (1-0 lakh) during the current year. | 1797 | 55 | Management | 1852 |
| Value of the equipment purchased during the year (Rs. in Lakhs) | - | Rs. 1,24,09,777 | Management | Rs. 1,24,09,777 |
| Others | - | - | - | - |

4.2 Computerization of administration and library

The College library, office, examination and hostel administration are completely automated.

Accounts Office:

- Salary statements, Arrear statements, financial statements have been computerised.
- The fee collection of the students is also automated and the database is maintained.

Examinations Office:

- Intranet services are used,
- Examiner's panel, Examiner selection and Hall ticket generation are computerised.
- Exam hall allotment is computerised.
- Result analyses are also computerised.
- Declaration of results is online.

Hostel:

- Hostel management is done through the software developed by Sri Krishna High-Tech.
- Fees Collection and room allotments are computerised.

Computerization of library:

The Library is computerized using AUTOLIB Software. The software has all the essential modules needed for running library services most efficiently. (Categorization, Circulation, purchase, Serial Control, OPAC, Student Entry and User Management)

Total Number of Computers for public access : 160 Nos.

Total Number of Printers for public access : 01 Nos.

Internet band width speed : 50 mbps

Institutional Repository : Yes

Content management system for e-learning:

The Library LAN has been a part of campus wide network, thus enabling the academic community of all the departments to access information from their location itself. Wi-Fi connectivity is also available. All the lecture materials are posted in Google classroom and e-Learning resources like NPTEL are available. Learning through MOOC is also encouraged.

Digital library:

The Digital Library provides value added services like access to several significant link namely N-List, shodhganga of INFLIBNET, NPTEL courses of IITs and IISc, and Open Access Journals etc.

Computerization of academics:

- All the academics and Circulars for students are sent to through group mail.
- The students can submit the assignment and other particulars only through the Google apps and the Google classroom.
- Telegram app group is created department wise to disseminate / share information.
- Google forms are used for collecting feedback from the students.

4.3 Library services:

| | Existing | | Newly added | | Total | |
|------------|----------|-------------|-------------|-------------|-------|-------------|
| | No. | Value (Rs.) | No. | Value (Rs.) | No. | Value (Rs.) |
| Text Books | 56677 | 2,34,90,164 | 4602 | 17,92,319 | 61279 | 2,52,82,483 |

| | | | | | | |
|---|-----------|--------------------|----------|-------------|-----------|--------------------|
| Reference Books | 11680 | 60,65,149 | 646 | 1,36,500 | 12326 | 62,01,649 |
| e-Books | 2700 | - | 559 | - | 3259 | - |
| Journals | 358 | 4,82,594 | 74 | 1,18,598 | 432 | 5,84,497 |
| e-Journals (IEEE, ASME, EBSCO, ASCE) | 1945 | 8,88,955 | 545 | 2,24,783.00 | 2490 | 11,13,738 |
| Digital Databases 1) PROWESS 2) DELNET | - | 1,07,722 11,500 | - | - | - | 1,19,222 |
| CD & Video | 12240 | 18,540 | 422 | - | 12662 | 18,540 |
| Others (specify) 1) Web cams 2) Digital Content Storage | 45 3TB | 2,22,300 13,020 | - 1TB | - 4,375 | 45 4TB | 2,22,300 17,395 |

4.4 Technology up gradation (overall)

| | Total Computers | Computer Labs | Internet | Browsing Centres (Digital library) | Computer Centres | Office | Depart-ments | Others |
|----------|-----------------|---------------|----------|------------------------------------|------------------|--------|--------------|--------|
| Existing | 1595 | 21 | 40 | 1 | - | 1 | 10 | - |
| Added | - | - | 10 | - | - | - | - | - |
| Total | 1595 | 21 | 50 | 1 | - | 1 | 10 | - |

4.5 Computer, Internet access, training to teachers and students and any other programme for technology up gradation (Networking, e-Governance etc.)

The entire campus is WI-FI enabled and the student can browse the internet all 24 X 7 hours expect during the lecture hours. Even during the regular classes, the students are allowed to access the SMART books which are provided for selected courses.

All the classrooms are equipped with interactive SMART boards and all the faculty members are provided with laptops to promote ICT bases learning. The lecture materials are sent to the students prior to the commencement of classes through Google classroom which enables all the students come well prepared to the class.

Smart board based teaching enables the faculty to screen videos, 3D illustrations etc. In addition to the above, on-line open source materials like the NPTEL of IITs are sent to the students through Google classroom by the respective faculty members.

The digital library has 1945 journals to enhance knowledge of the students. These learning resources and on-line content are utilized by the stakeholders to supplement the classroom teaching learning process. Since all the faculty members have been trained for e-content creations, it enables them to select the best resource available to explain a particular concept.

In all, the college has 25 computer labs with 1000 systems with 50 mbps to meets the needs of the students.

4.6 Amount spent on maintenance in lakhs of Rupees:

| | |
|--|--------------|
| i) ICT | 10.26 |
| ii) Campus Infrastructure and facilities | 14.78 |
| iii) Equipments | 6.8 |
| iv) Others | 4.5 |
| Total: | 36.34 |

