



SELF STUDY REPORT

FOR

2nd CYCLE OF ACCREDITATION

P.S.R.ENGINEERING COLLEGE

P.S.R ENGINEERING COLLEGE SEVALPATTI (PO) SIVAKASI - 626140

TAMILNADU STATE

626140

<http://www.psr.edu.in>

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

P.S.R Engineering College is an Autonomous institution, established by P.S. Ramasamy Telugu Minority Educational and Charitable Trust in the year 1999 in the state of Tamilnadu. The institute is sprawled over an area of 27.9 acres of land south of Sivakasi on Sivakasi – Sankarankoil highway which are in the tri-junction of the three districts – namely Virudhunagar, Tirunelveli and Thoothukudi. The college is affiliated to Anna University, Chennai and is granted the status of Autonomous in the Academic year 2012-13 by UGC. Three programmes viz., CSE, ECE & EEE are accredited by National Board of Accreditation (NBA) since 2009. The college has received an Educational Excellence award for best infrastructure in south Tamilnadu from Educational Post in 2013. Many important personalities including former president of India Dr.APJ Abdula Kalam and inventor of email Dr. Shiva Ayyadurai have visited our college and interacted with the students. The institute offers academic programs with innovative curriculum, advanced research and societal engagement through outreach activities. The institute has 7 departments and offers 12 academic programmes both at UG and PG level including a MBA programme. Ten of the academic programmes are permanently affiliated to Anna University. Five departments are recognized as research centres of Anna University. The total student strength as on date is 2226.

Vision

To contribute to the society through excellence in technical education with societal values and thus a valuable resource for industry and the humanity.

Mission

- To create an ambience for quality learning experience by providing sustained care and facilities.
- To offer higher level training encompassing both theory and practices with human and social values.
- To provide knowledge based services and professional skills to adapt tomorrow's technology and embedded global changes

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Proactive management with commitment towards education and society.
- Lush green, well maintained, environment friendly and good support systems campus.
- Independent Department blocks with sufficient isolation for better aesthetic purpose.
- Moderate competent faculty with 39 number of PhDs and good learning attitude.
- Anna University recognized five research centres
- Outcome Based Education and Choice Based Credit System
- ICT in teaching and learning, student data management and examination
- Active participation of students in co-curricular & extra-curricular activities

- Good placement record.
- Good transport facilities for both students and staff – 31 College buses and 16 Govt. buses

Institutional Weakness

- Lack of industries in the districts surrounding the college.
- Few consultancy and funded projects.
- Less number of recognitions / awards from international agencies for both faculty and students
- Placement in core companies
- Few full time Ph.D Research scholars.
- Lack of Faculty / Student exchange programs at national and international level.

Institutional Opportunity

- Improve the project proposals with the available competent faculty
- Faculty orientation towards better R&D activities and IPR content.
- Scope in faculty qualification up gradation.
- Tap the diversified talents of the students through co-curricular and extra-curricular activities
- Growth of start-ups and the support mechanisms available
- Alumni network for better monetary support, placement and internship

Institutional Challenge

- Retaining quality faculty
- Improving mean experience
- Motivating faculty towards research, R&D activities, consultancy and IPR
- Bringing blue-chip industries for placements and internships.
- Attracting students and faculty from other states
- Challenge in getting quality intake.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The institution has designed its curriculum and courses as per the guidelines of statutory bodies such as AICTE and UGC. The institute offers a wide range of UG and PG programs in Engineering and MBA program contributing the courses to the development of local / national needs. The courses are designed keeping the current trends of the industries, technological advancements, skill developments, employability enhancement requirements and based on the feedbacks of the stakeholders. Apart from the curriculum, the college also offers some value added courses to its students. The Program Outcomes (PO), Program Specific Outcomes (PSO) and Course Outcomes (CO) have been designed to meet out the graduate attributes that are set by MHRD / NBA. Nearly 70 % of the courses offered are revised to cater the needs of Society and Industry. 75% of the courses are focused on employability and skill development, while about 3% of the courses are focused on entrepreneur development. In all, 187 courses have been introduced during the last 5 years. The institute follows Choice

Based Credit System in all its academic programs. The students are given wide choice to choose electives of their interest. The institute also has introduced the courses on human values & professional ethics, Environmental Science and Women Studies and Empowerment, which are offered in various programs. An average of 16 value added courses have been offered every year benefitting 73.5% of the students. Around 60 % of the students undergone field projects and Internships. The feedback received from the students and other stakeholders are carefully analyzed, discussed and suitable actions are carried out periodically.

Teaching-learning and Evaluation

The students are admitted into the Institute as per the rules and regulations of State Government of Tamilnadu. Government quota seats are being filled up by the centralized counselling by the Tamilnadu Engineering Admissions (TNEA) committee as per the reservation policy of the government. In an average about 79.4% of the reserved quota seats have been filled up. The college follows Student Teacher Ratio (STR) of 1:15 for UG and 1:12 for PG programs. There are 166 full time teachers on rolls. The college takes special efforts to address the needs of both slow and advanced learners. The teaching and learning methods such as Experiential Learning, participative learning, self-learning, role plays, problem solving, etc are being followed by the faculty members. A mentor mentee ratio not more than 1:20 is maintained to take care of the academic related and other psychological issues. ICT is being practiced in teaching and learning by all the faculty members. Learning Management Systems such as Moodle and Google classroom are effectively utilized. Academic Calendar and Teaching plans are strictly followed and are monitored regularly by the concerned HOD. 39 faculty members are with Ph.D. qualification and 34 are pursuing Ph.D. About 40.36% of the faculty members having more than 7 years teaching experience. 42.77% of the faculty are women. Several reforms have been made in the examination system including full automation, go through answer papers before applying for revaluation, challenging valuation, new grading pattern as per UGC, Blooms Taxonomy in setting question papers, etc. Examination results are announced within two to three weeks from the date of last examination. Well defined POs, PSOs and COs are in place and they are disseminated to the students and other stake holders at appropriate places. The college systematically checks for attainment of outcomes and reviews the Teaching-Learning-strategies. 98% of the students have been graduated in the last year. Students provide feedback on all aspects of teaching and learning and corrective steps are taken wherever necessary.

Research, Innovations and Extension

The college has well defined policy to promote research, consultancy and IPR. Faculty are encouraged to participate in research and consultancy work by providing seed money and incentives. Anna University has recognized five departments as Research Centres to carry out Ph.D programmes. Nearly Rs.43.26 lakhs funds have been received from both government and private sources for various activities. 22 faculty members are recognized as research supervisors. 14 candidates have received Ph.Ds from our research centres. About 75 candidates are pursuing Ph.D in our centres. The institute motivates innovation and startups through Innovation and Incubation Centre. 4 startups have been incubated. Awareness programs on IPR are conducted regularly and about 22 patents have been filed and published. The college has Plagiarism Checker-X software to check plagiarism. In addition to this research supervisors and scholars use Urkund software provided by Anna University to check plagiarism. About 240 research papers in Scopus /WOS /UGC indexed Journals and 850 papers in conferences have been published. About 9.83 lakhs have been generated through consultancy. Corporate trainings are also being provided by our faculty members. In total 91 extension and outreach activities have been conducted in collaboration with the local bodies. 40 appreciations and awards have been received for the extension activities organized through NSS, YRC and RRC of the college. The institute has

about 17 functional MoUs with various industries and organizations.

Infrastructure and Learning Resources

The college has adequate infrastructure facilities spread over 27.9 acres of land with built up area of 49150 Sq.mts. There are 52 classrooms, 8 Seminar Halls, 90 laboratories and workshops, 2 drawing halls and an auditorium with about 2500 seating capacity. All the classrooms and seminar halls are equipped with ICT facilities and public address system. Well established sports facilities are available with indoor stadium, gymnasium, play grounds and athletic tracks. The students are actively participating in the sports and games events and won awards. The average expenditure incurred on maintenance of physical facilities and academic support facilities is about Rs. 126 lakhs. Library is fully automated with Autolib software with updation in 2018 and provides remote access to e-resources. Library has a good collection of rare books, 38097 volumes of books, 3964 journals, e-books and databases. An average of 6.9 lakhs per year is spent for purchase of books and journals. An E-learning centre with digital library is available in the library with NPTEL lectures, e-journals, Delnet and Inflightnet. In an average about 559 users utilize library facilities every day. State of art IT facilities exist, which include 105 Mbps Internet Bandwidth, 1:2.55 computer student ratio, lecture capturing system, smart interactive boards. Standard Operating Procedures for maintaining and utilizing facilities are in place.

Student Support and Progression

About 54 % of the students avail scholarships from the government and about 13.4% avail scholarships / freeships from non-governmental organizations and institution. Guidance for competitive examinations, soft skills training, career counselling, Remedial coaching and Bridge courses and induction program are some of the initiatives of the college for enhancing the capability and development the students. Grievance Redressal Committee and Anti-Ragging Committee help to solve the students' issues, if there are any. Adequate representation is given to students in all academic / administrative committees and students are involved in the decision making process. Institution has a good placement record and on an average more than 50% of the students are placed on campus. 8% of the students opt for higher education. 27 awards / medals have been won by the students in sports / cultural activities. 347 sports / cultural events / competitions have been organized in the institution during the last five years.

Governance, Leadership and Management

The college has a well structured governance system as per the guidelines of UGC and AICTE. The Board of Management, Planning and Monitoring Board, Academic Council, Finance Committee and various statutory / non-statutory committees meet periodically in order to plan / implement strategic policies for the growth of the institute. College has decentralized decision making process and believes in participatory governance. The resolutions / decisions passed in the meeting of various bodies are properly recorded and actions are taken. The Strategic plan of the institution have been designed meeting the institute vision and mission. Periodical monitoring and quality measures display the adherence to the plan. e-governance is implemented in all aspects of administration. The Institution provides effective welfare measures to all staff. All statutory welfare measures are implemented. On an average 38 professional development / administrative training programs have been organized by the institute per year for staff. About 46% of the faculty are provided with financial support for attending FDP / conferences / workshops. A structured system of performance appraisal for teaching / non-

teaching staff is in place. Institution conducts academic and administrative audits regularly and proper budgeting is done based on the plans and needs of departments and sections. Internal Quality Assurance Cell (IQAC) plays pivotal role in maintaining quality standards to attain excellence in all the aspects of the institution. On an average 18 quality initiatives are introduced by IQAC. AQAR submission to NAAC are regularly done.

Institutional Values and Best Practices

The college has conducted about 62 Gender equity programs during the past five years. Women Studies and Empowerment, Human values and Professional Ethics are offered as courses in the curriculum. Infrastructure is developed to cater the needs of all genders and Divyangjan. Effective campus surveillance is in place through CCTV. The institute has a policy of zero tolerance towards discrimination on the basis of caste, gender, religion. 30 KW grid tied solar plant is in use in campus. 14.88% of annual lighting power is met by LED bulbs. Twin Bin system is being used for collection of both dry and wet wastes. Used papers, notebooks are collected and sent for recycling. Sewage Treatment Plant with a capacity of 50 KL/day is in use. The college has signed MOU with a company 'Tritech Sysetms' Tiruppur to dispose E-wastes. Rainwater harvesting pits are provided for recharging the ground water. Institute provides Bicycles, Public Transport, Pedestrian friendly Roads. The campus is plastic free campus. The Institute has a canopy of trees and plants with 40% of green belt. 0.61% of total expenditure is spent on green initiatives. 61 initiatives are taken to address the locational advantages and disadvantages and societal engagement. Institution celebrates national festivals, birth / death anniversaries of great Indian personalities. Around 65 activities are conducted to promote universal values. The institute emphasizes on moral code of conduct for students and staff. The 2 Best practices of our college are "Experiential Learning" and "E-Governance in Teaching and Administration". Upliftment of Rural Populace through Technical Education is our institutional distinctiveness.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	P.S.R.ENGINEERING COLLEGE
Address	P.S.R Engineering College Sevalpatti (PO) Sivakasi - 626140 Tamilnadu State
City	Sivakasi
State	Tamil Nadu
Pin	626140
Website	http://www.psr.edu.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	B.G.Vishnuram	04562-239600	9489796849	-	contact@psr.edu.in
Professor	P.Marichamy	04562-239614	9841310110	-	pmarichamy@psr.edu.in

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular Day

Recognized Minority institution	
If it is a recognized minority institution	Yes Minority Status-2018-22.pdf
If Yes, Specify minority status	
Religious	
Linguistic	Telugu Minority
Any Other	

Establishment Details	
Date of Establishment, Prior to the Grant of 'Autonomy'	21-11-1999
Date of grant of 'Autonomy' to the College by UGC	01-03-2012

University to which the college is affiliated		
State	University name	Document
Tamil Nadu	Anna University	View Document

Details of UGC recognition		
Under Section	Date	View Document
2f of UGC	14-09-2011	View Document
12B of UGC	23-12-2014	View Document

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	29-04-2019	12	Extension of Approval renewed every year

Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	No

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	P.S.R Engineering College Sevalpatti (PO) Sivakasi - 626140 Tamilnadu State	Rural	27.9	49150

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Biotechnology	48	H.Sc	English	30	25
UG	BE,Civil Engineering	48	H.Sc	English	60	34
UG	BE,Computer Science And Engineering	48	H.Sc	English	120	118
UG	BE,Electronics And Communication Engineering	48	H.Sc	English	120	118
UG	BE,Electronics And Communication Engineering	48	H.Sc	English	60	57
UG	BE,Electrical And Electronics Engineering	48	H.Sc	English	60	57
UG	BE,Mechanical Engineering	48	H.Sc	English	120	108
PG	ME,Civil Engineering	24	B.E. B.Tech	English	18	18
PG	ME,Computer Science And Engineering	24	B.E. B.Tech	English	18	17
PG	ME,Electronics And Communication Engineering	24	B.E. B.Tech	English	18	18
PG	ME,Electrical And Electronics	24	B.E. B.Tech	English	18	15

	Engineering					
PG	ME,Mechanical Engineering	24	B.E. B.Tech	English	18	17
PG	MBA,Master Of Business Administration	24	Any Bachelor degree	English	60	48
Doctoral (Ph.D)	PhD or DPhil,Civil Engineering	72	M.E. M.Tech	English	0	0
Doctoral (Ph.D)	PhD or DPhil,Computer Science And Engineering	72	M.E. M.Tech	English	0	0
Doctoral (Ph.D)	PhD or DPhil,Electronics And Communication Engineering	72	M.E. M.Tech	English	0	0
Doctoral (Ph.D)	PhD or DPhil,Electrical And Electronics Engineering	72	M.E. M.Tech	English	0	0
Doctoral (Ph.D)	PhD or DPhil,Mechanical Engineering	72	M.E. M.Tech	English	0	0

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	0				0				0			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	20				42				101			
Recruited	18	2	0	20	30	12	0	42	46	55	0	101
Yet to Recruit	0				0				0			

Non-Teaching Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				59
Recruited	51	8	0	59
Yet to Recruit				0

Technical Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				35
Recruited	19	16	0	35
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	15	2	0	16	7	0	3	0	0	43
M.Phil.	3	0	0	0	0	0	7	19	0	29
PG	0	0	0	14	4	0	36	37	0	91

Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0

Part Time Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0

Details of Visting/Guest Faculties					
Number of Visiting/Guest Faculty engaged with the college?	Male		Female		Total
	0	0	0	0	0

Provide the Following Details of Students Enrolled in the College During the Current Academic Year

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
Doctoral (Ph.D)	Male	48	0	0	0	48
	Female	28	0	0	0	28
	Others	0	0	0	0	0
UG	Male	1378	2	0	0	1380
	Female	601	0	0	0	601
	Others	0	0	0	0	0
PG	Male	102	0	0	0	102
	Female	142	0	0	0	142
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years					
Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	13	30	48	28
	Female	23	34	25	12
	Others	0	0	0	0
ST	Male	1	0	0	0
	Female	0	1	0	0
	Others	0	0	0	0
OBC	Male	320	426	389	302
	Female	169	237	193	181
	Others	0	0	0	0
General	Male	13	11	16	8
	Female	0	4	5	6
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		539	743	676	537

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Biotechnology	View Document
Civil Engineering	View Document
Computer Science And Engineering	View Document
Electrical And Electronics Engineering	View Document
Electronics And Communication Engineering	View Document
Master Of Business Administration	View Document
Mechanical Engineering	View Document

3. Extended Profile

3.1 Program

Number of programs offered year-wise for last five years

2018-19	2017-18	2016-17	2015-16	2014-15
17	17	17	15	14
File Description			Document	
Institutional Data in Prescribed Format			View Document	

3.2 Students

Number of students year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
2086	2221	2141	2130	2214
File Description			Document	
Institutional Data in Prescribed Format			View Document	

Number of outgoing / final year students year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
586	588	617	632	602
File Description			Document	
Institutional Data in Prescribed Format			View Document	

Number of students appeared in the examination conducted by the Institution, year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
2084	2173	2125	2119	2209
File Description			Document	
Institutional Data in Prescribed Format			View Document	

Number of revaluation applications year-wise during the last 5 years

2018-19	2017-18	2016-17	2015-16	2014-15
49	54	52	48	52

3.3 Teachers**Number of courses in all programs year-wise during the last five years**

2018-19	2017-18	2016-17	2015-16	2014-15
559	547	599	601	587

File Description	Document
Institutional Data in Prescribed Format	View Document

Number of full time teachers year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
166	168	178	173	164

File Description	Document
Institutional Data in Prescribed Format	View Document

Number of sanctioned posts year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
166	168	178	173	164

File Description	Document
Institutional Data in Prescribed Format	View Document

3.4 Institution**Number of eligible applications received for admissions to all the programs year-wise during the last five years**

2018-19	2017-18	2016-17	2015-16	2014-15
841	1015	1009	996	987

File Description	Document
Institutional Data in Prescribed Format	View Document

Number of seats earmarked for reserved category as per GOI/State Govt rule year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
303	320	331	341	382

File Description	Document
Institutional Data in Prescribed Format	View Document

Total number of classrooms and seminar halls

Response: 60

Total number of computers in the campus for academic purpose

Response: 817

Total Expenditure excluding salary year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
493.02	430.52	425.06	406.27	428.05

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

1.1.1 Curricula developed /adopted have relevance to the local/ national / regional/global developmental needs with learning objectives including program outcomes, program specific outcomes and course outcomes of all the program offered by the Institution

Response:

- The primary objective of the institute is to develop technocrats who can effectively perform in the emerging globalism and contribute to national development. The institute judiciously curriculum keeping in mind the needs of the nation and the region.
- The Program Educational Objectives (PEOs), the Program Outcomes (PO) and Program Specific Outcomes (PSO) are established for all the programs offered in our institution, in consultation with faculty, students, alumni, BOS members, members of professional bodies and industry professionals
- To attain the PO & PSO, Course Outcomes (COs) are defined in line with the revised Bloom's Taxonomy.
- COs are designed with an intention to enhance higher order thinking skills.
- Effective course design is done based on the guidelines of AICTE & affiliating university, i.e. Anna University, Chennai.
- Curricula of all the programs covers multiple facets of providing engineering knowledge, desirable attributes, professional ethics and relevant technical and non-technical skills.
- The curriculum offers scope for Research Based Learning in the PG programmes.
- Board of Studies (BOS) and Academic Council with domain experts from reputed organizations/industry formulate the syllabi for all the disciplines taking into consideration the suggestions of stakeholders.
- The institution periodically reviews and upgrades the curriculum and to meet the demands of the industries as follows:
 - The feedback of stakeholders (students, industry, alumni), assist us to identify the current demands of the industry and the technological advancements which helps in redesigning the curricula.
 - The revisions of courses are discussed in the BOS meeting and the decision is passed on to the Academic Council, for final approval.
 - In the Academic Council meetings the curricular design strategies and revisions are thoroughly deliberated and implemented.
 - The institute autonomy provides academic flexibility to introduce new courses for overall development and upgradation to the current industry needs.
- Number of credits for UG programmes ranges from 176 to 180 and for Engineering PG programmes ranges from 70 to 71. For PG programme in Business Administration, the credits are 90.
- The following unique courses are offered by various programmes:

Programme	Unique Courses
BE - CSE	<ul style="list-style-type: none"> • Computational Biology • Green Computing

ME - CSE	<ul style="list-style-type: none"> • Agent Based Intelligent Systems • High Performance Computing • Ethical Hacking
B.E. - ECE	<ul style="list-style-type: none"> • Wearable Electronics • Agriculture Electronics • Quantum Computing
M.E. - AE	<ul style="list-style-type: none"> • Software Defined Radio • Mobile Robotics
BE-EEE	<ul style="list-style-type: none"> • Nano-Dielectrics • Electrical Safety • Domestic and Industrial Electrical Installation
B.E., MECH	<ul style="list-style-type: none"> • Fireworks Safety • Polymer Technology
ME – ED	<ul style="list-style-type: none"> • Computer Aided Process Planning • Design of Experiments
BE – CIVIL	<ul style="list-style-type: none"> • Water Resources System planning and management • Environment and Ecology • Technology Management
B. Tech - Biotechnology	<ul style="list-style-type: none"> • Nano Biotechnology • Developmental Biology
Master of Business Administration	<ul style="list-style-type: none"> • Public Health Care System & Health Insurance • Medical & Health System Management • Patient Care and Behaviour • Health Care Law and Regulations

- The choice-based credit system adopted in the institute has given scope to the students to learn cross domain subjects/technologies. The implementation of CBCS has given sufficient opportunity for the students to involve in innovative projects in areas of their choice.
- Based on local requirement, English Communication course is offered as mandatory.

File Description	Document
Any additional information	View Document

1.1.2 Percentage of programs where syllabus revision was carried out during the last five years

Response: 100

1.1.2.1 How many programs were revised out of total number of programs offered during the last five years

Response: 17

1.1.2.2 Number of all programs offered by the institution during the last five years

Response: 17

File Description	Document
Minutes of relevant Academic Council/BOS meeting	View Document
Details of program syllabus revision in last 5 years	View Document
Any additional information	View Document

1.1.3 Average percentage of courses having focus on Employability/ Entrepreneurship/ Skill development during the last five years

Response: 91.74

1.1.3.1 Number of courses having focus on employability/ entrepreneurship/ skill development year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
532	532	532	528	526

File Description	Document
Program/ Curriculum/ Syllabus of the courses	View Document
MoU's with relevant organizations for these courses, if any	View Document
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document
Average percentage of courses having focus on employability/ entrepreneurship	View Document
Any additional information	View Document

1.2 Academic Flexibility

1.2.1 Percentage of new Courses introduced out of the total number of courses across all Programs offered during last five years

Response: 29.02

1.2.1.1 How many new courses are introduced within the last five years

Response: 168

1.2.1.2 Number of courses offered by the institution across all programs during the last five years

Response: 579

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

1.2.2 Percentage of programs in which Choice Based Credit System (CBCS)/Elective course system has been implemented

Response: 100

1.2.2.1 Number of programmes in which CBCS/ Elective course system implemented.

Response: 17

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

1.3 Curriculum Enrichment

1.3.1 Institution integrates cross cutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum

Response:

- Curriculum offered in the institute addresses several major issues such as Gender, Environment and Sustainability, Human Values and Professional Ethics.
- Various student clubs i.e., Entrepreneurship Development Cell, Innovation cell etc. are actively functioning to promote the values and importance of Environmental protection, Gender equity, Human values and ethics.

Courses addressing Gender Issue:

- The curriculum includes the following courses to address Gender Issue:

Programme	Courses
-----------	---------

BE-Computer Science and Engineering	Indian Constitution and Society
BE - Electrical and Electronics Engineering	Human Resource Management
Master of Business Administration	Industrial Relations & Labour Welfare
	Managerial Behavior and Effectiveness
	Human Resource Management
	Legal Aspects of Business
	Labour Legislations

Courses addressing Environment and Sustainability:

- The curriculum includes many courses that address Environment and Sustainability.
- The course “Environmental Science” is offered to all the UG programme (based on the AICTE mandatory guideline). In addition to the above the following courses are offered:

Programme	Courses
BE-Computer Science and Engineering	Green Computing
	Computational Biology
ME-Computer Science and Engineering	Bio Inspired Artificial Intelligence
	Energy Aware Computing
	Green Computing
BE –Electronics and Communication Engineering	Energy Aware Computing
	Bio Medical Instrumentation
ME – Applied Electronics	Electromagnetic Compatibility
BE - Electrical and Electronics Engineering	Electric Energy Generation, Utilization and Conservation
	Energy Audit and Conservation
	Power Electronics for Renewable Energy Systems
ME Power Electronics and Drives	Smart Grid
	Wind Energy Conversion Systems
	Power Plant Engineering
	Renewable Sources of Energy
BE - Mechanical Engineering	Nuclear Engineering
	Fundamentals of Nanoscience
	Refrigeration and Air conditioning
	Polymer Technology
	Fireworks Safety
	Industrial Safety
	Air Pollution Management
ME - Engineering Design	Industrial Waste Water Treatment and Disposal
BE - Civil Engineering	

	Municipal Solid Waste Management
	Disaster Management System
	Environment and ecology
	Renewable Energy Resources
	Sustainable Management of Urban Ecology
B.Tech - Biotechnology	Nanobiotechnology
	Plant Biotechnology
	Animal Biotechnology
	Marine Biotechnology

Courses to address Human Values and Professional Ethics:

- The curriculum includes various courses to address Professional Ethics and Human Values. The courses “Professional Ethics in Engineering & Engineering Economics and Management” are offered to all UG programmes. Research Methodology course is offered in all PG programmes. In addition to the above the following courses are offered to address Professional Ethics and Human Values:

Programme	Courses
BE-Computer Science and Engineering	Human Computer Interaction Social Network Analysis
ME-Computer Science and Engineering	Social Network Analysis Ethical Hacking Medical Image Processing
BE –Electronics and Communication Engineering	Cyber Security
ME – Applied Electronics	Social Network Analysis Medical Imaging Processing
BE - Electrical and Electronics Engineering	Total Quality Management Human Resource Management Entrepreneurship Development
ME Power Electronics and Drives	Energy Auditing Management
BE-Mechanical Engineering	Principles of Management Total Quality Management Fireworks Safety Entrepreneurship Development
ME - Engineering Design	Productivity Management and Re-engineering Supply Chain Management Reverse Engineering
BE - Civil Engineering	Contract Laws And Regulations
B.Tech - Biotechnology	Bioethics
Master of Business Administration	Brand Management Customer Relationship Management International Trade Finance International Business Management Human Resource Management

Legal Aspects of Business

File Description	Document
Any additional information	View Document

1.3.2 Number of value-added courses imparting transferable and life skills offered during the last five years**Response:** 81

1.3.2.1 Number of value-added courses are added within the last five years

Response: 81

File Description	Document
List of value added courses	View Document
Brochure or any other document relating to value added courses	View Document
Any additional information	View Document

1.3.3 Average percentage of students enrolled in the courses under 1.3.2 above**Response:** 72.4

1.3.3.1 Number of students enrolled in value-added courses imparting transferable and life skills offered year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
1933	2090	1654	1092	1034

File Description	Document
Any additional information	View Document

1.3.4 Percentage of students undertaking field projects / internships**Response:** 62.18

1.3.4.1 Number of students undertaking field projects or internships

Response: 1297

File Description	Document
List of programs and number of students undertaking field projects / internships	View Document
Any additional information	View Document

1.4 Feedback System

<p>1.4.1 Structured feedback received from 1) Students, 2) Teachers, 3) Employers, 4) Alumni 5) Parents for design and review of syllabus Semester wise /year-wise</p> <p>A. Any 4 of above</p> <p>B. Any 3 of above</p> <p>C. Any 2 of above</p> <p>D. Any 1 of above</p> <p>Response: A. Any 4 of above</p>	
File Description	Document
Any additional information	View Document
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	View Document
URL for stakeholder feedback report	View Document

<p>1.4.2 Feedback processes of the institution may be classified as follows:</p> <p>A. Feedback collected, analysed and action taken and feedback available on website</p> <p>B. Feedback collected, analysed and action has been taken</p> <p>C. Feedback collected and analysed</p> <p>D. Feedback collected</p> <p>Response: A. Feedback collected, analysed and action taken and feedback available on website</p>	
File Description	Document
Any additional information	View Document
URL for feedback report	View Document

NAAC

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average percentage of students from other States and Countries during the last five years

Response: 0.45

2.1.1.1 Number of students from other states and countries year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
12	11	8	9	9

File Description

Document

List of students (other states and countries)

[View Document](#)

Institutional data in prescribed format

[View Document](#)

2.1.2 Demand Ratio(Average of last five years)

Response: 1.35

2.1.2.1 Number of seats available year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
660	720	720	720	760

File Description

Document

Demand Ratio (Average of Last five years)

[View Document](#)

Any additional information

[View Document](#)

2.1.3 Average percentage of seats filled against seats reserved for various categories as per applicable reservation policy during the last five years

Response: 79.54

2.1.3.1 Number of actual students admitted from the reserved categories year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
220	272	286	250	307

File Description	Document
Average percentage of seats filled against seats reserved	View Document
Any additional information	View Document

2.2 Catering to Student Diversity

2.2.1 The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners

Response:

The students are admitted based on the merit and reservation policy of the Tamilnadu State Government. The admitted students are from different boards of school education viz., Tamilnadu State Board both academic and vocational stream (Tamil and English medium), Tamilnadu Matriculation School Education, CBSE and lateral entry from Polytechnic Colleges.

In first year of the programme, bridge courses are offered on Physics, Chemistry, Mathematics and Computing Fundamentals. These courses reinforce the Science and Mathematics as pre-requisite knowledge that are required to initiate learning courses of undergraduate engineering programmes. Students admitted through lateral entry are offered extra classes to bridge the gap particularly in the mathematics. In addition to this, as per recommendation of AICTE, student induction program is also conducted for first year admitted students before the commencement of classes. It consists programming skills, communication skills and other value education courses with extra-curricular activities like Physical Education, Yoga, Meditation and Counseling.

The learning levels of the students are assessed based on performance in Internal Assessment test and CGPA. The Students are categorized as slow learners and advanced learners.

For slow learners, the department conducts special classes beyond regular working hours. In addition to this, peer coaching and collaborative learning is practiced, study materials and handouts are provided and the students can able study using Learning Management System of our college. Faculty advisors (Mentor: Mentee) periodically monitor the performance of slow learners and accordingly special care is given to improve their academic. In addition, question banks are also provided and discussed. To improve the skills in English language, two courses viz., Career English and Functional English courses have been incorporated in the curriculum.

Advanced learners are encouraged to develop their creativity, showcase their innovative ideas, analytical and problem solving skills, the students are motivated to organize, participate in various technical events, paper presentations and project contests. Further, Gate coaching, opportunity to walk with industrial

experts, utilization of laboratory beyond working hours, permission to take additional books in library, access to all software's and cash prize to academic toppers are also provided to the advanced learners. The students are also directed to do on-line courses and international certification programs. In the college day functions, academic toppers and other achievers are honoured with medals and certificates.

File Description	Document
Any additional information	View Document
link for additional information	View Document

2.2.2 Student - Full time teacher ratio

Response: 12.57

File Description	Document
Any additional information	View Document

2.2.3 Percentage of differently abled students (Divyangjan) on rolls

Response: 0.1

2.2.3.1 Number of differently abled students on rolls

Response: 2

File Description	Document
List of students(differently abled)	View Document
Institutional data in prescribed format	View Document
Any other document submitted by the Institution to a Government agency giving this information	View Document
Any additional information	View Document

2.3 Teaching- Learning Process

2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

Response:

The institution provides necessary ICT facilities such as LCD projectors with computer, smart interactive boards, LAN, Internet and Wi-fi to facilitate student centric learning process. Online courses content, simulation software and google classroom app are also used in the teaching learning process. The college

supports the teaching and learning process enabled through various scholarly e-journals, e-books, Delnet, NDL, VLab, N-List, infliplibnet, Shodhganga, NPTEL and SWAYAM courses. The students and faculty members can access the e-journals through our college LAN. The faculty members adopts the following student centric methods in order to enhance the learning experiences:

Experiential Learning

The laboratory / Practical classes, Industrial Projects, Internships and Industrial Visits (minimum one per semester) provides Experiential Learning to the students. The curriculum offers more than 30 percent courses on practical. The practical courses help the students experiment the theory that they have learned in the classrooms through various experiments performed using instruments / machineries / equipment's / software's. The institution encourages students for internships/industrial visit/field projects and industrial trainings to enable students have a real feel of industry environment and projects in industry. This learning promotes team work and communication skills. It is designed to engage students' emotions as well as enhancing their knowledge/skills and also provides opportunities for immersive, hands-on learning through activities, work experience, projects, and problem solving.

Participative Learning

Participative learning of the students is encouraged through paper presentations, participation in symposiums / technical events, undertaking industrial and in house projects. The students are actively participating in organizing the technical symposiums and association activities. They also act as volunteers in department and institutional level workshops, seminars and conferences. Students learn collaboratively by doing mini projects, and graduation projects during their course of study. It encourages students to think for themselves and provides students with an opportunity to gain professional values, knowledge, and skills.

Problem Solving

Students learn by working on problems. The students attain problem solving skills through the tutorials, assignments and design projects. The tutorial classes are monitored and facilitate the students in solving the problems. This enables the students to learn new knowledge by facing the problems to be solved. The students are expected to observe, understand, analyze, interpret find solutions, and perform applications that lead to a holistic understanding of the concept. The students are also motivated to form small groups and discuss among themselves in order to promote interactive and peer learning.

Self-Learning

Independent learning is encouraged through assignments, seminars and project presentations. Certain percentage of Internal marks is reserved for these components of learning. Delnet, infliplibnet, NDL, VLab and N-List features supports the students for self-learning. A separate period is allotted to the students to go to library for self-learning experience.

Other Learning Practices

The practices such as role play, think pair share, discussions, debates, quizzes etc. are being used during the delivery of lectures. These practices along with the other student centric methods at the institution enables higher order thinking skills in the students.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.3.2 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc.

Response: 100

2.3.2.1 Number of teachers using ICT

Response: 166

File Description	Document
List of teachers (using ICT for teaching)	View Document
Any additional information	View Document
Provide link for webpage describing the " LMS/ Academic management system"	View Document

2.3.3 Ratio of students to mentor for academic and stress related issues

Response: 13.91

2.3.3.1 Number of mentors

Response: 150

File Description	Document
Any additional information	View Document

2.3.4 Preparation and adherence to Academic Calendar and Teaching plans by the institution

Response:

Academic Calendar Committee comprising of Principal, Dean and Head of the Departments. The Committee collects action plan from departments and accordingly Academic calendar is prepared. The Academic Calendar is informed to the students through notice board and college website. The calendar consists of dates for commencement of classes, internal assessment tests, practical exams, end semester examination, holidays and last working day. It adheres to the statutory guidelines and ensures 90 working days in each semester. A minimum of 4-week holidays is ensured to the students to take up in-plant trainings and internships. The copy of the academic calendar is distributed to the faculty members and all concerned.

Teaching Plan:

Courses are allotted to the faculty members based on their choices and subject expertise. A class time table is prepared and circulated to the faculty members well ahead of the commencement of semester. Based on the academic calendar, the faculty members prepare course plan and assessment plan according to a common format of the institute and get it approved by the head of the department. The course lecture plan consists of Objectives of the course, Outcomes of the Course, Number of periods required to complete a topic, total number of periods, assessment plan, text books, reference books, and mapping matrix of COs and POs. Individual faculty members maintain a log book for each of the course that they handle. The details of the topics covered period wise in the classroom are entered in the log-book. The log books with course coverage are periodically checked by the HODs and the Principal. There is a fully automated ERP software 'iboss', where the attendance of the students on daily basis, scores of the internal assessment tests, assignment marks are entered by the respective course tutor. Each and every question of the tests with the marks scored is mapped to the course outcomes in the software. The software automatically evaluates the attainment of both course outcome and programme outcomes with analysis report. The Programme Assessment Committee periodically verifies the attainments scores of each course. If the attainment score is below the benchmark level, suggestions are given to improve the scores.