Criterion – V

5. Student Support and Progression

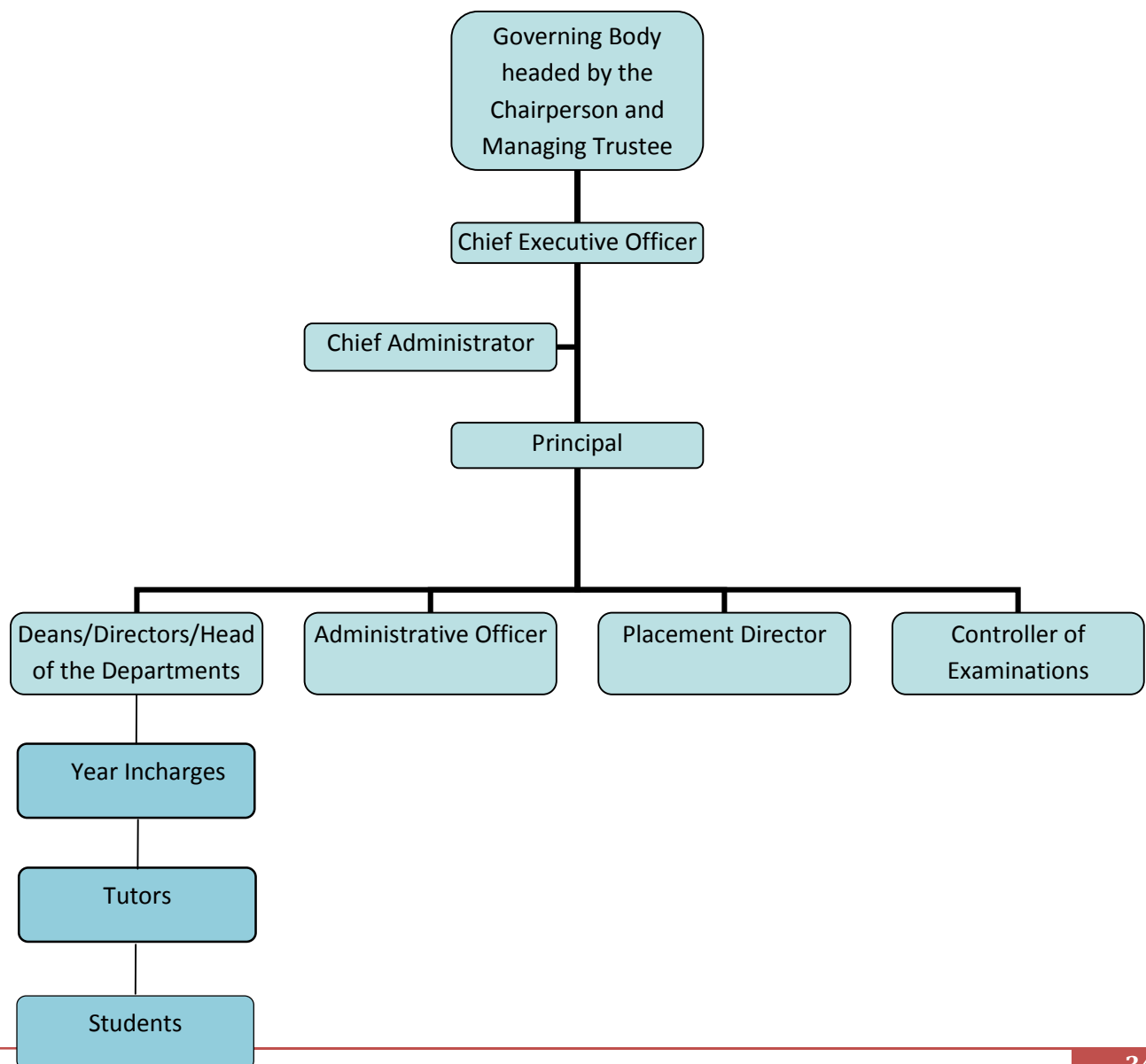
- The First year students are made aware of students support services through orientation programme
- The oral and written communication skills of the First Year Students are assessed and based on the performance, they are given special communication skill training.
- BEC vantage and preliminary coaching classes are conducted by English Faculty for the second and third year students. Online exams are conducted for both Preliminary/ Vantage (Listening, Writing, and Reading) to get the BEC certification so that the students can enhance their personal skills and work successfully in international business world
- Special Soft Skill development programmes are conducted for final year students.
- Career building programmes and workshops/seminars/symposiums on state-of-the-art technical fields are frequently organised for improving the knowledge and skill level of the students.
- Class presentations, group discussions are conducted to sharpen their communication skills
- Remedial coaching classes are organized for slow learners. A series of Continuous Assessment Tests are conducted and based on the marks obtained the weaker students are identified and remedial classes are conducted for their improvement.
- A class committee of at least 6 students comprising of 2 fast learners, 2 moderate learners, 1 slow learner and 1 class representative (generally based on their willingness) is formed. Class Committee Review Meeting is conducted twice every semester to find out the academic difficulties faced by the students. Remedies are taken based on the feedback of Class Committee Review Meeting.
- The college has many clubs and associations to groom the technical ability and invoke the creativity among the students.

5.2 Efforts made by the institution for tracking the progression

The institution has an effective tested and tried hierarchical administrative system for monitoring and tracking the progression. The institution is headed by the Chairperson and Managing Trustee. The Chairperson and Managing Trustee is advised by the governing body.

The Chief Executive Officer, the Chief Administrator and the Principal work together and articulate the strategic plan and the roadmap for attaining the goals and objectives to the IQAC/Deans/Directors/ HoDs/Administrative Officer.

The HoDs implement the plans and monitor the outcomes with the support of year in charges and tutors. Each class has three tutors to monitor and guide the students.



Tutor-ward Meeting

The students are supported by Tutor ward system. Each class has three tutors and all the tutors for a particular year of students are co-ordinated by a year in-charge,ie, if there are 3 sections for II year BE Mechanical Engineering, then each section will have 3 tutors and all the nine tutors are co-ordinated by a year in-charge. All the year in-charges and tutors support the students in the curricular, co-curricular, extracurricular activities, competitive exams, etc. The tutors also deal with the personal problems of the students and in certain cases counseling is arranged with professional counsellor and HOD. Tutors conduct Tutor-ward meetings frequently.

Class Committee Meeting

A class committee of at least 6 students comprising of 2 fast learners, 2 moderate learners, 1 slow learner and 1 class representative(generally based on their willingness) is formed. Additional students are included based on their interest as decided by class advisor after first internal test. The HoD organizes class committee meeting with a chairperson from the other department. Feedbacks received along with actions planned are recorded. These are communicated to the faculty through department wise faculty meetings organized by the Principal.

Feed Back from Students

Online feedbacks are also obtained from the students twice a semesters through google forms and the same is reviewed by the Principal and the HoD. When the faculty performance is not upto the mark, the HoD with a senior faculty member evaluate the performance of the faculty member by attending one or two sessions of his/her lecture and suitable guidance is provided. When the performance of the faculty is not improved in the subsequent classes, the HoD sends a senior faculty to that class to teach the the students and mentor the faculty who is not performing to the expected level. The underperforming faculty is also sent to faculty development programmes.

5.3 (a) Total Number of students

| UG | PG | Ph. D. | Others |
|------|-----|--------|--------|
| 2770 | 426 | - | - |

(b) No. of students outside the state

65

(c) No. of international students

0

| | | | | | |
|-----|-----------|----------|-------|-----------|----------|
| Men | No | % | Women | No | % |
| | 1545 | 66 | | 792 | 34 |

| Last Year | | | | | | This Year | | | | | |
|-----------|-----|----|------|-----------------------|-------|-----------|-----|----|------|-----------------------|-------|
| General | SC | ST | OBC | Physically Challenged | Total | General | SC | ST | OBC | Physically Challenged | Total |
| 652 | 221 | 11 | 1307 | 1 | 2192 | 699 | 226 | 10 | 1145 | 1 | 2081 |

Demand ratio 1:10

Dropout % 1.8

5.4 Details of student support mechanism for coaching for competitive examinations (If any)

The institution ensures that the students are sufficiently supported in preparing for their higher studies other than placement training.

The Higher education cell prevalent in the college library facilitates the students to prepare for GATE and other competitive exams. Frequent awareness programmes on the scope of higher education in India and Abroad are also conducted for the benefit of the students.

No. of students beneficiaries

286

5.5 No. of students qualified in these examinations

| | | | | | | | |
|-------------|---|-----------|---|------|---|--------|----|
| NET | - | SET/SLET | - | GATE | 6 | CAT | - |
| IAS/IPS etc | - | State PSC | - | UPSC | - | Others | 26 |

5.6 Details of student counselling and career guidance

- Effective Tutor-Ward system provides sufficient counselling to the students. Grievance redressal cell provides sufficient advice and guidance to the students who sought for it.
- The Placement and Training division organises several training programme for pre final year and final year students. Ample training is given to the students in improving their communication skills, technical, aptitude and logical abilities. Agencies like FACE and TECHNOTURF are invited to offer training to the students.
- Higher education cell provides guidance and counselling to the students regarding higher studies and employment. Programs organized by the Higher education cell include seminars such as benefits and possibilities of higher education opportunities at Abroad and India, GATE Opportunities, etc.
- Anti-Ragging Committee are actively functioning in the college and there are no reports of ragging in the campus.

No. of students benefitted

719

5.7 Details of campus placement

| Number of Organizations Visited | On campus | | Off Campus |
|---------------------------------|---------------------------------|---------------------------|---------------------------|
| | Number of Students Participated | Number of Students Placed | Number of Students Placed |
| 154 | 797 | 526 | 40 |

5.8 Details of gender sensitization programmes

- Equitable opportunities are provided to all the students and staff irrespective of their gender. The college conducts many gender sensitization programmes for the staff and students in order to train them to assess and analyze social issues from gender perspectives.
- Special sessions are organized by the women empowerment cell on the problems of women in the contemporary society, dignity of women, legal awareness and the role of women in the family and society.

5.9 Students Activities

5.9.1 No. of students participated in Sports, Games and other events

State/ University level National level International level

No. of students participated in cultural events

State/ University level National level International level

5.9.2 No. of medals /awards won by students in Sports, Games and other events

Sports: State/ University level National level International level

Cultural: State/ University level National level International level

5.10 Scholarships and Financial Support

| | Number of Students | Amount(Rs.) |
|--|--------------------|-------------|
| Financial support from institution | 13 | 260000 |
| Financial support from government | 1988 | 171483950 |
| Financial support from other sources | - | - |
| Number of students who received International/ National recognitions | - | - |

5.11 Student organised / initiatives

Fairs : State/ University level National level International level

Exhibition: State/ University level National level International level

5.12 No. of social initiatives undertaken by the students

5.13 Major grievances of students (if any) redressed: _____

The grievance redressal cell, class committee meetings, tutor-ward system, etc have attended various grievances of the students. Suitable solutions were provided to the students based on the nature of the problems faced by them.

The Students feedback helps in the following aspect:

- Sorting out their academic issues
- Curriculum development
- Other personal issues

Suggestions on curriculum and teaching–learning-evaluation are obtained through interaction and constructively used in curriculum development.

The committee takes initiative to implement the appropriate suggestion of the students to serve the students in the best possible way.

Criterion – VI

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

Vision:

To produce globally competitive Engineers with high ethical values and social responsibilities.

Mission Statement:

Our mission is to impart the highest quality of technical education, provide impetus to research and development, foster innovation in the technological growth, encourage entrepreneurship and strive to solve problems of mankind. We also endeavor to embed the greatest values of human life and inculcate the will to attain progress and prosperity in life in socially accepted norms, to remain an asset to our nation and be a part of its pride and heritage.

6.2 Does the Institution has a management Information System

Yes, the institution uses a Management information system to disseminate and share the information about students and faculty through software “PALPAP”.

Administrative procedures:

Student and faculty profiles, Faculty Workload details, Class Time table, Faculty Timetable are maintained using the software. The fees collection and office administration is completely automated. Even the hostel room allotment is done through the software developed by in-house software experts.

The examination management system is also computerized. Examination fees collection, Hall tickets generation, Exam allotment and result publication are automated.

Student records:

Student registration records, marks & grades, student progression data, internal assessment details, progress reports, Attendance details are maintained and shared.

Also the institution uses Cloud platforms to share information among the stakeholders. All the circulars are communicated to the students and faculty through group mail. The lecture materials are also shared to the students through the google classroom.

6.3 Quality improvement strategies adopted by the institution for each of the following:**6.3.1 Curriculum Development**

The institution follows a systematic process in the design and development of the curriculum. Curriculum and syllabus are updated periodically. The key feature of curriculum design includes.

- Feedback from each course faculty is collected by the respective departments through series of department meetings which is consolidated for curriculum/syllabus revision.
- The curriculum/syllabus is benchmarked with that of the reputed National and Foreign Universities.
- Feedback from the students, Alumni, subject experts and industrial experts are considered while framing curriculum/syllabus.
- Board of Studies Committee comprising of the HoD, senior faculty, university nominee, management nominee, alumni and industry expert is convened to discuss the revised curriculum/syllabus.
- The suggestions given by the members of board of studies are discussed in the standing committee and finally the amendments are passed in the Academic Council.

- Choice based credit system (CBCS) is introduced for the students from 2015 onwards. The students are allowed to choose the elective stream of their own interest.
- Open electives are introduced wherein the students can choose the subjects from other departments.