2.4 Teacher Profile and Quality**2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years****Response:** 100

File Description	Document
Year wise full time teachers and sanctioned posts for 5 years	View Document
List of the faculty members authenticated by the Head of HEI	View Document
Any additional information	View Document

2.4.2 Average percentage of full time teachers with Ph.D. during the last five years**Response:** 13.84**2.4.2.1 Number of full time teachers with Ph.D. year-wise during the last five years**

2018-19	2017-18	2016-17	2015-16	2014-15
39	26	20	17	15

File Description	Document
List of number of full time teachers with PhD and number of full time teachers for 5 years	View Document
Any additional information	View Document

2.4.3 Teaching experience per full time teacher in number of years

Response: 7.05

2.4.3.1 Total experience of full-time teachers

Response: 1169.7

File Description	Document
Any additional information	View Document

2.4.4 Percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years

Response: 6.48

2.4.4.1 Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
5	2	2	0	2

File Description	Document
Institutional data in prescribed format	View Document
e-copies of award letters (scanned or soft copy)	View Document

2.4.5 Average percentage of full time teachers from other States against sanctioned posts during the last five years

Response: 1.53

2.4.5.1 Number of full time teachers from other states year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
4	2	3	2	2

File Description	Document
List of full time teachers from other state and state from which qualifying degree was obtained	View Document
Any additional information	View Document

2.5 Evaluation Process and Reforms

2.5.1 Average number of days from the date of last semester-end/ year- end examination till the declaration of results during the last five years

Response: 13.6

2.5.1.1 Number of days from the date of last semester-end/ year- end examination till the declaration of results year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
15	13	11	14	15

File Description	Document
List of programs and date of last semester and date of declaration of result	View Document
Any additional information	View Document

2.5.2 Average percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years

Response: 2.38

2.5.2.1 Number of complaints/grievances about evaluation year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
49	54	52	48	52

File Description	Document
Any additional information	View Document

2.5.3 Average percentage of applications for revaluation leading to change in marks during the last five years

Response: 2.33

2.5.3.1 Number of applications for revaluation leading to change in marks year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
1	2	1	1	1

File Description

Document

Any additional information

[View Document](#)

2.5.4 Positive impact of reforms on the examination procedures and processes including IT integration and continuous internal assessment on the examination management system

Response:

The following reforms in the examination have been made during the last five years:

- Continuous evaluation system.
- Online examination for selective courses.
- Question paper are set as per revised Bloom's Taxonomy to attain cognitive skills.
- Auditing of question papers and Answer scripts.
- Examination schedule are published in institution website for easy access to all stakeholders.
- Dummy numbers for answer scripts to ensure unbiased evaluation.
- Results are published approximately within 2 weeks from the last day of the examination.
- The examination results are accessible through Internet (On-line results declaration).
- Go through answer scripts, photo copy and Challenge valuation.

Integration of IT with Examination:

Most of the examination process are automated and they are listed below:

- Examination management with 'iboss' automation system
- Student profile and registration of courses
- Marks entry
- Declaration of results through college website and also through SMS
- Hall ticket generation with the courses and exam dates
- Dummy number generation
- Entry of student attendance
- Conversion of marks into SGPA and CGPA

- CCTV facility for safety and security of the COE office
- Photo copier machine interfaced with computer
- Printers for printing A3 & A4 size for mark sheets

Continuous Internal Assessment System:

- Performance are evaluated based on (i) continuous Internal Assessment Tests (IAT) and (ii) End Semester Examination
- Three Internal Assessment Tests are conducted for each subject. The Internal Assessment Tests are conducted centrally by the COE. The faculty members set question papers for individual courses with course outcomes and blooms level mentioned for each questions with the approval of HOD. The first and second internal assessment tests are conducted for one and half hours duration. The third internal assessment test is conducted for three hours duration covering the whole syllabus. Final Internal marks awarded based on the components of internal assessment tests (60%), assignments or miniproject (20%), seminar (10%) and attendance (10%).
- The performance of the test is analyzed during the class committee meeting. The corrective actions are planned accordingly for each subject in order to improve the performance.
- The quality of Question paper and standard of evaluation is verified in each assessment test. The Evaluated Answer scripts are given to the students for clarifying the doubts and grievances if any can be explained with the concern faculty member.
- Internal assessment marks for final year projects are awarded based on the performance of the student in 3 reviews. Project review is conducted using rubrics. In each review, the internal committee constituted by the skill, presentation and hardware.
- Every practical exercise / experiment is evaluated based on conduct of experiment / exercise, Viva and records maintained. There will be at least one model practical test.

Impacts:

- Smooth and successful conduction of examination as per the schedule.
- The IT integration enables us to issue hall tickets with the date of examination benefitting the students
- Able to publish examination results within about 15 to 20 days from the date of last examination.

Transparency in evaluation process, i.e.,students can see their answer scripts before revaluation and get photocopy.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.5.5 Status of automation of Examination division along with approved Examination Manual A. 100% automation of entire division & implementation of Examination Management System

(EMS)

B. Only student registration, Hall ticket issue & Result Processing**C. Only student registration and result processing****D. Only result processing****Response:** A. 100% automation of entire division & implementation of Examination Management System (EMS)

File Description	Document
Current manual of examination automation system and Annual reports of examination including the present status of automation	View Document
Current Manual of examination automation system	View Document
Annual reports of examination including the present status of automation	View Document

2.6 Student Performance and Learning Outcomes

2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the Institution are stated and displayed on website and communicated to teachers and students

Response:

Mechanism of Communication:

The Program Outcomes (POs), Program Specific Outcomes (PSOs) stated for all the programs of the institution are published in the college website and also displayed at prominent places in the department such as class rooms, seminar halls, faculty rooms, laboratory halls, entrance and department library. Also, made available in syllabus book, laboratory manuals and faculty course files.

The course outcomes (COs) are given in the syllabus of every course. The syllabus also provides mapping of COs with both POs and PSOs. The students are issued a course syllabus copy and lesson plan with COs.

The students are briefed about the course outcomes, program outcomes and program specific outcomes at the start of the semester in the classes and also in the mentor meetings.

During induction / orientation program, the vision, mission, POs, PSOs and COs are explained to the first year students and other stakeholders.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.6.2 Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institution

Response:

The curriculum and syllabus are developed by taking into consideration of all the POs and PSOs.

COs of a course are measured by both the direct and indirect assessment tools. Direct assessments are made from the performance in continuous internal assessments, assignments, tutorials, mini project, seminars, quiz and end semester examination. Indirect assessment is made from the Course End Survey.

The questions given in the internal tests are charted with respect to the COs of the course, which in turn are mapped with the POs and PSOs with a correlation level of 1, 2 and 3. The correlation level 1, 2 and 3 are as defined as 1 - Slight (LOW); 2 – Moderate (MEDIUM) and 3 – Substantial (HIGH). The value '0' is given for no correlation. Correlation of a particular CO to PO is determined based on the Blooms Taxonomy knowledge levels.

The attainment levels shall be set considering average performance levels in the university examination. Attainment level is to be measured in terms of student performance in internal assessments with respect to the Course Outcomes of a course in addition to the performance in the University examination.

The direct and indirect assessments are given 90% and 10% weightage respectively. The course end survey questions are framed by the course tutor to indirectly find the level of confidence of the students on the COs.

At the end of the course, the course tutors measure the attainment COs based on the above assessment methods and report about his / her observations and actions need to be taken.

Indirect assessment is done through Graduate exit survey (10% weightage) and employer survey (10% weightage).

After the computation of POs / PSOs, a thorough analysis on these attainment levels is done by the department. This analysis helps to improve further the attainment of POs / PSOs. The proposed corrective, preventive and improvement potentials of the analysis are discussed in the Department Advisory Committee meeting before implementation.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.6.3 Average pass percentage of Students

Response: 98.29

2.6.3.1 Total number of final year students who passed the examination conducted by Institution.

Response: 574

2.6.3.2 Total number of final year students who appeared for the examination conducted by the institution

Response: 584

File Description	Document
List of programs and number of students passed and appeared in the final year examination	View Document
Any additional information	View Document
Link for annual report	View Document

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response: 3.72

Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

3.1.1 The institution has a well defined policy for promotion of research and the same is uploaded on the institutional website

Response: Yes

File Description	Document
Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	View Document
Any additional information	View Document
URL of Policy document on promotion of research uploaded on website	View Document

3.1.2 The institution provides seed money to its teachers for research (average per year)

Response: 4.71

3.1.2.1 The amount of seed money provided by institution to its faculty year-wise during the last five years(INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
5.34	4.53	4.27	3.79	5.64

File Description	Document
Minutes of the relevant bodies of the Institution	View Document
List of teachers receiving grant and details of grant received	View Document
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	View Document
Any additional information	View Document

3.1.3 Number of teachers awarded international fellowship for advanced studies/ research during the last five years

Response: 3

3.1.3.1 The number of teachers awarded international fellowship for advanced studies / research year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
0	3	0	0	0

File Description	Document
List of teachers and their international fellowship details	View Document
e-copies of the award letters of the teachers.	View Document
Any additional information	View Document

3.1.4 Institution has the following facilities

1. Central Instrumentation Centre
2. Animal House/Green House / Museum
3. Central Fabrication facility
4. Media laboratory/Business Lab/Studios
5. Research / Statistical Databases

A. Any four facilities exist

B. Three of the facilities exist

C. Two of the facilities exist

D. One of the facilities exist

Response: A. Any four facilities exist

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

3.2 Resource Mobilization for Research

3.2.1 Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution during the last five years (INR in Lakhs)

Response: 0.45

3.2.1.1 Total Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year-wise during the last five years(INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
0.15	0.30	0	0	0

File Description	Document
List of project and grant details	View Document
e-copies of the grant award letters for research projects sponsored by non-government	View Document
Any additional information	View Document

3.2.2 Number of research centres recognised by University and National/ International Bodies

Response: 5

3.2.2.1 Number of research centres recognised by University and National/ International Bodies

Response: 5

File Description	Document
Names of research centres	View Document
Any additional information	View Document

3.2.3 Percentage of teachers recognised as research guides

Response: 12.94

3.2.3.1 Number of teachers recognised as research guides

Response: 22

3.2.3.2 Number of full time teachers worked in the institution during the last 5 years

Response: 170

File Description	Document
Details of teachers recognized as research guide	View Document
Any additional information	View Document

3.2.4 Number of research projects per teacher funded, by government and non-government agencies, during the last five year

Response: 0.35

3.2.4.1 Number of research projects funded by government and non-government agencies during the last five years

Response: 12

File Description	Document
Supporting document from Funding Agency	View Document
Any additional information	View Document
link to funding agency website	View Document

3.3 Innovation Ecosystem

3.3.1 Institution has created an eco system for innovations including Incubation centre and other initiatives for creation and transfer of knowledge

Response:

P.S.R. INNOVATION AND INCUBATION CENTRE

The Institution has created an innovative ecosystem for project and product development in this regard we developed an incubation centre to initiatives and transfer of knowledge. The faculty members are empowered to take up research activities utilizing the existing facilities. The college has a Research and Development Cell to motivate the faculty members to write feasibility studies and research projects and also helps to create research culture among faculty members and students.

PSR Innovation and incubation center (PSRIIC) initiated various activities for the career enhancement of students at different medium like self-employment, startup initiatives, collaboration with research institutions and other industrial manufacturing related careers are enriched through various training programmes. On the basis of qualitative and quantitative outcome based, ideas are shortlisted and suggested for incubation and development. PSRIIC encourages on establishing different clubs constituted by the students thereby favoring the students by providing guidance on healthy innovation interactive sessions. Further these discussions are converted into innovative projects and other development activity in the research context.

PSRIIC also helps the students to organize various events like seminars, workshops, national conferences,

entrepreneurial awareness programmes, inter/intra college competitions by enriching innovative ideas from the students. PSRIIC inculcate the culture of innovative research practice, social issues identification, entrepreneurship qualities, creative ideas, business strategies, science and technological development and support to society on Nation building and provides extensive ideas on real time projects by visiting various industries through in-plant training, industrial visit and internship for prospective learners.

PSRIIC guides both faculty and students on Intellectual Property Rights, Patentable research & Skill based training programmes for lifelong learning. Over and above the institution is having various verticals on research establishment by starting up incubation centres, R & D Councils, Research laboratories and social needs as and when addressed through converting research into a reality by proper systematic provisions.

PSRIIC which helps to reduce gap between industry and academics by organizing various events like skill development programs, Industry – Academia meets, guest lecture, etc., under the cell. Awareness programs of various schemes under MSME, Digital India and Make in India were conducted under PSRIIC.

PSR Innovation and incubation center (PSRIIC) cultivates business enterprise through their start-up phase by providing the entire support essential to facilitate entrepreneurs who have proposals with strong social & strategic impact. PSR Innovation and incubation center (PSRIIC) is ready to support entrepreneurs translating their innovations into products and services that are commercially possible.

Entrepreneurs/ Incubatees/ Startups may be offered shared office space at P.S.R. Engineering College on a case-by-case basis. P.S.R Incubation Cell will also enthusiastically support Entrepreneurs/ Incubatees/ Startups with a combination of inputs including:

- Seed Funding
- Permission to use laboratories, workshop facilities and equipments
- Mentoring
- Business support services
- Branding
- Networking

Admission to P.S.R Incubation Cell is open to:

- Teaching and non-teaching staff
- Students
- Alumni
- Research Scholars

All others approved by the management.

File Description	Document
Any additional information	View Document
link for additional information	View Document

3.3.2 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry - Academia Innovative practices during the last five years

Response: 116

3.3.2.1 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
38	20	19	22	17

File Description	Document
Report of the event	View Document
List of workshops/seminars during the last 5 years	View Document
Any additional information	View Document

3.3.3 Number of awards for innovation won by institution/ teachers/ research scholars/students during the last five years

Response: 35

3.3.3.1 Total number of awards for innovation won by institution/teachers/research scholars/students year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
15	10	6	3	1

File Description	Document
List of innovation and award details	View Document
e- copies of award letters	View Document
Any additional information	View Document

3.3.4 Number of start-ups incubated on campus during the last five years

Response: 4

3.3.4.1 Total number of start-ups incubated on campus year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
2	2	0	0	0

File Description	Document
List of startups details like name of startup, nature, year of commencement etc	View Document
e- sanction order of the Institution for the start ups on campus	View Document
Contact details of the promoters for information	View Document
Any additional information	View Document

3.4 Research Publications and Awards

3.4.1 The institution has a stated Code of Ethics to check malpractices and plagiarism in Research

Response: Yes

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

3.4.2 The institution provides incentives to teachers who receive state, national and international recognition/awards

Response: Yes

File Description	Document
e- copies of the letters of awards	View Document
Any additional information	View Document

3.4.3 Number of Patents published/awarded during the last five years

Response: 21

3.4.3.1 Total number of Patents published/awarded year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
19	2	0	0	0

File Description	Document
List of patents and year it was awarded	View Document
Any additional information	View Document

3.4.4 Number of Ph.D.s awarded per teacher during the last five years

Response: 0.64

3.4.4.1 How many Ph.Ds are awarded within last 5 years

Response: 14

3.4.4.2 Total number of teachers recognised as guides during the last 5 years

Response: 22

File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	View Document
Any additional information	View Document
URL to the research page on HEI web site	View Document

3.4.5 Number of research papers per teacher in the Journals notified on UGC website during the last five years

Response: 0.98

3.4.5.1 Number of research papers in the Journals notified on UGC website during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
22	40	25	26	53

File Description	Document
List of research papers by title, author, department, name and year of publication	View Document
Any additional information	View Document

3.4.6 Number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings per teacher during the last five years

Response: 5.06

3.4.6.1 Total number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
101	199	286	100	173

File Description	Document
List books and chapters in edited volumes / books published	View Document
Any additional information	View Document

3.4.7 Bibliometrics of the publications during the last five years based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Response: 2.61

File Description	Document
BiblioMetrics of the publications during the last five years	View Document
Any additional information	View Document

3.4.8 Bibliometrics of the publications during the last five years based on Scopus/ Web of Science - h-index of the Institution

Response: 11

File Description	Document
Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	View Document
Any additional information	View Document

3.5 Consultancy

3.5.1 Institution has a policy on consultancy including revenue sharing between the institution and the individual

Response: Yes

File Description	Document
Soft copy of the Consultancy Policy	View Document
Minutes of the Governing Council/ Syndicate/Board of Management related to Consultancy policy	View Document
Any additional information	View Document
URL of the consultancy policy document	View Document

3.5.2 Revenue generated from consultancy during the last five years**Response:** 9.83

3.5.2.1 Total amount generated from consultancy year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
4.6875	4.522	0.006	0.134	0.4775

File Description	Document
List of consultants and revenue generated by them	View Document
Audited statements of accounts indicating the revenue generated through consultancy	View Document
Any additional information	View Document

3.5.3 Revenue generated from corporate training by the institution during the last five years**Response:** 0.45

3.5.3.1 Total amount generated from corporate training by the institution year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
0.453	0	0	0	0

File Description	Document
List of teacher consultants and revenue generated by them	View Document
Audited statements of account indicating the revenue generated through training	View Document
Any additional information	View Document

3.6 Extension Activities

3.6.1 Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years

Response:

In P.S.R Engineering College, the extension activities are carried out through the following forums:

- **National Service Scheme (NSS)**
- **Red Ribbon Club (RRC)**
- **Youth Red Cross (YRC)**
- **Department Associations**

National Service Scheme (NSS):

National Service Scheme (NSS) is a forum where students can directly interact and serve the society. The NSS unit of our Institute is regularly serving the people of the villages in and around the Institute. Few of the activities of NSS are given below:

- Swachh Bharat Abhiyan (SBA) or Clean India Mission camp in local villages
- Blood donation camps
- Eye camp
- veterinary camp
- Tree planting
- Removal of seemai karuvelam (Prosopis juliflora)
- Awareness Rallies on
 - Self-hygiene
 - Plastic free environment
 - Voter awareness
 - Firework safety
 - Road safety
- Dengue Awareness Program
- Campus cleaning
- NSS special camp

Red Ribbon Club (RRC):

PSREC-Red Ribbon Club (RRC) Programme is a voluntary on-campus intervention, envisaged to instil among all the students in the Institute values of service, develop healthy life styles, and increase availability of safe and adequate quantities of blood to all the needy.