6.3.2 Teaching and Learning

The institution follows a teaching-learning and assessment strategy that are structured in order to facilitate the achievement of the intended outcomes.

- The curriculum of every semester is completed within the stipulated time through planning of the courses of study, timely conduct of continuous evaluation for laboratory courses.
- The institution introduced Choice Based Credit System(CBCS) to choose the courses of their interest in their allied area of study.
- The course information for each subject is provided to students to enable them to get an idea of what they are going to learn.
- Periodic Class Committee meetings with student representatives of the class meet to ensure transparency in curriculum delivery and evaluation pattern.
- The over-all performance of the student is assessed through a combination of continuous and end semester Examination.
- Smart board based interactive teaching-learning is promoted.
- Learning in all courses is made more student-centric. Computer-aided learning is given priority in teaching and learning methods.
- The College is endowed with highly qualified teaching Faculty, mostly having Ph.D. degree.
- The Faculty is recruited through a rigorous selection process in accordance with the directives of the AICTE and Anna University.
- The College follows the self- appraisal method to evaluate the performance of Faculty, which is used for correcting shortfalls.
- Greater Faculty participation in Faculty Development Programmes, National and International Seminars and Conferences is encouraged.

- Field visits, case studies, and internships have been made compulsory, wherever necessary, to make teaching and learning more effective.
- To improve employability skills and skill set among the students, value added courses and soft skill development courses are introduced to make students industry ready.

6.3.3 Examination and Evaluation

Examination

- Examinations are conducted under the supervision of the Controller of Examinations.
- The centralized paper evaluation is undertaken in the office of the Controller of Examinations itself and the results are declared after the approval of the concerned evaluation committee of the college.
- Choice Based Credit System is introduced for both UG and PG programmes from this academic year onwards.
- The students can earn extra credit points above curriculum by taking up certification courses offered by external agencies.
- Capstone model of evaluation for CIA is introduced. A Capstone matrix has been prepared for testing the various skill sets required for evaluation and evaluation is based on the rubrics.

Evaluation:

- Central valuation is practiced by inviting experienced faculty from eminent colleges for evaluation.
- Transparent revaluation procedures introduced.
- Monitoring the performance of the students by means of Internal Exams, End Semester Exams, and Continuous Evaluation for laboratory courses.
- Internal assessments are done through series of internal tests and based on performance in the capstone model internal components.
- Continuous evaluation procedure introduced for laboratory courses.

- The college publishes all its results on the College official website as soon as the results are declared. A hard copy is also prominently displayed on the Notice Board for the convenience of the students.

6.3.4 Research and Development

- A core research team comprising of experts from various domains is formed to provide guidance to faculty pursuing research.
- To promote research, the institution encourages Faculty members to participate and present papers in various State/National/International Seminars and Conferences.
- Students are also motivated to do research in their respective fields of interest and encouraged to publish papers in reputed journals.
- Faculty members guide full time and part time Ph.D. scholars.
- The College library has subscribed National/International e- journals in various subjects and ICT facility which can be accessed free by Faculty to update their knowledge.
- The faculty members are motivated by The HoDs and The principal to submit research proposals to various funding agencies like AICTE/DRDO/DST etc. The college also received funds for a few research projects submitted by the faculty members.

6.3.5 Library, ICT and physical infrastructure / instrumentation

Library:

- The Vankatram Learning Centre (Central Library) is one among the best academic libraries in this part of the country in terms of its Architecture, Size, Resources and ICT enabled services.
- The Library is well equipped with unique features and world-class infrastructure to support and encourage scholarly communication and professional development. With the state-of-the-art technology, the users can access the print, digital and visual resources online throughout the campus.

- The library has a collection of about 73271 volumes of books on 40073 titles on variety of subjects. Some of them are rare and valuable. Meticulous care is taken to develop resources for various disciplines.
- More than 1,00,000 scholarly resources in digital and visual modes such as NPTEL Video Lectures and Web Courses, NMEICT - Spoken Tutorials, E-Learning Portal, Knowledge Portal, IEEE, ASME, EBSCO, ASCE and ASTM Online Journals Packages, 2000+ national and international periodicals in print and digital modes and more than 12146 CDs / VCDs / DVDs add value to the teaching and learning process.
- Library is fully automated with Library management software –OPAC.

ICT:

- Introduced Smart boards to facilitate ICT based teaching and learning.
- Google classrooms are used for the effective and efficient e-learning process and sharing open resource learning materials.
- Wi-Fi facility is provided for the entire campus.

Physical Infrastructure/Instrumentation:

The College has separate Estate office which oversees the maintenance of building and other infrastructure facilities. A Civil Supervisor with an assistant is employed to supervise and maintain all the civil and electrical works in the campus. The following are the few campus specific initiatives undertaken to improve the physical ambience of the campus,

- Rainwater harvesting facility is available.
- Solid waste management facility is available in the campus.
- Landscaping and tree plantations are done throughout the campus to maintain a green environment.
- Intercom with Direct Inward Dialling (DID) facility is made available for all the laboratories and faculty rooms.
- Fire extinguishers are periodically inspected for the proximity to a potential hazard.

- Mineral water supply in the campus ensures potable water for all the members of the College.
- Treated water from the sewage treatment plant is recycled for use in gardening
- The garden maintenance and security services are outsourced.

6.3.6 Human Resource Management

- Institutions attract talents on regular basis as and when required.
- The recruitment and selection process adhere to the guidelines provided by the affiliated university and AICTE/UGC.
- The faculty members are encouraged to attend orientation, refresher courses and faculty development programmes.
- Faculty review meeting and feedbacks are analyzed for enhancing their teaching skills.
- A Centre for Professional development and training (CPDT) is established to provide technical training and soft skill development training for faculty members.
- Best faculty award, best researcher award and best publication award are provided for all the performing faculty.
- Faculties producing 100% results are recognized every semester.

6.3.7 Faculty and Staff recruitment

- Based on the estimated workload of the departments for the ensuing academic year and if new staff members are required, the College advertises in regional, national newspapers and in college website for the available posts.
- The applications are scrutinized as per their qualification and teaching experience by the respective heads of the departments in consultation with the Principal and the short listed candidates are called for a demonstration class and an interview.
- The Staff Selection Committee constituted by the College Management conducts interview.