The activities of RRC of PSREC are given below:

- Awareness on blood donation
- Blood donation camps
- HIV awareness rally

Youth Red Cross (YRC):

PSREC-Youth Red Cross Society is a well-known, admired and identified humanitarian service organization. PSR-YRC is the independent non-religious, non-political, non-sectarian and voluntary relief organization treating people equally without any discrimination.

The activities of YRC of PSREC are given below:

- Eye Camps
- Health awareness programme
- Awareness on Blood and Organ Donation
- Fire safety programmes to the mess workers.
- Stress Management

Department Associations

The student association of all the departments of our Institute also take part in the extension activities in the neighborhood community for its holistic development. Some glimpses of the departmental extension activities are:

- Fire safety programmes
- Electrical safety
- Conservation of energy
- Use of solar / wind energy in agriculture
- Awareness on Digital banking
- Women Safety
- Awareness on Self-employment
- Use of bio fertilizers
- Computer literacy to school students of nearby villages

File Description	Document
Any additional information	View Document
link for additional information	View Document

3.6.2 Number of awards and recognition received for extension activities from Government /recognised bodies during the last five years

Response: 1

3.6.2.1 Total number of awards and recognition received for extension activities from Government /recognised bodies year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
1	0	0	0	0

File Description	Document
Number of awards for extension activities in last 5 years	View Document
e-copy of the award letters	View Document
Any additional information	View Document

3.6.3 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the last five years

Response: 89

3.6.3.1 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
17	20	16	19	17

File Description	Document
Reports of the event organized	View Document
Number of extension and outreach programs conducted with industry,community etc for the last five years	View Document
Any additional information	View Document

3.6.4 Average percentage of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the last five years

Response: 53.89

3.6.4.1 Total number of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
1021	1840	983	1104	884

File Description	Document
Report of the event	View Document
Average percentage of students participating in extension activities with Government or NGO etc	View Document
Any additional information	View Document

3.7 Collaboration

3.7.1 Number of Collaborative activities for research, faculty exchange, student exchange per year

Response: 0

3.7.1.1 Total number of Collaborative activities for research, faculty exchange, student exchange year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

File Description	Document
Number of Collaborative activities for research, faculty etc	View Document
Copies of collaboration	View Document
Any additional information	View Document

3.7.2 Number of linkages with institutions/industries for internship, on-the-job training, project work, sharing of research facilities etc. during the last five years**Response:** 85

3.7.2.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
29	46	2	5	3

File Description	Document
e-copies of linkage related Document	View Document
Details of linkages with institutions/industries for internship	View Document
Any additional information	View Document

3.7.3 Number of functional MoUs with institutions of National/ International importance, Other Institutions, Industries, Corporate houses etc., during the last five years (only functional MoUs with ongoing activities to be considered)**Response:** 17

3.7.3.1 Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years (only functional MoUs with ongoing activities to be considered)

2018-19	2017-18	2016-17	2015-16	2014-15
10	3	1	1	2

File Description	Document
e-copies of the MoUs with institution/ industry/ corporate house	View Document
Details of functional MoUs with institutions of national, international importance, other universities etc during the last five years	View Document
Any additional information	View Document

NAAC

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The institution has adequate facilities for teaching - learning. viz., classrooms, laboratories, computing equipment, etc

Response:

The institution is sprawled over an area of 27.9 acres of land with the built up area of 5,35,255Sq.ft. The college has 6 departments for Engineering programmes and one department for MBA programme. Each department is housed in a separate building with adequate facilities and amenities for teaching and learning. In total, the college has 51 classrooms, infrastructure and facilities for 90 laboratories, 9 tutorial halls, 2 English Communication Laboratories, 8 seminar halls and computing facilities with computer student ratio of 1:2.5.

In addition to the glass boards for chalk and talk, 47 classrooms (about 90%) are equipped with LCD projectors and computers with internet connectivity. All 8 seminar halls are air conditioned and equipped with LCD projector with smart interactive board, computer with internet connectivity, podium and public address system. The seminar halls are being utilized for conducting seminars, workshops, guest lectures, value added courses, project presentations and research presentations. There is an air conditioned Auditorium with about 2500 seating capacity. This is being utilized for conducting induction programmes, graduation function, college day, cultural programs, important celebrations, etc. There is a well equipped board room in the administrative block for conducting meetings such as board of studies, academic council, board of management etc. Each faculty member is provided a separate cabin with computer and internet connectivity.

Advanced Computing facilities with 817 computers including Intel Core-i7, Core-i5 computers. Rack mounted blade servers, Storage Area Networks, Cisco Routers and Sonic Firewall are also available. The college has 105 Mbps Internet connectivity from BSNL and Airtel and Wi-Fi facilities. The college has installed both licensed and open source software for the needs of teaching and learning.

Using various ICT environments such as Power Point Presentation (PPT), Google Classroom, Moodle for courses and online tests, NPTEL Lectures, You Tube videos, etc., the faculty members effectively implementing teaching learning process.

PSR Centre of Excellence has been established in the college in June 2019 in order to provide advanced training, internship and certification programs of Microsoft, Google, IBM, Texas, Bentley, E-Plan and Autodesk to the students.

The college has 320 KVA & 125 KVA power generators to meet out the occasional power shut down and to provide continued power supply for laboratory classes, computer labs and for events.

Ramp facility, Separate rest room with western toilet facilities are provided for the differently abled. RO water plants are available in the campus to ensure the availability of safe drinking water. Sufficient number of certified Fire Extinguishers are maintained to ensure safety in the campus.

In addition to hostels, the college is operating 31 buses to nearby towns for the smooth transit of both

students and staff members. Also, the Government transport corporation plying about 12 buses both morning and evening to the college for the benefit students and staff.

College has the following infrastructure / facilities in its premises for personal needs and for carrying out extracurricular activities: Bank of India branch, ATM facility, Store for Stationeries, Canteen, Various Forums/Clubs, Photocopying facilities, ISDN facility.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

4.1.2 The institution has adequate facilities for sports, games (indoor, outdoor),gymnasium, yoga centre etc., and cultural activities

Response:

Adequate facilities are available in the campus for playing indoor and outdoor games, sports, gymnasium, yoga and cultural activities.

Open Play Ground

The open play ground of 76,234 sq.ft is being used to conduct the games such as Football, Handball, Kabaddi, Tennis Courts, and Cricket fields. Also, it has 400m Athletic Track to conduct run events and facilities to conduct Volleyball, Ball Badminton, Long jump, Shot-put, High jump, Hammer, Javelin Throw and Discuss Throw.

The students are trained to participate in the competition at the zonal, inter-zonal, state and national level. Institution also regularly organizes various zonal level sports events such as Anna University Zone-18 Zonal Volleyball Women Tournament, Volleyball Men Tournament, Handball Men Tournament and Zonal Athletics Men & Women. About 221 sports and games have been conducted during the past 5 years.

Indoor Stadium

A fully furnished indoor stadium with a multi gym facility has been established in the year 2002. Indoor Area is 14741 sq.ft. It has facilities for the games such as Badminton and Table Tennis. Also, it houses a Gymnasium Hall.

Gymnasium Hall

The gymnasium hall is established in the year 2002, which houses various exercise equipment including Six Station Multi-Gym, Motorized Tread Mill and Smith Machine. The gymnasium hall is open for the students both morning and evening times.

Yoga Centre

The yoga is being practiced in the college since 2017. The size of the yoga centre is 1100 sq.ft. The students are motivated to do yoga exercises regularly. International Yoga Day is celebrated on 21st June every year with a yoga trainer in the college.

Cultural Activities

The seminar halls and the auditorium are utilized for conducting cultural programs. The students perform the cultural such as folk dance, music, plays, mono acting, traditional events like Karakam, Silambam, Martial Arts, etc. The students have participated in the cultural competitions and won prizes. The students are encouraged to perform cultural in the college day functions and conferences. About 126 cultural events have been organized during the past 5 years.

File Description	Document
Any additional information	View Document
link for additional information	View Document

4.1.3 Percentage of classrooms and seminar halls with ICT - enabled facilities such as smart class, LMS, etc

Response: 91.67

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 55

File Description	Document
Number of classrooms and seminar halls with ICT enabled facilities	View Document
Any additional information	View Document
Link for additional information which is optional	View Document

4.1.4 Average percentage of budget allocation, excluding salary for infrastructure augmentation during the last five years.

Response: 45.14

4.1.4.1 Budget allocation for infrastructure augmentation, excluding salary year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
274.84	256.61	189.80	129.43	144.93

File Description	Document
Audited utilization statements	View Document
Any additional information	View Document

4.2 Library as a Learning Resource

4.2.1 Library is automated using Integrated Library Management System (ILMS)

Response:

Our college library is automated with the details as below:

Name of the ILMS software:	Autolib
Nature of automation: (fully or partially)	Fully
Version:	V 3.1
Year of automation:	2003, Last updation in 2018

The college has a Central library with a carpet area of 16,721Sq.ft. including a reading hall accommodating 200 students. Our library is the greatest resource and we afford with Professional, Reliable and User-Friendly service to our students and faculties. It maintains separate collections of Reference Books, Bound volumes of journals, Technical Reports, Thesis, Video Cassettes, Compact Discs and Micro-forms covering various branches of Engineering, Humanities & Science and other books related to Competitive Examinations. The Books are arranged and classified according to the Universal Decimal Classification Scheme.

Open Access System is followed in the library. Circulation was computerized and bar coding system was introduced to speed up library transactions. Accordingly, all faculty and students were issued bar-coded membership cards for access to the library.

The entire collection of the library can be accessed through the college LAN. Library has 38,097 volumes of books, E-Journals (about 6964) subscribed with IEEE ASAP and Springer, E-Books (about 4613528), 3684 Educational CDs, 2763 back volumes and 4183 project reports, 300 deep learning books and collection of rare and special books, separate dictionary section.

Unique Faculty Corner is available in the library to keep and access the journal / conference paper publications, Book chapter / Book publications of the faculty members. Also a separate section is available to enhance the Post Graduate and Research scholar reference purpose. To honor our former President Dr.APJ. Abdul Kalam, a section named as “Know About Dr.APJ. Abdul Kalam Corner”, is made available. All students can access books and scientific notes written by Dr.APJ. Abdul Kalam.

Student entries are recorded by the E-Gate facility installed at the entrance. The users can access the E-Resources and know the availability / details of the books through the college OPAC facility.

The library has a separate digital section with computers to access e-Journals of IEEE ASAP, Springer, N-List, DELNET, NDLI and NPTEL courses. The e-Journals and contents can also be accessed through our college LAN. CCTV cameras are installed in the library to ensure security. In addition to that, each department has a separate department library to cater the internal needs of the department staff and students.

File Description	Document
Any additional information	View Document
link for additional information	View Document

4.2.2 Collection of rare books, manuscripts, special reports or any other knowledge resource for library enrichment

Response:

Our library has a good collection of resources available for the users. The library is enriched with Rare Books including handbooks, old editions, encyclopedias, project reports, books on competitive examinations, personality development, English language certifications and old question papers. These books are extensively used and printed and published long back. The library also holds good collection pertaining to literature and religion.

The College library has access to various e-resources such as IEEE, Springer, eShodhSindhu, Shodhganga, Delnet and NList and provides information services to the students, faculty and researchers. The students, faculty and research scholars access the e-resources and download the relevant and needed articles. The users can know the availability / details of the books through the college OPAC facility.

Through Shodhganga, the faculty and researcher scholars know the availability of thesis and research reports on their concerned subjects which are available freely for their research pursuits. Shodhganga contains all the electronic thesis of various universities and it helps to choose the research topic and problems of relevance and quality. E-ShodhSindhu has various research articles in full text, bio-graphic and factual that are useful because of their authenticity on research topics. The library is a member of N.list and Delnet for using the e-journals provided by the consortium online.

File Description	Document
Any additional information	View Document
link for additional information	View Document

4.2.3 Does the institution have the following

- 1.e-journals
- 2.e-ShodhSindhu

3.Shodhganga Membership**4.e-books****5.Databases****Any 4 of the above****Any 3 of the above****Any 2 of the above****Any 1 of the above****Response:** Any 4 of the above

File Description	Document
Details of subscriptions like e-journals,e-ShodhSindhu,Shodhganga Membership etc	View Document
Any additional information	View Document

4.2.4 Average annual expenditure for purchase of books and journals during the last five years (INR in Lakhs)**Response:** 7.37

4.2.4.1 Annual expenditure for purchase of books and journals year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
10.67	7.37	5.83	5.67	7.33

File Description	Document
Details of annual expenditure for purchase of books and journals during the last five years	View Document
Audited statements of accounts	View Document
Any additional information	View Document

4.2.5 Availability of remote access to e-resources of the library**Response:** Yes

File Description	Document
Any additional information	View Document

4.2.6 Percentage per day usage of library by teachers and students

Response: 24.82

4.2.6.1 Number of teachers and students using library per day over last one year

Response: 559

File Description	Document
Any additional information	View Document

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

The college has a well-established IT infrastructure and facilities and upgrade them regularly depending on the necessity. The details of IT infrastructure and their upgradation are given in the table below:

About 950 computers are available for both academic and administrative purpose including the recent additions and upgradations with 60 Intel Core i7 computers, 32 Intel Core i5 computers in the year 2018-19.

The campus is connected with LAN and Internet since its inception. Initially provided BW of 8 Mbps internet is upgraded to 20 Mbps in 2012-13, 60 Mbps in 2015-16, 100 Mbps in 2017-18 and to 105 Mbps in 2019.

College has various high speed advanced servers such as IBM X3650M3, Lenovo X3550M5 functioning as Domain servers, Education Management Server, Linux Server, Database Server and Moodle Server. All faculty members were provided with College Mail id (@psr.edu.in) through Google Apps. Storage Area Network (SAN) of size 6TB capacity is available to ensure the reliable storage of data. SonicWall (Internet Gateway for the college) is used to provide secured internet access.

Various other IT services and application portals supported by the Data center are Student Attendance (Student Attendance Monitoring System), Exam Process Automation (Automation of Examination Process) and Faculty profile updation. Biometric based staff attendance system also has been implemented. All the departments are provided with a smart interactive board for teaching and learning process.

IT Infrastructure	Details of Last Upgradation
-------------------	-----------------------------

Servers:	Added Lenova Server LNPR 5231 in 2017-18
Firewall:	Cyberoam replaced by Sonic wall in 2015-16. Last renewal in 2019
System OS:	Windows-10 in 2018-19 Renewal yearly.
Internet BW:	105 Mbps
Wi-fi:	Upgraded in 2018-19
Computers:	Intel-i7 added in 2018-19
Automation-Education Management System:	GEIS replaced by i-boss in 2016-17 with AMC service
ICT in Class Rooms:	Upgraded in 2018-19
ICT in Seminar Halls:	Upgraded with smart interactive board in 2017-18

File Description	Document
Any additional information	View Document
link for additional information	View Document

4.3.2 Student - Computer ratio

Response: 2.55

File Description	Document
Any additional information	View Document

4.3.3 Available bandwidth of internet connection in the Institution (Lease line)

?50 MBPS

35 MBPS - 50 MBPS

20 MBPS - 35 MBPS

5 MBPS - 20 MBPS

Response: ?50 MBPS

File Description	Document
Any additional information	View Document

4.3.4 Facilities for e-content development such as Media Centre, Recording facility, Lecture Capturing System (LCS)

Response: Yes	
File Description	Document
Facilities for e-content development such as Media Centre, Recording facility,LCS	View Document
Any additional information	View Document
Link to photographs	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1 Average Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, as a percentage during the last five years				
Response: 29.14				
4.4.1.1 Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component year-wise during the last five years (INR in Lakhs)				
2018-19	2017-18	2016-17	2015-16	2014-15
125.48	108.56	140.74	150.89	106.17
File Description		Document		
Details about assigned budget and expenditure on physical facilities and academic facilities		View Document		
Audited statements of accounts.		View Document		
Any additional information		View Document		

4.4.2 There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

Response:

Laboratory Maintenance

The maintenance of the equipment of laboratories are taken care of by the respective departments. The technicians of the laboratories periodically monitors and maintains the working condition of the equipment / instruments / machinery in the laboratories. During the warranty period of the equipment, if the equipment need servicing or replacement supplier of the equipment will be called to rectify the fault. After warranty period the technicians of the laboratories service the equipment to the extent possible. Otherwise, the supplier will be called on call basis to service the equipment. At the end of every academic year

technicians will carry out preventive maintenance of their laboratories and verify the stock of the equipment. The laboratory halls are well effectively utilized for the conduction of practical both in odd and even semesters as per the curriculum with adequate equipment and facilities.

Classroom Maintenance

Maintenance of the classroom ICT facilities and electrical fittings are rests with the concerned department. The ICT facilities such as computer, internet points and LCD projector in the classrooms are regularly monitored by the department technicians. If the faults occurred are unable to rectify by them will be reported to the computer maintenance cell. The electrical fittings such as lights, fans, switches and plug points in the classrooms are regularly monitored by the department and inform to electrical maintenance cell if there is a problem for rectification.

Computer and LAN Maintenance

There is a computer maintenance cell which takes care of the maintenance of computers, campus network, installation and upgradation. The technicians / system administrators attend the faults of the computer both software and hardware whenever they are informed by the concerned department. There is a form to report about the kind of faults. The cell maintains a record of servicing. Maintenance of the servers, internet connectivity, emails accounts with college domain, back up of data, renewal of licenses and services also are taken care by the cell.

Campus Maintenance

Cleanliness & daily maintenance of the interior facility (classrooms, laboratories, library, hallway, and staircase) is done by housekeeping team of the institute under the supervision of the college maintenance incharge. Fire extinguisher is outsourced since refilling of the cylinder is done once in a year.

Electrical Maintenance

Power supply, Generators and Electrical Repairs are looked after by the by the electrical maintenance cell attached with the Electrical Engineering department. There are two diesel generators with the capacity of 325 KVA & 125 KVA to augment the power failures. The generators are regularly monitored and maintained by the electricians. The UPS for providing uninterrupted power supply to the server room, computer labs and various laboratories also maintained by the electrical cell. The generator sets and UPS are serviced by suppliers based on call basis.