- The committee comprises of the Managing Trustee, CEO, Principal, Subject expert and Head of the department.
- The selection is made, taking into account the eligibility, academic record, subject expertise, teaching efficiency and previous experience.

6.3.8 Industry Interaction / Collaboration

Industry interaction:

- The students are encouraged in doing their research projects in different industries which are a part of their curriculum.
- Experts are also invited to share their industrial experiences with the students.
- Many conferences, workshops and seminars are regularly conducted by each department and many technical experts and leading industrialists are invited during the event.
- Field visits and study trips are organized for the students to make them familiar with the practical environment.
- The college has signed MoU with many leading industries.
- The institution included industry specific courses to cater the needs of the industry.
- Students are encouraged to take-up internships in leading industries.

Internationalization:

- The College encourages the faculty members to participate in international level conferences, seminars, etc., to gain knowledge by virtue of interaction with international experts.
- The international academic experts are also invited to the institution as resource person for conferences, seminars, etc., to share their expertise with the students and faculty.
- International events are conducted frequently to share knowledge among researchers, faculty and students.

6.3.9 Admission of Students

- Admission of students is done through single window system as per Anna University Norms.
- The Institution ensures wide publicity and transparency in the admission process through prospectus, College website and advertisements in all leading national and regional daily newspapers.
- The prospectus and application form are uploaded in the College website. Prior to the results of higher secondary examinations, counselling centre inside the College helps the parents to enquire information about the range of courses, eligibility criteria, and process of admission as well as academic support facilities.
- The College has participated in various educational fairs of various leading publications in Coimbatore. The admission process sticks to the norms given by the government order.

6.4 Welfare schemes for

Teaching and non-teaching staff:

Realizing that the college can be a productive place, only if the employees are satisfied, the management has put several incentive measures in place for them besides the salary package reasonably high for a tier II city. These measures address the needs of the college community and are a means of appreciating the contribution of the teaching and non-teaching faculty in practical ways. A list of these initiatives are given below

- The management meets the expenditure of faculty for attending conferences/FDP and seminars outside the college.
- Free medical camps are conducted for teaching and non-teaching staff members by the college.
- Best journal publications with impact factor by the faculty members are awarded with cash prizes.

- Group insurance for all the staff members.
- Female staff members can avail maternity leave.
- Transport facilities are provided to teaching faculties at subsidiary rates and free for non-teaching staff.
- Hostel accommodation is provided to staff at subsidiary rates.
- Contribution for employees provident fund scheme.

Students:

- Health care benefits, Motivation and support to attend conferences, Industrial visits, Job oriented training programs, Presentation skill (seminars) enhancement programs.
- Group Medical Insurance.
- Cash prizes for award winners.

Non teaching:

- The institution provides opportunities for their Skill Development.
- Motivation for acquiring higher qualification.
- Best non-teaching faculty is awarded with cash prize.

6.5 Total corpus fund generated

NA

6.6 Whether annual financial audit has been done

Yes



No

**6.7 Whether Academic and Administrative Audit (AAA) has been done?**

| Audit Type | External | | Internal | |
|----------------|----------|--------------------|----------|-----------|
| | Yes/No | Agency | Yes/No | Authority |
| Academic | Yes | External Committee | Yes | IQAC |
| Administrative | Yes | External Committee | Yes | IQAC |

6.8 Does the University/ Autonomous College declare results within 30 days?For UG Programmes Yes No For PG Programmes Yes No **6.9 What efforts are made by the University/ Autonomous College for Examination Reforms?**

- Online publication of end semester results
- Mark sheets printed with photograph of the student.
- Revaluation of papers
- Copy of answer sheets is given on request.
- Supplementary examination for arrear in single paper for outgoing students

6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?

University supports all initiatives of the
institution

6.11 Activities and support from the Alumni Association

- Alumni meet is held on last Sunday of December every year.
- Alumni are involved in Curriculum development.
- Alumni Interacts with students through guest lectures and seminars.
- The Feedback from Alumni serves to improve in the prospectus of career building and curriculum design.
- Alumni entrepreneurs motivate students to encourage students as an entrepreneur.
- Alumni association meets frequently to discuss the developments.

6.12 Activities and support from the Parent – Teacher Association

Regular conduct of Parent-Teacher Meet facilitates the interaction that enables in building a rapport and co-operation between them. During the meeting, the feedback of the parents are reviewed and used for nurturing the students. Parents meet whenever students run short of attendance. Parents and local guardians are invited to the college to discuss the necessary action to be implemented for the progress of the student. The College encourages frequent visit by the parents during their wards' course of study. Input from parents provides general feedback about the related curricular/co-curricular activities.

6.13 Development programmes for support staff

Training for supporting staff on

- Computer training
- Internet
- Computer aided packages
- Non teaching staff members are encouraged to pursue higher education.

6.14 Initiatives taken by the institution to make the campus eco-friendly

Energy conservation:

- Solar water heaters have been installed in the hostels for providing hot water to boys and girls for bathing, thereby to conserve energy and minimize energy consumption
- Florescent tube lights have been replaced by LED bulbs.
- Building structures are designed with high natural lighting and ventilation to minimize lighting loads.
- Sewage water treatment plant to treat the waste water has been installed.
- The provision for submission of Assignments through Google classroom so as to reduce the time and to conserve natural resource.

- During the orientation programme for freshers, along with the rules and regulations of the College, advice on energy conservation and environmental hygiene are given.

Use of renewable energy:

Water harvesting - Water harvest tank for holding huge gallons has been installed to hold rain water. This facility has been constructed adhering to the Government norms. The water thus harvested is being used for watering the plants and garden.

Efforts for Carbon neutrality:

- College provides bus facilities to the teaching and nonteaching staff connecting various places with an aim to avoid the use of individual vehicles and thus reducing the carbon emission
- A systematic parking area that allows for free and convenient movement within the campus
- More saplings are planted every year in various locations to reduce the carbon load
- Emission free vehicles in the campus
- Pavement for pedestrian traffic.

Plantation:

- College campus has more than 1000 trees of multi-variant types.
- Acres of land have been dedicated for landscape lawns.
- Tree plantation drives are organized regularly to create clean and green campus.