Library Maintenance and Utilization

The cleanliness of the library is maintained by the campus maintenance team regularly. Electronic Gate Entry system is using for monitoring the user entry of students, faculty and others staff members. All types of counter transactions are done using barcode system. Barcode scanner based stock verification process is carried out every year in the library.

Sports Complex Maintenance and Utilization

Playgrounds, courts and Indoor stadium are well maintained by the ground markers (two members) of the physical education department under the supervision of the physical director on regular basis. These ground markers maintain the track and field regularly with proper marking. Students receive the sports kit from the physical education department for practicing by enter their name and roll number in material issue register and after completing the practice session he/she should return same in physical education store room.

File Description	Document
Any additional information	View Document
link for additional information	View Document

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years

Response: 54.37

5.1.1.1 Number of students benefited by scholarships and freeships provided by the Government year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
1122	1238	1213	1175	1118

File Description	Document
Upload self attested letter with the list of students sanctioned scholarships	View Document
Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	View Document
Any additional information	View Document

5.1.2 Average percentage of students benefited by scholarships, freeships, etc. provided by the institution besides government schemes during the last five years

Response: 13.38

5.1.2.1 Total number of students benefited by scholarships, freeships, etc provided by the institution besides government schemes year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
417	380	269	206	167

File Description	Document
Any additional information	View Document

5.1.3 Number of capability enhancement and development schemes –

- 1.Guidance for competitive examinations
- 2.Career Counselling
- 3.Soft skill development
- 4.Remedial coaching
- 5.Language lab
- 6.Bridge courses
- 7.Yoga and Meditation
- 8.Personal Counselling

7 or more of the above

Any 6 of the above

Any 5 of the above

Any 4 of the above

Response: 7 or more of the above

File Description	Document
Details of capability enhancement and development schemes	View Document
Any additional information	View Document
Link to Institutional website	View Document

5.1.4 Average percentage of students benefited by guidance for competitive examinations and career counselling offered by the institution during the last five years

Response: 70.31

5.1.4.1 Number of students benefited by guidance for competitive examinations and career counselling offered by the institution year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
1510	1482	1469	1582	1540

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	View Document
Any additional information	View Document

5.1.5 Average percentage of students benefited by Vocational Education and Training (VET) during the last five years**Response:** 0

5.1.5.1 Number of students attending VET year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

File Description	Document
Details of of students benefited by Vocational Education and Training (VET)	View Document
Any additional information	View Document

5.1.6 The institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases**Response:** Yes

File Description	Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View Document
Details of student grievances including sexual harassment and ragging cases	View Document
Any additional information	View Document

5.2 Student Progression**5.2.1 Average percentage of placement of outgoing students during the last five years****Response:** 49.66

5.2.1.1 Number of outgoing students placed year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
366	320	286	274	251

File Description	Document
Self attested list of students placed	View Document
Details of student placement during the last five years	View Document
Any additional information	View Document

5.2.2 Percentage of student progression to higher education (previous graduating batch)

Response: 7.51

5.2.2.1 Number of outgoing students progressing to higher education

Response: 44

File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education	View Document
Any additional information	View Document

5.2.3 Average percentage of students qualifying in State/ National/ International level examinations during the last five years (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)

Response: 46.2

5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil services/ State government examinations) year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
12	6	7	9	3

5.2.3.2 Number of students appearing in state/ national/ international level examinations (eg: NET/SLET/GATE/GMAT/CAT, GRE/TOEFL/ Civil Services/State government examinations) year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
52	16	17	13	5

File Description	Document
Upload supporting data for the same	View Document
Number of students qualifying in state/ national/ international level examinations during the last five years	View Document
Any additional information	View Document

5.3 Student Participation and Activities

5.3.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) during the last five years

Response: 27

5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
7	5	8	3	4

File Description	Document
Number of awards/medals for outstanding performance in sports/cultural activities at national/international level during the last five years	View Document
e-copies of award letters and certificates	View Document
Any additional information	View Document

5.3.2 Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution

Response:

The institute believes in giving opportunity to the students in supporting the authorities and the institute faculty in running the affairs of the institute. For this, the institute provides them with opportunities to participate in the various academic and administrative bodies. The various academic and administrative bodies and their activities which have student representations on them are:

- **Class Committee**

The goal of the Class Committee is to improve the teaching-learning process. The functions of the class committee include: Resolving difficulties experienced by the students in the classrooms, laboratories and Informing the academic schedule including the dates of assessments and the syllabus coverage for each assessment. About Six students representing both boys and girls are included in the class committee.

- **Internal Quality Assurance Cell (IQAC)**

Student representatives are nominated for this cell who involves in the decisions regarding the quality initiatives of the institute.

- **Sports Committee**

Student representatives give valid suggestions towards the sports activities within the institute.

- **Training and Placement Cell**

It motivates the students to develop technical knowledge and soft skills in terms of career planning, goal setting etc. Also arrange training programs for the students to get placed in various companies.

- **Hostel committee**

A student member from each year is nominated as the member of the committee. The students communicate to the concerned authorities to take active interest in general welfare of the students residing in the hostel and assist the Council of Wardens in maintaining the basic amenities and mess.

- **Department Association**

It provides the practical exposure to the students, through regular activities like technical seminars, symposium, talks on ongoing research practices from distinguished practitioners in the industry. Student members from each class actively take part in the hosting of events.

- **Board of studies**

A student representative from both UG and PG take part in the revision and updating of curriculum and syllabi.

- **Library committee**

Student representatives are nominated to the library committee, which addresses the issues of proper utilization of resources and services, Maintenance, issue of library books and project reports.

- **Student Council**

It is the voice of the student body which provides an opportunity to develop leadership skills by organizing and carrying out college activities, planning events, community welfare, share student ideas and interests.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

5.3.3 Average number of sports and cultural activities / competitions organised at the institution level per year

Response: 16.6

5.3.3.1 Number of sports and cultural activities / competitions organised at the institution level year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
18	17	16	16	16

File Description	Document
Report of the event	View Document
Number of sports and cultural activities / competitions organised per year	View Document
Any additional information	View Document

5.4 Alumni Engagement

5.4.1 The Alumni Association/Chapters (registered and functional) contributes significantly to the development of the institution through financial and non financial means during the last five years

Response:

P.S.R Engineering College Alumni Association was formed in the year 2003 with the objective of fostering long-term relationships with the alumni. The association was registered under the Tamil Nadu Societies Registration act 1975 at Registrar of society, Virudhunagar (Ref. SL.No.:358/2018). The association plays a vital role in the progress and achievement of the College. The Executive Committee of the Alumni Association meets periodically and contribute appreciably to the development of their alma mater.

The members of Alumni Association are also involved in the mentoring of students, placement, internship, Board of Studies, Result Passing Board and IQAC. The College has an Alumni coordinator who takes care of arranging the meetings and other related activities. The contribution of the alumni for the growth and progress of the College is appreciable as they offer student support services by way of counselling, guidance and lectures.

They have contributed to the infrastructural development also. The College canteen was renovated with a sponsorship worth of Rs.20 lakhs by the Alumni. They have sponsored an event 'Hackathon-2019' in the college to develop the thinking and designing skills of the students. All the expenses of the event including the cost of the prizes worth Rs.55,000 were borne by the Alumni. Our Alumni are wide spread all over the world and all measures have been taken for the frequent reunion of its members.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

5.4.2 Alumni contribution during the last five years(INR in Lakhs)

? 15 Lakhs

10Lakhs - 15 Lakhs

5 Lakhs - 10 Lakhs

2 Lakhs - 5 Lakhs

Response: ? 15 Lakhs

File Description	Document
Any additional information	View Document
Alumni association audited statements	View Document

5.4.3 Number of Alumni Association / Chapters meetings held during the last five years

Response: 16

5.4.3.1 Number of Alumni Association /Chapters meetings held year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
4	3	3	3	3

File Description	Document
Report of the event	View Document
Number of Alumni Association / Chapters meetings conducted during the last five years	View Document
Any additional information	View Document

NAAC

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the institution

Response:

Vision and Mission of the Institute have been designed to reflect the focus of our Institution.

Vision: To contribute to the society through excellence in technical education with societal values and thus a valuable resource for industry and the humanity.

Mission: To create an ambience for quality learning experience by providing sustained care and facilities. To offer higher level training encompassing both theory and practices with human and social values. To provide knowledge based services and professional skills to adapt tomorrow's technology and embedded global changes.

The institute policies, strategies and quality assurances giving directions in achieving excellence in every aspects of the institution such as academic, research, infrastructure, faculty development, placement, social activities, etc. A systematic governance of the institution ensures effective leadership in administering the institution with transparency and also encourages participative management by involving various stakeholders at appropriate bodies in making decisions.

The Principal is assisted by the deans, heads of the departments, controller of examination, office staff and various statutory committees / cells in administering the institution. The committees established as per the guidelines of the various statutory bodies such as Board of Management (Governing Council), Academic Council and Boards of Studies, Finance Committee, Internal Quality Assurance Cell (IQAC), Results Passing Board that meet as per the norms and make suitable decisions for overall development of the Institute.

Faculty members participate in designing the curriculum and syllabus to achieve vision and mission of the Institution and graduate attributes of our nation, examination reforms, maintaining standards in academic and research. Members of the board of management include UGC nominee, State Government nominee, University nominee, Academic experts and Industry expert. The affiliating University nominates its members to Board of Management, Academic Council, Board of Studies and Result passing board. Alumni and student nominees are also included in the above bodies in decision making process.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.1.2 The institution practices decentralization and participative management

Response:

The institution functions in a decentralized manner with transparent mechanism in all its activities and decisions. Well-defined policies and procedures are in place to ensure transparency in various activities of academic, research and administration. Academic related decisions are taken in the Board of Studies and Academic Council. The financial decisions are made in the finance committee. The Board of Management (Governing Council) takes policy decisions, formulates/amends rules and regulations, strategy planning, delegation of powers and responsibilities.

Principal ensures the smooth functioning of the institution with the support of Deans and Head of the departments. The examination related activities are planned, executed and monitored by Controller of Examinations. At the department level, Program Coordinator coordinate the Head of the Departments for the smooth functioning. Class advisors ensure the conduction of the classes. Lab in-charges are taking decisions for the conduction of laboratories.

In addition to the regular academic activities, other co-curricular, extra-curricular, research and extension activities are planned and executed by various forums / cells / administrative set-ups like IQAC, Library Committee, Standing Committee, Recruitment Committee, Finance Committee, Press and Publicity Committee, Hostel committee, Sports committee, ISTE, IETE, YRC, RRC, NSS, EDC, etc.,

Case study: Establishment of Centre of Excellence

The recruiters felt that there is a gap between Industry and Institute. This was reflected in the placement statistics. This was discussed in the tenth meeting of IQAC. It was decided that a Centre of Excellence with necessary infrastructure can be established to enhance the skills of the students. This was forwarded to the Management through Principal. The Management accepts the proposal and agreed to establish the Centre of Excellence through a corporate vendor "Ethnotech Academic Solution, Bengaluru". The COE was established with leading corporates like IBM, Google, Bentley, ePlan, Texas Instruments, AutoDesk, Cisco, Tally and Microsoft. These centres provide ample opportunity for the students and staff to comprehend the latest industry practice and upgrade their knowledge through industry relevant projects using these facilities.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.2 Strategy Development and Deployment**6.2.1 Perspective/Strategic plan and Deployment documents are available in the institution****Response:**

Institution has a well-defined Strategic plan aiming to achieve excellence in five major aspects of Academic, Research, Faculty, Student and Society. The proposed performance indicator with a set target assesses attainment of each strategy. Strategic Plan and deployment documents are provided on the Institute website.

Successfully Implemented Activities as Per Strategy

Strategy 2.1: Permanent Affiliations to Programmes

Indicator: Number of Programmes permanently affiliated

Target: To get permanent affiliation to all eligible Programmes

Review Period: Every Year

The College has 7 UG and 5 PG Programmes and affiliated to Anna University, Chennai. Until the academic year 2018-19, all the eligible 6 UG programmes and 2 PG programmes have been received permanent affiliation. In total, out of 12 academic programmes, 10 programmes have been permanently affiliated to the university. The college is able to achieve this based on the infrastructure, faculty strength, teaching learning process, research facilities and the achievements such as NBA accreditation and Autonomous status. The College has received Educational Excellence Award for Best Engineering College for Academic Infrastructure in South Tamilnadu from Education Post and CII. The Institution has secured fifth rank among 522 Engineering Colleges in Anna University Examination in December 2015 and also secured fourth rank in autonomous colleges rank list in December 2018 Examination. The target of getting permanent affiliation to all eligible Programmes have been achieved as per the strategy 2.1.

Strategy 3.1: Research Centre Recognition

Indicator: Number of Departments Recognized as Research Centres

Target: To apply and get research centre recognition for all eligible departments.

The strategic plan of the institution is analyzed in the Board of Management and it was decided to take necessary actions for strengthening the field of Research and Development (R&D). The prime factors for the development of R& D field are getting Research Centre Recognition for various disciplines and to increase the number of Research Supervisors and students. The eligible five departments viz., CSE, ECE, EEE, Civil and Mech have received research centre recognition from Anna university for carrying out collaborative research. There are seven departments in the college and 39 Ph.D faculty members are available in various departments. Among them, 22 Ph.D faculty members are recognized as research supervisors. About 65 research scholars are on role in the various research programmes of the college. About 14 candidates were awarded Ph.D degree through our research programmes. There are 268 research papers in various reputed & Scopus indexed Journals have been published. 21 patents have been file. Funded projects worth Rs 66 Lakhs have been received from DST, AICTE, TNSCST, CSIR and Texas Instruments. The targets of getting research centre recognition for all eligible departments have been achieved as per the strategy 3.1.

File Description	Document
Any additional information	View Document
Strategic Plan and deployment documents on the website	View Document
Link for Additional Information	View Document

6.2.2 Organizational structure of the institution including governing body, administrative setup, and functions of various bodies, service rules, procedures, recruitment, promotional policies as well as grievance redressal mechanism

Response:

The college has a well-structured administrative setup for its smooth functioning. The administrative setup is provided in the organogram. The functions of various bodies are given in the link for additional information.

Service rules, Procedures, Recruitment and Promotional Policies:

The college has a well-established policies, procedures and rules as approved by the Governing Council adhering to the guidelines of statutory bodies such as UGC, AICTE and Affiliating University. The policies and procedures are reviewed as and when required in the governing council meeting. The concerned documents on the above are made available in the college website. Also, they are circulated to the all concerned. Some of the policies and procedure contained in the manual are listed below:

- Roles and Responsibilities
- Human Resource Planning
- Leave Policy
- Recruitment Policy
- Research and Consultancy Policy
- Discipline and Grievance Policy
- Incentives Policy
- Examination Procedure

Organisation structure and policies and procedures are available in additional information .

Grievance Redressal Mechanism

The Grievance Redressal Mechanism of the institution is established with an aim to provide easy and readily accessible procedure for prompt disposal of the day to day genuine grievances of the student and faculty community to maintain a congenial atmosphere. The Grievance Committee considers only individual grievances of specific nature from the employee and students. The Grievance Committee considers the grievances submitted in writing by an individual related to employment, working conditions and services. Grievances received are addressed systematically with active involvement and cooperation of the respective department / section concerned with the grievance; maintain necessary confidentiality in handling process. The objectives of Grievance Redressal Committee are:

- All the grievances of the students / employee which could not be settled in the routine process should be referred to this committee.
- Committee tries to settle the issues amicably in a time bound manner.
- Introduces a reasonable and reliable solution for grievances of various issues received from students/parents
- Ensures that the grievances are resolved on time impartially and confidentially.

File Description	Document
Any additional information	View Document
Link to Organogram of the Institution webpage	View Document
Link for Additional Information	View Document

6.2.3 Implementation of e-governance in areas of operation

- 1.Planning and Development
- 2.Administration
- 3.Finance and Accounts
- 4.Student Admission and Support
- 5.Examination

All 5 of the above

Any 4 of the above

Any 3 of the above

Any 2 of the above

Response: All 5 of the above

File Description	Document
Screen shots of user interfaces	View Document
ERP Document	View Document
Details of implementation of e-governance in areas of operation Planning and Development,Administration etc	View Document
Any additional information	View Document

6.2.4 Effectiveness of various bodies/cells/committees is evident through minutes of meetings and implementation of their resolutions

Response:

The Institute has various committees, which carry out their respective tasks and pass resolutions / decisions for its smooth functioning. Actions are taken based on the decision of these committees. Few of the resolutions / decisions taken by some of the committees and action taken on them are described below.

Academic Council

Details of Meeting	Resolutions / Decisions	Implementation
4th Meeting 14.02.2015 Item.4.5	Introduction of CBCS in R-2012 itself. Offer Electives of interdisciplinary nature as Open electives	Implemented.
5th Meeting 07.05..2015 Item.4.5	Ratification of Rules and Regulations of Supplementary Exam	Implemented
6th Meeting 4.03.2017 Item.5	Special supplementary exam for passed out candidates	Implemented as per the decision to allow the outgoing candidates who have Reappearance (RA) in 2 Courses maximum only in 7th and 8th semesters are eligible.
7th meeting 03.02.2018 Item.3	Assessment for Theory cum Practical Courses	Theories cum Practical Courses were implemented and weightage of mark allocation as follows. Internal Test and Assignment 50% , Practical Exam 40% and Attendance 10%

Governing Council

Details of Meeting	Resolutions / Decisions	Implementation
3rd Meeting, 23.04.2014 Item.6	New or Extension of Guest house	Extension of Guest house implemented.
5th Meeting, 23.06.2016 Item.6	To Appraise and Get Feedback on the Program Outcomes (PO) & Program Specific Outcomes (PSO) of the Departments	Board of Management resolves to follow the new POs and PSOs as proposed by NBA from the academic year 2016-17 onwards
6th Meeting 14.09.2017 Item.5	Participation in Swacchta Pakhwada Construction of new canteen	Implemented

IQAC Cell

Details of Meeting	Resolutions / Decisions	Implementation
5th Meeting, 30.08.16	Updation of College website	College website updated and new website

Item.5 10th Meeting , 22.11.18	Improve Teaching and Learning Process	will be launched soon. Teaching Learning process has been improved by using teaching aids like usage of smart class, ICT Tools, Video lecture preparation, Hackathon, Online Courses and Accessing Online/Print Journals
Item.1 10th Meeting , 22.11.18	Create Centre of Excellence Environment	Implemented
Item.4 11th Meeting , 06.04.19	New Curriculum 2019 Regulations	Implemented
Item.4		
File Description		Document
Any additional information		View Document
Link for Additional Information		View Document

6.3 Faculty Empowerment Strategies

6.3.1 The institution has effective welfare measures for teaching and non-teaching staff

Response:

Institute has effective welfare measures for both teaching and non-teaching staff. The following monetary and non-monetary welfare measures for personal and professional growth are provided to the staff.

- Employees Provident Fund (EPF)
- ESI facility for Non-teaching staff
- Group Insurance
- Concessional transport facility to faculty members
- Free transport to non-teaching staff
- Casual, Maternity and Medical leaves
- Priority in admission and fee concession to the wards of staff
- On-duty leave for attending FDPs / Conferences
- Financial support for attending conferences/workshop/seminar
- Incentives for publications in peer reviewed Journals
- Incentives for publication of books and book chapters
- Cash awards for achieving highest pass percentage
- Sports and Gym facilities.
- Bank of India branch with ATM facility in the campus.
- Staff Club - Annual picnic and festival gift for staff

- Free over coat for female faculty members
- Free uniform to drivers
- Free uniform to lab technicians / electricians /office assistants
- Festival advance

Year	Amount of welfare measure for Teaching and Non-Teaching (in Rs)
2014-15	73,87,919
2015-16	90,25,950
2016-17	76,76,848
2017-18	7,73,984
2018-19	32,74,613

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.3.2 Average percentage of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the last five years

Response: 26.82

6.3.2.1 Number of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
42	55	51	44	36

File Description	Document
Details of teachers provided with financial support to attend conferences,workshops etc during the last five years	View Document
Any additional information	View Document

6.3.3 Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years

Response: 5.6

6.3.3.1 Total number of professional development / administrative training programs organized by the Institution for teaching and non teaching staff year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
3	12	5	2	6

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centres).	View Document
Reports of Academic Staff College or similar centers	View Document
Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff	View Document
Any additional information	View Document

6.3.4 Average percentage of teachers attending professional development programs viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Program during the last five years

Response: 11.95

6.3.4.1 Total number of teachers attending professional development programs, viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Programs year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
32	22	35	7	6

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers).	View Document
IQAC report summary	View Document
Details of teachers attending professional development programs during the last five years	View Document
Any additional information	View Document

6.3.5 Institution has Performance Appraisal System for teaching and non-teaching staff

Response:

The college conducts performance appraisal annually for both teaching and non-teaching staff. Faculty members are required to submit the filled in self-appraisal proforma designed considering the factors viz., teaching, supporting activities, research and consultancy, publication and participation in administrative work both in department and college level. The consolidated scores of the appraisal criteria are analyzed by the respective heads of the departments and provide their remarks for improvement. The performance appraisal system helps the faculty members to assess their strengths and weaknesses in various categories and accordingly they can plan to enhance their performance. Non-teaching staff are also assessed based on their work achievements, qualification enhancement and adoptability towards the technological changes.

In general, following factors are considering in the assessment

- Academic Performance
- Pursuing higher studies (Ph.D, PDF)
- Research Fund received from Government /Non-Govt. Agencies and consultancy activities
- Paper Publication in journals & conference proceedings
- Publication of books/ chapters in books
- Rewards and recognition from outside of institution
- Organizing conferences / workshops / training programs
- Participation in Conferences, Workshops, FDP and others
- Participation as Resource Person for delivery of special lectures / Chairing sessions
- State and national level Awards and Rewards received
- Participation in institute's extension activities Community
- Departmental responsibilities
- Institutional responsibilities
- Future plan for the Development of Institution

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

- Utilization and execution of the budget is monitored through internal and external auditing.
- Internal audit is conducted half yearly basis and external audit is conducted annually by External Auditor (chartered accountant) at the end of every financial year.
- The consolidation of the findings of the Institution has been completed and the annual returns have been submitted to Income Tax Authorities, Registrar of Societies, Tamilnadu and other relevant authorities concerned by External Auditor.

- Financial planning and review is done regularly by the Finance Committee.
- Finance Committee meets twice a year and reviews the fund utilization by the college and department level activities and suggest further action plan.
- Depending on the demand and requirement, the finance committee allows to spend more than the budget allocated.
- The received government funds are audited by the respective government auditors by verification of documents and the disbursal of the scholarships such as post metric scholarships, backward community scholarship and first generation graduate scholarship to the students.
- Financial section of the college maintains record of every online financial transaction .

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.4.2 Funds / Grants received from non-government bodies, individuals, Philanthropists during the last five years (not covered in Criterion III) (INR in Lakhs)

Response: 52.63

6.4.2.1 Total Grants received from non-government bodies, individuals, philanthropists year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
24.59	8.82	5.69	6.15	7.38

File Description	Document
Details of Funds / Grants received from non-government bodies during the last five years	View Document
Any additional information	View Document
Annual statements of accounts	View Document

6.4.3 Institutional strategies for mobilisation of funds and the optimal utilisation of resources

Response:

A major source of revenue for the college is from the tuition fee collected from the students as per the guidelines of the state government. The fee is converted into fixed deposits and withdrawn periodically as per the requirements of the institute. The fixed deposits are withdrawn and used for the expenditure of the college. The interest earned on these fixed deposits is also being utilized for the needs of the institution.

The other sources of revenue are from transport fee, examination fee and funds / grants received from government bodies, consultancy, training, examination, transport alumni contributions, individual donors and philanthropist.

Transparency and accountability is ensured by conducting annual audit of the statements. Optimal utilization of the fund is ensured through a budget plan. Every department and sections submit their budget proposal with requirements well ahead of the commencement of the financial year. The proposals are consolidated and reviewed by the finance committee and allots funds. The funds also utilized for infrastructure development, salary, research, training activities, ICT tools, green campus initiative, extension activities, transport, maintenance, welfare measures and library. The financial supports are extended to seminars/workshops/ Symposium Association activities/ Faculty Development programs/Conferences. The extracurricular activities of the students are a major concern and adequate funds have been utilized by the sports and games & social extension activities. Scholarships provides to the economically backward students & meritorious students. Utilization of the allocated funds are monitored periodically and audited at the end of every financial year. The budget utilization from the past years speaks out the efficient budgeting and optimal utilization in the institution.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

Response:

Internal Quality Assurance Cell (IQAC) of the college has contributed significantly for institutional quality assurance strategies and processes at all levels. The quality parameters for various aspects of the institution are listed in the table given below:

- Teaching and Learning
- Percentage of curriculum aligning with the AICTE model curriculum
- No of seminars / workshops / guest lectures organized
- Monitoring the evaluation of OBE – CO, PO and PSO attainments
- Internal academic auditing
- Analysis of Students' feedback on teaching faculty
- Monitoring the conduction of class committee meetings
- Analysis of faculty performance appraisal
- Remedial classes for weak students
- Promotion of ICT

Research and Development

- Number of quality publications : 290
- Number of Patents filed : 17
- Number of FDP per faculty : 204
- Number of programmes for motivating research : 24
- Number of proposals submitted for funding : 32

Student Support Service

- Mentor: mentee ratio: 1: 13
- Number of orientation programmes : 112
- Number of soft skills training and career guidance: 300

Number of Environmental and Social Awareness Programmes: 84

Awareness programmes conducted: Tree Plantation, use of Solar Energy, Rain Water Harvesting, Electrical Usage and Saving Energy, Ozone Layer Protection.

Practice 1: Digitalization Initiative in Academic and Administrative Activities

With an initiative of the IQAC, Digitalization has been carried out successfully in the college in all academic, financial, administration and examination. The following major functionalities are in place under digitalization

- WhatsApp group, Facebook, Twitter, YouTube and Instagram for quick dissemination of the information
- E-Content Development facility for recording video lecture by faculty members and uploaded it into Learn online portal and Youtube.
- A tailor made software 'ibossems' for the following
 - Evaluation of CO, PO and PSOs
 - Student Attendance entry
 - Time table
 - Biometric system for staff
 - Students' Scholarship
 - Examination system – Hall ticket, Marks entry, Analysis of Results
 - Online Exams , Online Courses and Digital Text books
 - Library Automation
 - Faculty Profile

Practice: -2: Outcome Based Education (OBE)

Outcome-Based Education (OBE) is a student centric teaching and learning methodology in which the course delivery, assessment are planned to achieve stated objectives and outcomes. It focuses on measuring student performance i.e. outcomes at different levels. Some important aspects of the Outcome Based Education are as follows

- Course Outcomes (COs)
- Programme Outcomes (POs)

- Program Educational Objectives (PEOs)
- Programme Specific Outcomes (PSOs)
- Attainment of CO, PO and PSO

Blooms' taxonomy has been introduced to attain the required competency levels of the students. The software 'ibossems' includes the features related to OBE such as CO, PO and PSO Entry, Question Paper Mark Allocation, CO, PO and PSO Mapping, Attainment level of CO, PO and PSO .

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms

Response:

The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes in association with IQAC and academic departments. The IQAC has significantly contributed towards improving the teaching and learning process and research environment in the institution. The Academic calendar is prepared well in advance before the commencement of classes. Along with the academic calendar, IQAC prescribe targets for various parameters including academic, co-curricular, extra-curricular, research and faculty empowerment. To ensure the attainment level of the target both academic and administrative audits are conducted regularly by IQAC. Ongoing course review is done in Class Committee Meetings. Feedback is collected every semester on the curriculum and the faculty performance. For curriculum development, the feedbacks are received from all the stakeholders regularly. These feedbacks are analysed and needed actions are taken and incorporated in the system. Feedback also collected from the students about the course teachers every semester. This process helped to identify and evaluate the faculty competency level and their training needs.

The teaching and learning process is reviewed at various levels such as self-assessment and external assessment. The self-assessment is done by the respective course teachers and the Programme coordinator / Head of the Departments through the assessment of outcomes such as Course Outcomes (CO), Program Outcome (PO) and Program Specific Outcome (PSO). This assessment is performed through marks scored in internal assessment tests, end semester examinations and course end survey is collected at the end of every semester for every course. This assessment helps to improve the course content, content delivery procedures and also curriculum.

The external assessment is conducted in two phases such as internal and external audit. The academic audit offers an opportunity to enrich the quality in teaching-learning process in the college. Every semester the internal academic audit is conducted for all the courses being offered in all programmes. Senior faculty members of the Institution are appointed as auditors to perform the internal academic audit and senior faculty members from other reputed institution / University are involved in conducting external academic audit. During the audit the following documents / parameters are being verified:

- Academic Calendar
- Log-book of Faculty
- Course File
- Course Material
- Use of ICT in Teaching and Learning
- Syllabus Coverage
- Quality of Question Papers
- CO, PO and PSO evaluation
- Student Records

Each semester, the Controller of Examinations initiates the audit of question papers by the external audit team. Apart from the academic audit, both internal and external administrative audit also have been conducted every year. The financial resources and mobilization are recorded and certified by a certified auditor. The returns are filed every year properly.

OUTCOMES

- Feedbacks on curriculum helped in revising the curriculum into latest and dynamic.
- Feedbacks on course teacher helped to identify and evaluate the faculty competency level and their training needs.
- Inclusion of value added courses led to better placements.
- Increasing in number of publications of the faculty
- Higher number of participation in Faculty Empowerment Programmes
- Three UG Programs are NBA Re-Accredited

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.5.3 Average number of quality initiatives by IQAC for promoting quality culture per year

Response: 11.2

6.5.3.1 Number of quality initiatives by IQAC for promoting quality year-wise for the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
19	13	9	9	6

File Description	Document
Number of quality initiatives by IQAC per year for promoting quality culture	View Document
Any additional information	View Document
IQAC link	View Document

6.5.4 Quality assurance initiatives of the institution include

1. Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback collected, analysed and used for improvements
2. Academic Administrative Audit (AAA) and initiation of follow up action
3. Participation in NIRF
4. ISO Certification
5. NBA or any other quality audit

Any 4 of the above

Any 3 of the above

Any 2 of the above

Any 1 of the above

Response: Any 4 of the above

File Description	Document
e-copies of the accreditations and certifications	View Document
Details of Quality assurance initiatives of the institution	View Document
Any additional information	View Document
Annual reports of Institution	View Document

6.5.5 Incremental improvements made during the preceding five years (*in case of first cycle*) Post accreditation quality initiatives (*second and subsequent cycles*)

Response:

The following points are recommended for improvement during the first cycle of NAAC accreditation:

- Drive should be launched to increase the enrolment

- More orientation programmes to be offered to improve employability and increase campus placement
- Less number of PhD faculty: provide physical and financial support
- Bridge courses are to be taught beyond working hours
- Educational module preparation and activity based teaching with the help of audio-visual aids should be launched.
- Communication skills for students from Rural areas and also some staff/faculty need to be improved
- Encouragement for Placement training programmes, Internships from industries, GATE/CAT competitive examinations are to be improved and students to be motivated
- R&D facilities and quality publications with good impact factor need to be enhanced and supported.
- Advanced laboratories for PG and Research with sophisticated equipment need to be established
- Each faculty need to be provided with personal computing facilities.
- College should establish industry institute linkage cell.
- Professional skills need to be improved among students by involving industries and entrepreneurs

The following efforts have been taken to achieve the recommendations of NAAC:

- Our Institute have organized motivational programme to school students in the institute premises. During the programme, the students have a chance to visit the infrastructure and other facilities such as fee concession to meritorious students which is motivating them to seek for admission. Apart from that additional effort is taken to reach the public through advertisements in newspapers, social media, etc. This was evident that the admission is improved to 90% in the last academic year
- 112 orientation programmes have been conducted focussing on employability skills of the students. This effort resulted that the hike in campus recruitment drive from 54% to 69%
- Institute motivate the faculty to do research and related activities through monetary and non-monetary benefits. Five departments CSE, ECE, EEE, MECH, and CIVIL have been recognized as research centres. Due to this, the strength of doctoral faculty members has been increased from 16 to 39.
- 110 bridge courses were conducted for the benefits of the students and 81 value added courses have been conducted beyond working hours.
- E-Content Development Centre has been established for effective use of ICT based Education. Around 100 Educational modules were prepared by the faculty members and posted into webserver, YouTube and Learn-online portal. Students can access these materials through online at any time. 47 ICT enabled class rooms have been established to improve Teaching & Learning. In addition, NPTEL, SWAYAM and Google class rooms are effectively utilized by the faculty members and students.
- Two Language Laboratories equipped with more than 140 computers with audio-visual aids and related software. External Soft Skills vendors like Ethnotech Academic Solution, Focus Academy for Career Enhancement (FACE), Spark Training Academy, Syasans Career Analytics, Six Phase, Lunch pad and Find Mind have conducted training programmes to enhance the communication skills of both student and staff members.
- Students are encouraged to take part in placement training programmes, internships etc., This motivation has made them to take part in more number of placement training programmes leads to higher placements. An average of 60% of the students underwent Internships. 38 students have gone for higher education through GATE, CAT, TANCET etc.,

- By enhancing and supporting R&D facilities and providing incentives to quality publications the following have been achieved. Around 44 Lakhs worth of funded projects received from Government and private funding agencies. This was improving the number of Research Scholars to 78. From the Institute 14 members have completed their Ph. D degree. 22 of our faculty members have been recognized as Research Supervisors. Around 248 papers were published by the faculty members and research scholars. 22 patents were filed by the faculty members.
- Rs.2.5 Crore worth of Centre for Excellence, Rs.10 Lakhs worth for Internet of Things (IOT) Laboratory, Central fabrication Lab, Central Instrumentation Facilities, Incubation Centre and Business Laboratory have been established.
- Separate cabin and individual Computer system with LAN connection are provided to Faculty members.
- The college established an Industry Institute Linkage cell within the campus through which 21 MoUs were signed for the benefit of students and staff. Institute also received around Rs.10 Lakh worth of consultancy projects.
- A separate Entrepreneurship Development Cell is functioning in the Institute. This cell regularly organized Industrial visits, training programmes to motivate the students to become Entrepreneurs. Every year minimum one industrial visit was arranged for the students.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Number of gender equity promotion programs organized by the institution during the last five years

Response: 14

7.1.1.1 Number of gender equity promotion programs organized by the institution year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
4	3	2	2	3

File Description	Document
Report of the event	View Document
List of gender equity promotion programs organized by the institution	View Document
Any additional information	View Document

7.1.2 Institution shows gender sensitivity in providing facilities such as

- a) Safety and Security
- b) Counselling
- c) Common Room

Response:

a) Safety and Security:

A functional Grievance Redressal Cell in the Institute ensures the safety and security of the girl students and women staff. Full time securities in girl's hostel guarantees the safety of hostel inmates. The following facilities are provided to enhance the safety and security in the Institute premises:

- Deployment of CCTVs across the campus for round-the-clock surveillance.
- Separate timings for girls to utilize the GYM.
- For safer transport 31 College buses and 16 Government buses exclusively for the college are operated
- Separate leisure room for boys and girls.
- Programmes on women safety is regularly organized by Police Department.
- A lady Physical Education Trainer(women) is available to train and motivate the girl students to participate in sports activities

b) Counselling:

The prime objective of the counselling is to facilitate Academic, Emotional, Social and cognitive development of the students in order to empower them in their learning and personal development. The senior faculty members in the departments give counselling to the students in academic related problems. A Mentor is assigned for every 15 – 20 students. In addition to the mentor a Psychologist is appointed as visiting counsellor in the Institute. He visits the institute every month to give counselling. Apart from the students, the parents and teachers are also getting benefitted from the counsellor in order to pave a path to the students for their better carrier.

c) Common Room:

The Common Room is a room in the college for use of students or staff beyond the class hours. In the college common rooms with all facilities are available for both boys and girls.