E-waste Management:

- The college encourages students to use the old electronic gadgets on their projects during exhibitions. The inoperative electronic devices are given back to the supplier or disposed of in an appropriate manner.

- The nature club of the College is exclusively involved in creating awareness and environmental consciousness to conserve the environment for our future generation.
- The students of the Department of Biosciences were involved in survey of plant species in the hills adjacent to College zone with the curiosity of knowing the flora of the surrounding environment.
- The NSS unit of our College organizes various programmes in nearby villages to emphasize the need for protecting our mother nature for our future generation.

Criterion – VII

7. Innovations and Best Practices

7.1 Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.

To motivate and prompt students to learn and succeed the following practices were introduced in our institution.

- Smart board based interactive teaching learning process
- Up gradation of curriculum based on the improvements in technology in such a way that learning process is made easier for the students.
- For the benefit of the students the concept of earning additional credits for certificate / mandatory courses like BEC , foreign language etc.
- Many E-learning platforms have been established such that it makes the teaching learning process, an easy task.
- Incentives to all the students in leading MNCs.
- Governing process is made simple by utilization of Google drives and apps.
- Internet facilities has been provided for all the staff in their respective departments
- Closed User Group sim cards have been provided to all the faculties for easy communication with their wards.
- Wastewater generated from the college premises are treated and reused for gardening and flushing
- To expose the students to industrial activities Internship Programme are introduced.
- Bridge Courses have been started for the students moving from Higher Secondary to College for better understanding of the learning practices in college.
- Syllabus Completion in every class is monitored by Head of the department through Google apps.
- The institution has a Centre for Professional Development and Training (CPDT) Cell which aids in enhancing the skills of the faculty.

- Amenities center consisting of Higginbotham's book stall, Krishna Xerox, etc., has been opened
- A mobile application named Sri Krishna Institutions has been developed which brings all the information related to the institution under one roof.
- Separate IPR cell is established and the patents filed so far is 2. More patents will be filed soon.
- Patents filed __2__ ; Patents in process __3__

7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year

Recommendation 1: Internal Audit shall be conducted in all the departments to ensure quality in teaching and learning

Peer level internal audit was conducted as per the guidelines of IQAC in all the departments during the month of May 2016. The details of the audit team is as follows.

| S.No | Name of the Department | Name of the Auditor |
|------|--|--|
| 1 | Mechanical Engineering | Dr.P.Balamurugan, HoD/Mechatronics Engineering |
| 2 | Mechatronics Engineering | Dr.S.Sopia, HoD/Information Technology |
| 3 | Civil Engineering | Dr.S.Shankar, HoD/Information Technology |
| 4 | Information Technology | Dr.P.Ashoka Varthanan, HoD/Information Technology |
| 5 | Computer Science and Engineering | Dr.D.Maruthachalam, HoD/Civil Engineering |
| 6 | Electronics and Communications Engineering | Dr.S.J.K.Jagadeeshkumar, HoD/ Computer Science and Engineering |
| 7 | Electrical and Electronics Engineering | Dr.P.N.Magudeeswaran, HoD/Science and Humanities |
| 8 | Science and Humanities | Dr.C.Ramakrishnan, Director, MBA |
| 9 | MBA | Dr.U.K.Sridevi, HoD/Computer Applications |
| 10 | MCA | Dr.S.Ramkumar, HoD/Electrical and Electronics Engineering |

Recommendation 2: Educating Students on Choice Based Credit System (CBCS)

The Heads of various departments addressed the students about the CBCS. The members of all the Board of Studies (BoS) had prepared a Road Map of prerequisite courses to be studied before selecting a particular elective and the same has been informed to the students.

Recommendation 3: Incorporate Suggestions from Faculty to improve results

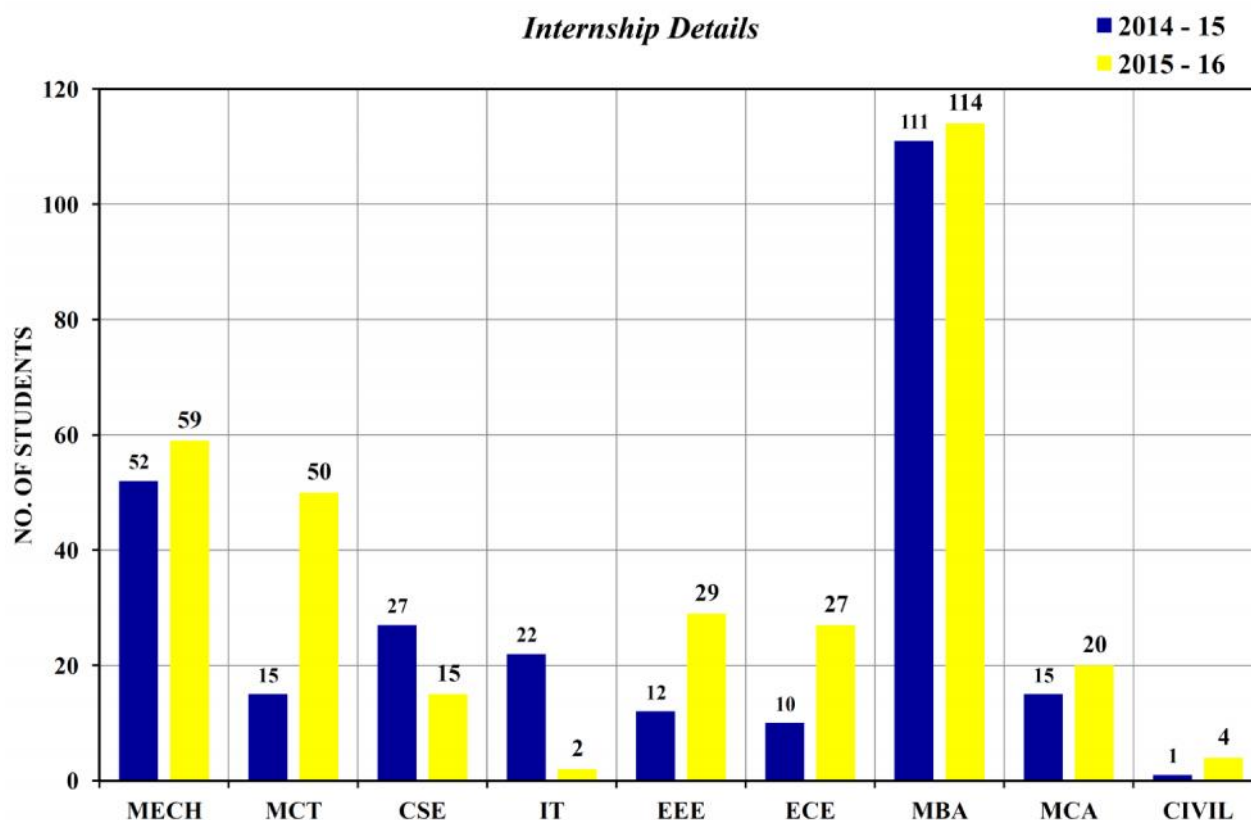
The following practices were followed during the odd semester 2015-2016 to improve the results.