Common Room for Boys and Girls

- Common rooms are spacious and airy.
- Newspapers are made available in the common rooms.
- Notice boards are available.
- Provision for the students to meet their parents/guardian

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

7.1.3 Percentage of annual power requirement of the Institution met by the renewable energy sources

Response: 14.88

7.1.3.1 Annual power requirement met by renewable energy sources (in KWH)

Response: 54750

7.1.3.2 Total annual power requirement (in KWH)

Response: 368050

File Description	Document
Details of power requirement of the Institution met by renewable energy sources	View Document
Any additional information	View Document

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 17.28

7.1.4.1 Annual lighting power requirement met through LED bulbs (in KWH)

Response: 11315

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 65481

File Description	Document
Details of lighting power requirements met through LED bulbs	View Document
Any additional information	View Document

7.1.5 Waste Management steps including:

- Solid waste management
- Liquid waste management
- E-waste management

Response:

Solid Waste Management

Solid wastes are collected every day and transferred to the nearest land fill and disposed as per State Pollution Control Board norms. Adequate number of twin waste bins are placed at appropriate places within the premises of the college to collect both Dry and Wet Wastes. The used papers are transferred to a nearby paper and board industry for recycling. Leaf litter is allowed to decompose systematically over a period of time to be used as manure for the gardens in the institute. The food and vegetable wastes are used for biogas plant of the campus. Incinerators are available in the ladies' hostel for disposing sanitary napkins in an environmental friendly way. Sewage sludge of 10 kg/50 KL/day was kept on sludge drying beds and used as manure for the gardens in the institution

Liquid Waste management

The liquid waste originating from the chemistry, environmental engineering and bio technology laboratory was initially neutralized and chemicals are treated through Effluent Treatment basins. Chemical Treatment

is done using chemical reagents like slaked calcium hydroxide or coagulants like Ferric Chloride, Aluminum Sulphate etc. Sulphuric Acid & Hydrochloric acid are used for neutralization. Sodium hypochlorite is used to kill harmful bacteria. The Tests COD, TSS, Total dissolved Solids, pH and Colour are conducted to dispose of chemicals being used. Apparatus required for testing chemicals are kept in laboratories. The liquid waste from hostels and kitchens are let out as effluent into a proper drainage facility and to avoid stagnation.

- The wastewater originating from the bathrooms and toilets were collected by two pipe system, where the one pipe carries wastewater due to batching, washing of clothes, cleaning was collected in one pipe and the other one carries human feces and night soil. This system of collection facilitates proper and effective treatment and sewage disposal
- Sewage treatment plant of capacity 50,000 liters per day which comprises of a screening chamber to remove the floating matter such a shampoo Sackets, hairs wood and debris, a grit chamber to remove in organic grit which has a specific gravity about 2.65, a aerator which supplies oxygen in the aeration tank for effective growth of microbes, secondary settling tank to remove the bio flocs and chlorination tank to destroy the pathogenic microbes in the treated effluent were installed in the campus and properly maintained.
- The effluent from the treatment plant was used for irrigating plants in the campus.
- Strom water runoff was diverted into the rainwater harvesting pit which was installed near each block of the college.

E-waste Management

E-Waste management is also taken care by the Institute. Obsolete electronic items such as monitors, computers, batteries etc., are exchanged through buy back policy. Institution signed an MoU with Tamil Nadu State Pollution Control Board authorized e-Waste dismantling unit TRITECH SYSTEMS for the safe and environment friendly disposal. Old version computers are donated to the nearby schools. E-waste such as CDs, fluorescent bulbs, PCBs and electronic items are collected from every department and office and delivered for safe disposal. Useful parts of electronic gadgets like resistors, capacitors, inductors, diodes, transistors, thermistors etc, are removed from the gadgets for reuse in practical/projects.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

7.1.6 Rain water harvesting structures and utilization in the campus

Response:

Rainwater Harvesting

The college has established 28 rainwater harvesting pits, which collect rainwater from the rooftops of the buildings in the campus. The pits are located near to the building and receive rainwater through 15 cm diameter pipes. The rainwater harvesting pit is fitted with RCC ring of 0.75 m diameter above the ground level and 0.15 m diameter below the ground level. The depth of the pit is 6 m. The pit is filled with coarse aggregate of effective size 20 mm for effective and quicker percolation of rainwater. An estimated amount of rainwater that was harvested in the year 2018 was 49,78,520 Liters. The rain falls on the surface excluding the concrete structures in the college were diverted to the nearby ponds. The stored water is used for the plants and trees in the campus.

Utilization of Harvested Rainwater

The College totally depends on the ground water. The rainwater harvesting systems in the campus has raised the level of the ground water. There are two numbers of open well of depth 15.24 m and four numbers of bore well with 60.96 m deep in the college. Due to the rainwater harvesting system the above wells always have water level from 3.05 m and 7.62 m from the ground level during the monsoon and summer respectively. The water extracted from the well with the aid of 7.5 HP submersible centrifugal pump and supplied to fulfil the need of the college. The drinking water need of the college was satisfied from the bore well after treating with Reverse Osmosis plant of capacity 750 LPH in the college and two numbers of 1000 LPH each in the hostels.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

7.1.7 Green Practices

- **Students, staff using**
 - a) **Bicycles**
 - b) **Public Transport**
 - c) **Pedestrian friendly roads**
- **Plastic-free campus**
- **Paperless office**
- **Green landscaping with trees and plants**

Response:

Bicycles:

The College encourages both staff and students to use bicycle in the campus to make the campus free from pollution and reduce the consumption fuel. The management has sponsored 26 bicycles exclusively for staff use inside the campus. The maintenance of the cycles is carried out by the Mechanical department of our college. All the roads inside the campus are tar topped, pedestrian friendly and suitable riding bicycles.

Public Transport:

Public transport is available for both staff and students from various nearby towns to the college. About 16 government buses are operating to our college during both morning and evening hours for the benefit of staff and students. Also college is also operating about 31 buses for the benefit of day scholar students and staff. This has resulted in the reduction in the usage of individual vehicles / two wheelers. Every year the college buses undergo pollution tests and renew pollution under control certificate (PUC).

Pedestrian Friendly Roads:

All the roads inside the campus are tar topped with pedestrian pathway on both sides. The pedestrian pathways are made up of paver blocks. These pedestrian friendly roads ensure pedestrians to use the roads safely and freely.

Plastic free campus:

The campus is made plastic free. Awareness on the reduction of plastic usages have been given to both students and staff through various forums like NSS. Awareness posters are prominently displayed in the key locations of the campus.

Paperless office:

The e-governance of the college ensure the reduction in the use of papers. The college campus is networked with LAN with 105 Mbps internet connectivity. E-mails and electronic messengers services like WhatsApp are effectively used. All the circulars and notices are circulated through these media to reduce the usage of the papers.

Green landscaping with trees and plants:

The college has Lush green and well maintained campus environment. There are about 1500 various species of trees and plants in the campus. Every year through various forums and with the support of forest department trees are planted. Trees are planted by the prominent guests whenever they visit our college. Nearly one third of the college is covered by the green grasses and trees.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

7.1.8 Average percentage expenditure on green initiatives and waste management excluding salary component during the last five years

Response: 0.73

7.1.8.1 Total expenditure on green initiatives and waste management excluding salary component year-wise during the last five years(INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
4.4	6.06	5.43	0.05	0.20

File Description	Document
Green audit report	View Document
Details of expenditure on green initiatives and waste management during the last five years	View Document
Any additional information	View Document

7.1.9 Differently abled (Divyangjan) Friendliness Resources available in the institution:

1. Physical facilities
2. Provision for lift
3. Ramp / Rails
4. Braille Software/facilities
5. Rest Rooms
6. Scribes for examination
7. Special skill development for differently abled students
8. Any other similar facility (Specify)

A. 7 and more of the above

B. At least 6 of the above

C. At least 4 of the above

D. At least 2 of the above

Response: B. At least 6 of the above

File Description	Document
Resources available in the institution for Divyangjan	View Document
Any additional information	View Document
link to photos and videos of facilities for Divyangjan	View Document

7.1.10 Number of Specific initiatives to address locational advantages and disadvantages during the last five years

Response: 27

7.1.10.1 Number of specific initiatives to address locational advantages and disadvantages year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
6	6	5	5	5

File Description	Document
Number of Specific initiatives to address locational advantages and disadvantages	View Document
Any additional information	View Document

7.1.11 Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)**Response: 61**

7.1.11.1 Number of initiatives taken to engage with and contribute to local community year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
15	14	12	11	9

File Description	Document
Report of the event	View Document

7.1.12**Code of conduct handbook exists for students, teachers, governing body, administration including Vice Chancellor / Director / Principal /Officials and support staff****Response: Yes**

File Description	Document
Any additional information	View Document
URL to Handbook on code of conduct for students and teachers , manuals and brochures on human values and professional ethics	View Document

7.1.13 Display of core values in the institution and on its website

Response: Yes

File Description	Document
Any additional information	View Document
Provide URL of website that displays core values	View Document

7.1.14 The institution plans and organizes appropriate activities to increase consciousness about national identities and symbols; Fundamental Duties and Rights of Indian citizens and other constitutional obligations

Response: Yes

File Description	Document
Details of activities organized to increase consciousness about national identities and symbols	View Document
Any additional information	View Document

7.1.15 The institution offers a course on Human Values and professional ethics

Response: Yes

File Description	Document
Any additional information	View Document
Provide link to Courses on Human Values and professional ethics on Institutional website	View Document

7.1.16 The institution functioning is as per professional code of prescribed / suggested by statutory bodies / regulatory authorities for different professions

Response: Yes

File Description	Document
Any additional information	View Document
Provide URL of supporting documents to prove institution functions as per professional code	View Document

7.1.17 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years

Response: 44

7.1.17.1 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
10	10	8	8	8

File Description	Document
List of activities conducted for promotion of universal values	View Document
Any additional information	View Document

7.1.18 Institution organizes national festivals and birth / death anniversaries of the great Indian personalities

Response:

The college celebrates the days of national importance and birth anniversary of great Indian leaders / personalities. Both students and staff remember the leaders and their sacrifices with their achievements for the nation.

- **26th January, Republic Day- Principal / invited guest** hoists the national flag on this day. Both students and staff will present on this occasion to celebrate the attainment of republic status of our country.
- **15th August, Independence day-** Independence Day is celebrated every year with pride and passion. A lecture is arranged to recall the struggles of our ancestors in getting freedom to our nation. During the function national pledge is taken by all the participants.
- **5th September, Dr. Sarvpalli Radhakrishnan Birth Anniversary-** On this day, the students organise function to mark their respect to the teachers and present mementos.

- **15th September, Engineers' day (Birth Anniversary of Sir Visveswaraya) – On this day** eminent professors / industrial personalities are invited for lectures on the emerging trends in the technologies.
- **12th January, National Youth Day (Birth anniversary of Swami Vivekananda's)** This day is celebrated with the completions. The history of Swami Vivekananda and his quotes are remembered, which inculcate the youngster minds to get positive thoughts to leads a successful life.
- **15th October, Birth Anniversary of Dr.A.P.J.Abdul Kalam-** The United Nations declared Dr.A.P.J. Abdul Kalam's birth anniversary as 'World Students Day'. This day is celebrated every year in our college. It is our pride that Dr.APJ Abdul Kalam had visited our college on 26th June 2011 and interacted with the students. Tree plantation is done on this occasion.
- **2nd October, Mahatma Gandhi Birth Anniversary-** Our nation celebrating Gandhi Jayanthi for remembrance of father of our nation Mohandas Karamchand Gandhi. Celebration of this day spreads truth, nonviolence and honesty among the students.
- **11th November, National Education Day (Birth anniversary of Maulana Abul Kalam Azad)** -This day is an annual observance in India to remember the first education minister of the independent India, who had brought important changes in the education system..
- **28th February, National Science day (Birth Anniversary of Sir C.V. Raman)-** On this occasion science exhibition is organized, where the students get an opportunity to show cause their talents by displaying their project models.

7.1.19 The institution maintains complete transparency in its financial, academic, administrative and auxiliary functions

Response:

The institution maintains complete transparency in its financial, academic, administrative and auxiliary functions.

Transparency in Financial Functions:

The Institute has a defined process for financial mobilization for every financial year. All the financial transactions in the institution are carried out through bank only. The students are paying the government prescribed fee through the bank. The salary paid to the employees is as per the norms through bank transactions. The vendors are also paid through cheque/online transfer.

Before starting the academic year, all the Heads of the Department have submitted the budget requirements to the Principal. Principal consolidates the budget of all the departments and forward the same to the Management for approval. After getting approval the allotted funds are utilized by the departments and a separate register is maintained. A Certified Auditor audits financial documents every financial year. The audited financial statements are kept on the Institute website.

Transparency in Administrative Functions:

The Governing council of the college make the strategic decisions and executed at various levels such as Principal, Dean, Head of the Departments and faculty members. The Governing Council is constituted as per the guidelines of UGC and has members at various levels. Transparency is also maintained in

admission process and the admission policy is as per the AICTE, State Government and University norms. All the administrative functions are performed as per the policy manual where the roles and responsibilities are well defined. . The institution has a participative management model where the faculty and the students are members of various committees of the institution and take part in decision making.

Transparency in Academic Functions:

At the beginning of each semester the academic calendar was prepared and distributed to all the members of the faculty and it is made available in the college website. Timetables are displayed to the students prior to the starting of the semester. Decisions related to academics are made in the Department Review Committee meetings, Board of Studies and approved by the Academic Council. The minutes of the meetings are displayed on the website. Programs offered, curriculum and syllabus are available in the website. The procedure for calculation of internal marks is attached with the course plan Examination related notifications and circulars are issued by the Controller of Examinations and widely displayed, circulated and kept on the website. The examination results are available in the website. Students are given an opportunity to verify the evaluated papers and provision for students to apply for revaluation. The academic transparency is maintained through Education Management Software system (i-boss).

Transparency in Auxiliary functions:

Various committees such as Grievance Redress Committee, IQAC, Purchase committee, Anti-ragging committee, sports committee, library committee etc., are active in the institution to take care of academic and related activities. Recruitment process for teaching and non-teaching is done as per HR policy. Wide advertisement is given in the newspapers and on the college website. Shortlisted applicants are called for interview. Interview process is handled by a committee constituted by the Principal.

7.2 Best Practices

7.2.1 Describe at least two institutional best practices (as per NAAC Format)

Response:

BEST PRACTICE I

1.TITLE OF THE PRACTICE:

EXPERIENTIAL LEARNING PROCESS

2.OBJECTIVES OF THE PRACTICE:

- To transform the students into productive engineer through interactive and experiential learning process
- To assess students learning and effectiveness of all educational and operational activities
- To enable students, develop projects on their own replicating the same concept or go on for new concept development as they move to higher semesters.

3. THE CONTEXT:

Earlier in any institute staff and students have to look forward for the product, open it up and try to understand the mechanism of working. Such a process is cumbersome and in effective. It is a known fact that students cannot understand the concepts of science without any visual aids. In the experiential learning process, outcome assessment plan is prepared and informed to all stakeholders. Reverse engineering was the first step towards gaining the knowledge of an assembly system. Students can tear down a product and gain a better understanding of the concept and bring together innovative thinking and analysis to solve problems. Though this helps one to build some fundamental engineering skills and inspire one to create, evolving the product to improve some aspect (e.g., change a component to improve performance or reduce cost) this process is ineffective and expensive. Students coming out of rural schools are unable to get an experience of this during school and get into the college without understanding the fundamental concepts of science.

4. THE PRACTICE

In our institution, teachers facilitate student's learning which helps the students to gain skills, knowledge and thinking ability. Experiential Learning is a comparatively new term which defines giving freedom to students to analyze and explore the best suitable learning option for them. The teacher provides a learning environment and the tools required to achieve a certain result. The purpose of this practice is to imbibe lessons through experience rather than preaching theories and dumping facts. The pedagogy followed in PSREC can easily assess the educational levels of the students on particular skills. In PSREC the following Experiential Learning Process are followed:

Student Centric Learning

Student centric learning broadly encompasses methods of teaching that shift the focus of instruction from the teacher to the student. This aims to develop learner autonomy and independence by putting responsibility for the learning path in the hands of students by imparting them with skills and basis on how to learn a specific subject. This method focuses on skills and practices that enable lifelong learning and independent problem-solving.

Activity Based Learning:

To overcome the difficulties experienced by the student's activity-based learning is used. The idea of activity-based learning is rooted in the common notion that children are active learners rather than passive recipients of the information. Its core premises include the requirement that learning should be based on doing some hands-on experiments and activities. ICT enabled teaching and learning methods are being used in this method that result in easy understanding of the concepts by students. This method provides a detailed learning to students and prepares them to initiate a project on the basis of what they have learnt in the classroom. A hands on training programme like dismantle and assemble a bicycle, tube light with frame, fans, computers, concrete mixing etc., at the beginning of second year will give a practical experience to students and spark an excitement to learn their courses with passion. Additional laboratories and software are required for students to enhance the understanding of technical subjects with practical examples.

Project Based Learning

This method provides a detailed learning to students and prepares them to initiate a project on the basis of what they have learnt in the classroom. Our institution ensures that all the students irrespective of the departments at the start of their second year attend a 'Hands-On-Training' programme wherein they are taught to dismantle and assemble various day-to-day gadgets they use like a bicycle, tube light with frame, maintenance of computers etc. This practical experience sparks an excitement to learn their courses with passion. Our institution is proud to host additional facilities like 'Centre Fabrication Facility' in Department of Mechanical Engineering, 'Power Systems Analysis Laboratory' in Department in Electrical and Electronics Engineering, 'Embedded Systems Laboratory' in Department of Electronics and Communication Engineering, 'Heat Curing Chamber' and 'Mould for Concrete Preparation' in Department of Civil Engineering, 'Mobile Applications Development Laboratory' in Department of Computer Sciences and Engineering. By making use of these laboratories, staffs help the students to enhance the understanding of technical subjects with practical examples. Additional software other than that of the curriculum is also available for the students to enhance their skills. As students move on to higher semesters, they make use of our "Centre for Excellence" and the other facilities to enhance their skills and fabricate projects under the guidance of the staff.