- In-order to inculcate seriousness in the continuous assessment tests, questions papers were obtained from the sister concern, viz., Sri Krishna College of Technology. This is different from the earlier practice where the faculty handling classes will set the question paper.
- Evening coaching classes (8th hour) were introduced to improve the pass percentage and help the students clear their previous semester back-logs. More concentration was given to students with arrears in single subject.
- Faculty – Parent meet was convened in the departments to deliberate the present status of their son/daughter.

Recommendation 4: Exposing students to Industrial Practices

All the fast-track final year students are deputed to internships in various industries since Jan 2016. The theory classes for the non-fast track students will also be completed by the end of February 2016 in an accelerated manner. This is done for the first time to pave the way for non-fast track students also to take-up internships during March/April 2016. The number of students who are deputed to internships is enclosed.

| Department | 2014 – 15 | 2015 - 16 | Some Key Industries |
|------------|-----------|-----------|--|
| MECH | 52 | 59 | Kudankulam Nuclear Power Plant, Ashok Leyland, Ford, IISc Bangalore – Research Fellowship, L & T Foundries, Yuvaraj Floors. |
| MCT | 15 | 50 | Asahi Glass, Pricol Ltd., Roots Ltd., Bull India, ELGI Ltd., Solution technologies, Robert Bosch Engineering and Business Solution Ltd., Gishnu Gears, |
| CSE | 27 | 15 | Infosys, Wipro, Heterogenous Network, Amazon, ZOHO, Robert Bosch, Athena Healthcare, Owler, Payoda, Red hat, Inautix, Innovatus system |
| IT | 22 | 4 | Amazon, ZOHO, Payoda, Infosys, Inautix, Wipro, Trimble, Vuram technologies, Sansperil |
| EEE | 12 | 29 | Salem Steel plant, Bosch, Soliton, Zoho, Wipro, Infosys, Inautix Tech India, Amazon, Sree Pooja Industries, Pricol, Savera alloys. |
| ECE | 10 | 27 | Soliton, Robert Bosch, Amazon, Zoho, Wipro, Infosys, Inautix Tech India. |
| MBA | 111 | 114 | Roots, Pricol, LMW, Mahendra Pumps, Bimetal bearings, Acc, suguna Poultry, L&T, Deccan Pumps, Craftsmen, KGISL, Sakthi Sugars. |
| MCA | 15 | 20 | Amazon, Robert Bosch, CTS, Wipro, Scava, Avion, Pantech |
| CIVIL | 1 | 4 | IIT Madras Summer Fellowship, Yuvaraj Floors. |



Recommendation 5: Invite Eminent Scientists/Academicians and Award Winners to Campus

Many eminent personalities have addressed our students and some of their names are listed below.

1. Dr.Avinandan Mukerjee, Dean, College of Business, Clayton State University, USA
2. Dr.M.Sethumadhavan, Professor in Mathematics, Head of TIFAC-Corein Cyber Security, Amrita University, Coimbatore.
3. Mr.Scott Smith, Senior Director, McGraw Hill
5. Dr.Shakeel Ahmed, Joint Secretary, UGC

Recommendation 6: Evaluate language competency of the faculty and impart training to faculty lacking communication skills

Panel of experts from Bharathiar University, Bharathidasan University and other eminent institutions were invited for evaluating the communication skills of all the faculty members. Faculty members who need communication skill training are identified and training programmes were organized by the centre for professional development and training (CPDT).Remedial programmes are also organized for bloomers.

7.3 Give two Best Practices of the institution (please see the format in the NAAC Self-study Manuals)

Best Practice 1:

1. Title of the Practice

Interactive Smart Boards

2. Goal

To promote a captivating, motivating and collaborative teaching and learning experience, modern classrooms have been introduced. These interactive smart boards enhance the skills of younger generation by increasing the student engagement and teacher effectiveness, both inside and beyond the classrooms.

3. Context

The younger generation of 21st century is changing rapidly due to the major advancements in the technology. To keep pace with the tech-savvy learners and to keep them captivated throughout the lecture interactive smart boards are being used. Using these exciting interactive whiteboards, you can create multimedia lessons that engage learners and address their diverse needs. But having Smart Boards in the classroom and knowing how to use them to provide quality instruction are two different things. The challenging issue in implementation of this practice is to train the instructor to get used to the board and to involve the students into this new way of learning process.

4. The Practice

The Smart Board technology can broaden your content and make the lessons accessible to all students. It reveals brilliant colours and crisp details to boost readability ensuring the best learning experience for students. Students can actively participate in lessons at the display with just a swipe, pinch or zoom. The intuitive interface makes the experience natural whether you're writing with the digital pen or using multi-touch gestures. The interactive software installed in the panel provides more tools that suit the needs of the lesson. Dual-user input and pen and multi-touch functionality encourage students to engage, interact and work together

5. Evidence of success

The evidence of success is visible, qualitatively as well as quantitatively. The improvement in desire to understand things rather than learning by the rote have added a positive note to the practice. They show improvement in the academic performance since they have a better understanding of the subject. Demonstrations in the smart boards, animations and videos have extremely helped the slow learners to grasp the concepts easily.

6. Problems encountered and Resources Required

The challenge in using the smart boards laid with many traditional teachers who had neither used ICT- based learning strategies as learners themselves, nor as trainees. They have been trained to use smart board by the institution. Students who have got used to traditional way of teaching also need some time to get adapted to interactive boards

Best Practice 2:

1. Title of the Practice

E-Platform for learning (Google classroom)

2. Goal

To increase access to learning opportunities/ increase flexibility for students e-learning platforms have been launched in the institution. This will aid them in developing the skills and competencies needed in the present scenario, and in particular will ensure that the learners have the digital literacy skills required in their discipline, profession or career.

3. Context

The e-learning tools will provide an opportunity for the students to access its content anytime from anywhere in the world and enable self-managed learning. The E-platforms saves the time of learner where a number of students can be educated at the

same time, what is not possible in face to face learning process. Geographical barriers are eliminated, opening up broader education options. Materials can be read online or downloaded for reading later.

4. The Practice

Google Classroom is a free web-based platform that integrates Google Apps for Education account with all your Google Apps services, including Google Docs, Gmail, and Google Calendar. Google Classroom saves time and paper, and makes it easy to create classes, distribute assignments, communicate, and stay organized. Teachers can quickly see who has or hasn't completed the work, and provide direct, real-time feedback and grades right in Classroom.

Teachers set up a class, invite students and co-teachers, engage students in question-driven [discussions](#) and then share information—assignments, announcements in the class stream. The simple, paperless assignment workflow allows teachers to manage student work quickly, all in one place.

Students can see assignments on the Work page, in the class stream, or on the class calendar. All class materials are automatically filed into Google Drive folders. Links to other resources can be shared in the classroom

5. Evidence of success

The success of this practice is witnessed when students have a healthy discussion among themselves in the Google Classroom. As students can access Classroom on the web or via the [Android and iOS Classroom mobile apps](#) they find it available 24x7 whenever they are in need of the study material. Students can share resources with each other and interact in the class stream or by email. This breaks the exterior barrier in face-to-face learning.

**Provide the details in annexure (annexure need to be numbered as i, ii, iii)*

7.4 Contribution to environmental awareness / protection

Sri Krishna college of Engineering and technology thrives to promote awareness about environment amongst the students and faculty. Some of the initiatives taken by the

college are as follows. Rally to spread awareness among the public about environmental protection, a rally on “Global Warming” was organised by Sri Krishna Institutions which was headed by Coimbatore district collector.

Use of renewable energy

- Solar water heaters have been installed in the hostel for the supply of hot water to the students
- Solar street lights have been installed throughout the campus premises.

Energy Conservation

- Classrooms are made with sufficient cross ventilation and light so that the use of electricity can be minimized.

Rain Water harvesting

- Rain water harvesting tanks have been constructed for all the buildings in the college to increase the ground water level. The facility has been constructed adhering to government norms on hygiene.
- Separate storm water drains are being maintained which collects the excess water from pathways and pavements.

Check Dam Construction

- Not applicable

Efforts for Carbon neutrality

- The College makes the students aware of the Carbon Credits, Carbon Neutrality, its advantages etc. as a part of its curriculum in the subject Environmental Studies offered during the first year programme.

Plantation

- The National Service Scheme units and students plant tree samplings in and around the campus to make green campus.
- Plants purchased by the Management have been distributed among the students to promote green cover belt
- Lush green lawns and ornamental plants are being maintained in the campus.
- Sprinklers for even and uniform watering of the lawns and to reduce the heat of premises have been installed throughout the campus.

Hazardous waste management

- There are no hazardous chemicals used in the college. The minimal wastage is drained after reasonable treatment so as to make it non hazardous.
- Sewage Treatment Plant has been established so that college campus is made as an eco friendly environment.
- The recycled water is used for gardening and flushing purpose.

E-Waste management

- Computers and peripherals are sorted and exchanged with new purchases

7.5 Whether environmental audit was conducted?

Yes

No

7.6 Any other relevant information the institution wishes to add. (For example SWOT Analysis)**Strength**

- Curriculum developed to the needs of the industry.
- Smart board based teaching to improve the understanding level of the students
- In house training cell named Centre for Professional Development and Training (CPDT) to train the faculty
- Ample on campus placement opportunities for the students.
- MoUs with reputed institutions/industries.
- Centre of excellence in Embedded systems and VLSI

Weakness

- Lack of funds/support for R & D activities from government agencies as the institution is self-financing in nature
- Consultancy work may be promoted
- More patents needs to be filed

Opportunities

- Scope for better industry based curriculum
- Scope for skill development of students in various sectors
- Motivating students to take up entrepreneurship/start-up
- Government initiatives like Make in India, Skill India schemes.

Threats

- Lesser appeal for engineering education in recent times
- Under employment of engineering graduates
- Availability of competent faculty

8. Plans of institution for next year

1. Skill development programmes will be organised for the students to improve their competency.
2. Focused seminar/conferences/workshops for students in emerging areas of engineering.
3. Efforts will be taken to streamline the 'outcome based education' implemented in the institution.
4. Interest of the students will be kindled in Entrepreneurship
5. Training for faculty in the emerging areas of engineering to improve their technical competency.

Name _____

Name _____

Signature of the Coordinator, IQAC

Signature of the Chairperson, IQAC

_____ *** _____

Abbreviations:

| | | |
|------|---|--|
| CAS | - | Career Advanced Scheme |
| CAT | - | Common Admission Test |
| CBCS | - | Choice Based Credit System |
| CE | - | Centre for Excellence |
| COP | - | Career Oriented Programme |
| CPE | - | College with Potential for Excellence |
| DPE | - | Department with Potential for Excellence |
| GATE | - | Graduate Aptitude Test |
| NET | - | National Eligibility Test |
| PEI | - | Physical Education Institution |
| SAP | - | Special Assistance Programme |

- SF - Self Financing
- SLET - State Level Eligibility Test
- TEI - Teacher Education Institution
- UPE - University with Potential Excellence
- UPSC - Union Public Service Commission

AQAR - 2016



**SRI KRISHNA
INSTITUTIONS**
COIMBATORE

Sri Krishna College of Engineering and Technology

(An Autonomous Institution)

Affiliated to Anna University Chennai, Accredited by NAAC with 'A' Grade

Kuniamuthur, Coimbatore- 08

Phone: 0422- 2678001 (7 Lines), Fax: 0422- 2678012

Email: info@skcet.ac.in, Website: www.skcet.ac.in