Field Work

Field work allows students to explore and apply content learned in the classroom in a specified field experience away from the classroom. Field work experiences bridge educational experiences with an outside community that can range from neighborhoods and schools to anthropological dig sites and laboratory settings. Survey camps are included in the Civil Engineering curriculum which gives a better insight on the field.

Internships:

Students are undergoing internship during their course of study where they are trained in a work place and with the experience gained hence they will become a Industry Ready Engineer. Additionally this will improve the chance of getting placement in reputed organizations.

Industrial Visits:

Industrial visit is considered as one of the most tactical methods of teaching. It aids students to know things practically through interaction, working methods and employment practices in the industries. Moreover, it gives exposure to practical working environment; acquaint students with interesting facts and breath-taking technologies. Such visits help the students to choose the choice of their careers.

5. EVIDENCE OF SUCCESS

Student Competency

There is an increasing number of participation and award winners among students in various project competitions, presentations in conferences. Recently two batches of 3 and 2 students of the Department of Bio-Technology won Rs.50,000 as cash from Tamil Nadu Entrepreneur Development Cell for the display of their innovative projects during a programme conducted by Anna University in the Academic Year 2018-19. Students have come forward to present their fabrication and design projects in the National level

Conferences conducted in-house and on seeing the recognition obtained here head to other institution conferences.

Patents have been filed

In-plant training:

Students are encouraged to seek in-plant training. Placement centre of the college aid in this process of acquiring a minimum of 1week to 2 weeks training during their semester holidays. A total number of 244, 208, 121, 137 and 134 students actively participated in in-plant training years during the academic years 2018-19, 2017-18, 2016-17, 2015-16 and 2014-15 respectively.

Internships:

A list of 288, 123, 133, 109 and 132 final year students underwent internships for a period of 2 to 5 months during the academic years 2018-19, 2017-18, 2016-17, 2015-16 and 2014-15 respectively.

Industrial Visits:

Students are taken for visits to industries during each academic year.

On-campus Placements:

There is a significant improvement in the on-campus placements. The number of placements is 252, 275, 291, 320 and 366 starting from academic year 2014-15 to 2018-19 in ascending order.

Pass percentage:

A remarkable success of this practice has been reflected in the increasing pass percentage of students. Pass percentage of out-going students is in the range of 90% throughout the past five years.

Additional laboratory facilities:

By making use of additional laboratories and software, students enhance the understanding of technical subjects with practical examples.

6. PROBLEMS ENCOUNTERED AND RESOURCES REQUIRED

Effective training is required for the transition from the conventional learning method to experiential learning. It involves more investment and time. Getting permission for industrial visits / internships / industrial based training from the industries is another challenge. Due to the competitive productive environment, the industries are not willing to accommodate students for training / visit / internship. The curriculum followed is having time constraint and hence the availability of time is the another challenge.

BEST PRACTICE II**1.Title of the Practice:****E-GOVERNANCE IN TEACHING AND ADMINISTRATION****2.Objectives of the Practice**

- To ensure accurate, hassle free and speedy process of data processing and decision making and continual improvement
- To standardize and automate various processes across the institution
- To meet the challenges of accessible, relevant and affordable data across the institution and the outside world
- To create paperless administration

3.The Context

Starting from Student Admission to completion of degree, more number of academic and administrative processes are involved. Educational institutions have various requirements

that include computerization and management of processes such as registration, admission,

student information, classes, time table, transport, attendance, library, salary and expenses,

examinations, performance, results, hostels and reports. In manual process, data generation, storage and retrieval of the data is having less accuracy level and time consuming. To rectify these problems E-Governance is the only possible method. Of course, access to any institutional detail need to be quick, accurate, hassle free and secure throughout the year. Networking and ample computer facilities are needed to achieve the purpose of e-governance. Though adapting to modern computer or android mobile technology is difficult compared to paper based governance, with the rapidly changing technology it should be done such that people across various levels can access the information easily without any training. Updating the available software and go for emerging technologies to get the data secured and easy accessibility is the need of the hour for successful e-governance.

4. THE PRACTICE**E-Services:**

E-governance is introduced in all levels. Institute has a well-designed ERP called i-Boss, through which the data can be stored and retrieved whenever needed. The information about the students, faculty, are stored in the ERP software and reused whenever required. E-governance in our institution allows use of information and communication technologies with the aim of improving education, improve information, service delivery, encourage student participation in the decision making process, making administration transparent and effective.

E-Governance in Admission:

The ERP is having the admission module in which all the admission related processes are stored and retrieved. On line application reduces the paperwork and enhance the clarity and accuracy. The student's personal information, fee payment details, scholarship details, academic achievements, and other relevant information are available in this module.

E based Teaching and Learning:

The current delivery of education is based on eLearning technology providing lecturers with ICT based teaching tools. The online methods enable more effective education and offer significant advantages over traditional teaching methods. This has been possible by technological implementation based environments such as LCD projectors, Video lectures, video conferencing. smart classroom lectures, virtual lectures and E-Libraries and E-learning environment supports class room discussions. More number of MOOC courses are also made available to our students and staff for reference. A separate online module called Learn on Line is established in our college where the faculty post their materials, lectures and assignments online and the students can be answered the same way. Apart from that, Google Classroom is also blended online learning platform.

E-Governance in Examination:

Course registration, examination schedule, hall arrangement, issue of hall tickets, examination results and issue of mark statements are automated. Due to this the errors are eliminated and the results are published in time.

E governance in Library:

PSREC library is using Autolib library management software (JAVA version) for circulation, stock verification. This software provides facility such as department interlinking, SMS, E-mail notification for transaction etc. E-Gate facility is also available to monitor the entry and exit of the user. Library networking is connected with college LAN and Wi-Fi access. The electronic resources can be accessed through Digital library. . Electronic Resources like IEEE journals, Springer Journals, N-LIST(inflibnet), Delnet etc. are made available in the digital library for the use of faculty and Students at the college campus.

Centralized Information:

E-Governance has provided electronic information infrastructure to simplify service delivery, reduce duplication, and improve the level and speed of service at a lower cost. The centralized information approach of e-Governance keeps all information at one place in electronic form. This approach of making information secure prevents it against any theft or leakage.

5.0 EVIDENCE OF SUCCESS:

After the implementation of e-governance, there is a vast improvement in the delivery of services to students, faculty by providing services. The academic related circulars are sent through E-mail and 'WhatsApp' applications to the students and the faculty. The system provides timely alert to colleges through SMS /Emails.

In Teaching & Learning:

Due to the use of ICT in Teaching and Learning, the efficiency, transparency and accuracy are improved. The multi-faceted benefits of ICT are;

- Personalized login for each student.
- Extensive saving in time cost & efforts
- Students can access virtual lectures & seminars.
- Data can be accessed easily.
- Saving of hidden operational cost.
- Instant statistical report generation.
- Long term impact on organization goals
- Improve education system
- Empowerment of faculties, students & encouragement of their participation in governance.

In Examination:

The automation in examination system reduces the number of days between the conduct of examination and publication of results. This speedy publication of results helps the students in their further progression to higher studies and placements.

In Library:

The Staff and students have unlimited access to resources through the library automation. The searching of books made easier. Remote access of e-Journals save the time

Green Practice:

The Automation process reduces the usage of paper in our college. It also helps to retrieve necessary information instantaneously for decision-making.

5.Problem Encountered and Resources required:

The system needs to be updated and maintained frequently to meet the needs of the governance. Implementation of E-governance increases the investment. Data updation is another challenge in E-Governance. For remote access, the users need internet facility in their places.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

7.3 Institutional Distinctiveness

7.3.1 Describe/Explain the performance of the institution in one area distinctive to its vision, priority

and thrust**Response:*****UPLIFTMENT OF RURAL POPULACE THROUGH TECHNICAL EDUCATION***

Upliftment of rural populace through technical education is our main objective. This institution was started with a vision to impart technical education to uplift the rural populace in technical education and they can also contribute to the society. Rural upliftment through technical education is a strategy to enable engineering education to the wards of illiterate and poor parent from rural area. The group includes workers of firework industries, coolies, small scale farmers, tenants and the landless. The establishment of our Institution in this backward area helps the rural populace to take up engineering education with affordable cost. Nearly 50% students are first generation graduates. The Institute gives top priority to the welfare of the students who are in need of financial assistance. Every year fee waiver / concession on tuition fee / hostel fee / transport fee is given to economically backward students on need basis.

Most of our students are from the Government Schools of nearby districts who have completed their +2 through Tamil medium. Our institution provides a special concentration on language skills to them in order to compete with other students. For this, the institution provides special training focusing on LSRW (Listening, Speaking, Reading and Writing) skills in English with the aid of soft skills training by both our faculty and external agencies. Opportunity also provided to them to learn Hindi Language which is increasing the chance of placement in throughout India. Excellent library facilities provide wide stream in engineering knowledge and also helpful for competitive examination such as GATE, GRE, TOFEL, IELTS etc.

The institute also aims at vitalizing the learning skills of the students with a focus on futuristic demands, vitalizing teaching learning process, ICT, Human Values, and functional relationship with all the stakeholders for the holistic development of the individual and society. The institute aims at instilling a sense of self-discipline and accountability among students and developing a respect for democratic, ethical, and moral values. The department associations motivate the students to participate in conferences, guest lectures, workshops organized throughout the year, through which the students are exposed to the outside world. Our placement cell train the rural students with additional care and prepared them to face their campus interviews effectively. Training is imparted to the students from their second year onwards in soft skills and technical skills. The academic and placement processes are complemented with a diverse array of opportunities provided to the students in enhancing their knowledge beyond academics. Placement from various private and IT sectors are provided for the better job opportunity there by helping the improvement of social status of students from the rural background. Students are encouraged to develop their own projects through funding from the management and state government which help them to explore their creative ideas. The institution encourages participation of students in inter collegiate events whatever it may be so that the students can equip themselves in a better way to face any situation in future with a high confidence and competence.

Apart from the service to the rural students, our institute extend the service to the rural society through various forums regularly. Through the NSS of our Institute the following programmes / events are conducted:

- Swachh Bharat Abhiyan (SBA) or Clean India Mission camp in local villages
- Blood donation camps

- Eye camp
- Veterinary camp
- Removal of seemai karuvelam (Prosopis juliflora) trees
- Creating awareness on Self-hygiene, Plastic free environment, Firework safety and Road safety
- Dengue Awareness Program

The student association of our Institute take part in the extension activities in the neighbourhood community for its holistic development. Few of them are given below:

- Electrical safety
- Conservation of energy
- Use of solar / wind energy in agriculture
- Awareness on Digital banking
- Women Safety
- Awareness on Self-employment
- Use of bio fertilizers
- Computer literacy to school students of nearby villages

The success of the upliftment of the rural students is evident from our placement record. Among the placed students about 65% of the students are from rural background.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

5. CONCLUSION

Additional Information :

- A new programme B.E. Biomedical Engineering has been introduced in the academic year 2019-20.
- Two PG programmes, M.E. Applied Electronics and M.E Structural Engineering have received permanent affiliation status from Anna university in the year 2019-20.
- 47 classrooms are equipped with LCD projectors and computers with internet connectivity. All 8 seminar halls are air conditioned and equipped with LCD projector
- Centre of Excellence has been established in the college in 2019 to provide advanced training, internship and certification programs of Microsoft, Google, IBM, Texas, Bentley, E-Plan and Autodesk to the students.
- 12 candidates have been awarded PhD degrees who have carried out research in our research centers.
- Our college is ranked fourth among the autonomous engineering colleges affiliated to Anna University, Chennai as per the Apr / May 2018 academic performance.
- One RPS and 2 STTPs have received grant from AICTE for current academic year.
- One student has received best student award from ISTE (TN) in Dec'2019.
- An event Hackathon-2019 on the theme of APP development is conducted in association with Alumni in Dec'2019.

Concluding Remarks :

The College has achieved significant improvements in all the activities of Academic, Research, Infrastructure, Extension Activities and Student Support Systems since the last accreditation by NAAC. The curriculum and syllabi have been revised based on the guidelines of AICTE, University and stakeholders feedback. The curriculum provides holistic engineering education with human values and gender equality. The courses like Fireworks Safety, Agriculture Electronics, Domestic and Entertainment Electronics satisfy the local needs. Teaching and Learning process have been improved by ICT facilities resulting in introduction of on-line courses and experiential learning. The outcome based education enable us to measure the attainment of outcomes and plan for remedial steps for improvement. The automated library system enabled the students and staff to utilize the e-resources effectively from their places. The reforms brought in the examination system enabled us to publish the results faster and also resulted in the reduction of number of grievances related to revaluation. The research centre recognition earned for the departments with the qualified research supervisors resulted in higher publications in journals and conferences and also filing patents. The h-index of the college is 16. The grants for research projects, FDPs/STTPs and conferences also have been fetched. The college has conducted good number of extension activities through the forums like NSS, RRC and YRC with active participation of students. Adequate budget is allocated for augmentation of infrastructure and library facilities. The college regularly upgrades its IT facilities to meet out the changing requirements. The scholarships provided by both government, non-government and management encouraged first generation graduates and socially backward students to avail engineering education. Mentoring system motivates the students to do well in the academic and also take part in co & extra-curricular activities. A strong alumni network supports its alma mater academically and financially. A structured administrative setup with defined policies ensure smooth functioning of the institute. E-governance helps to speed up the activities with paperless. The college administration provides its staff with all statutory welfare measures. IQAC ensures attainment of quality in all aspects of the academic and administration. The college ensures pollution free green campus environment.

NAAC

6.ANNEXURE

1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification																				
1.2.1	<p>Percentage of new Courses introduced out of the total number of courses across all Programs offered during last five years</p> <p>1.2.1.1. How many new courses are introduced within the last five years Answer before DVV Verification : 187 Answer after DVV Verification: 168</p> <p>1.2.1.2. Number of courses offered by the institution across all programs during the last five years Answer before DVV Verification : 579 Answer after DVV Verification: 579</p> <p>Remark : HEI input edited as per clarification response.</p>																				
2.4.4	<p>Percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years</p> <p>2.4.4.1. Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year-wise during the last five years Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> </tr> </thead> <tbody> <tr> <td>41</td> <td>20</td> <td>28</td> <td>7</td> <td>7</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> </tr> </thead> <tbody> <tr> <td>5</td> <td>2</td> <td>2</td> <td>0</td> <td>2</td> </tr> </tbody> </table> <p>Remark : HEI input edited according to provided documents.</p>	2018-19	2017-18	2016-17	2015-16	2014-15	41	20	28	7	7	2018-19	2017-18	2016-17	2015-16	2014-15	5	2	2	0	2
2018-19	2017-18	2016-17	2015-16	2014-15																	
41	20	28	7	7																	
2018-19	2017-18	2016-17	2015-16	2014-15																	
5	2	2	0	2																	
3.2.1	<p>Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments,Chairs in the institution during the last five years (INR in Lakhs)</p> <p>3.2.1.1. Total Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year-wise during the last five years(INR in Lakhs) Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> </tr> </thead> <tbody> <tr> <td>0.375</td> <td>25.60</td> <td>0.20</td> <td>0</td> <td>17.04</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	2018-19	2017-18	2016-17	2015-16	2014-15	0.375	25.60	0.20	0	17.04	2018-19	2017-18	2016-17	2015-16	2014-15					
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0.375	25.60	0.20	0	17.04																	
2018-19	2017-18	2016-17	2015-16	2014-15																	

2018-19	2017-18	2016-17	2015-16	2014-15
0.15	0.30	0	0	0

Remark : HEI input edited according to provided documents.

3.2.2 Number of research centres recognised by University and National/ International Bodies

3.2.2.1. Number of research centres recognised by University and National/ International Bodies

Answer before DVV Verification : 5

Answer after DVV Verification: 5

3.2.4 Number of research projects per teacher funded, by government and non-government agencies, during the last five year

3.2.4.1. Number of research projects funded by government and non-government agencies during the last five years

Answer before DVV Verification : 18

Answer after DVV Verification: 12

Remark : HEI input edited according to provided documents.

3.3.2 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry - Academia Innovative practices during the last five years

3.3.2.1. Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
51	26	27	31	23

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
38	20	19	22	17

Remark : HEI input edited as per HEI clarification.

3.3.3 Number of awards for innovation won by institution/ teachers/ research scholars/students during the last five years

3.3.3.1. Total number of awards for innovation won by institution/teachers/research scholars/students year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15

16	12	7	3	1
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Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
15	10	6	3	1

Remark : HEI input edited according to provided documents.

3.3.4 Number of start-ups incubated on campus during the last five years

3.3.4.1. Total number of start-ups incubated on campus year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
2	2	0	0	0

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
2	2	0	0	0

3.4.5 Number of research papers per teacher in the Journals notified on UGC website during the last five years

3.4.5.1. Number of research papers in the Journals notified on UGC website during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
96	44	27	27	54

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
22	40	25	26	53

Remark : HEI input edited according to clarification and Scopus links given in excel sheet

3.6.2 Number of awards and recognition received for extension activities from Government /recognised bodies during the last five years

3.6.2.1. Total number of awards and recognition received for extension activities from Government /recognised bodies year-wise during the last five years

Answer before DVV Verification:

--	--	--	--	--

2018-19	2017-18	2016-17	2015-16	2014-15
11	8	7	7	7

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
1	0	0	0	0

Remark : HEI input edited because DVV will consider only awards and recognition received for extension activities from Government /recognised bodies.

3.6.3 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the last five years

3.6.3.1. Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
19	20	16	19	17

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
17	20	16	19	17

Remark : HEI input edited according to provided documents.

3.7.1 Number of Collaborative activities for research, faculty exchange, student exchange per year

3.7.1.1. Total number of Collaborative activities for research, faculty exchange, student exchange year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
19	28	23	18	31

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

3.7.2 Number of linkages with institutions/industries for internship, on-the-job training, project work,

sharing of research facilities etc. during the last five years

3.7.2.1. Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
223	70	54	73	41

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
29	46	2	5	3

Remark : HEI input edited according to provided documents. DVV consider only linkages.

4.1.3 Percentage of classrooms and seminar halls with ICT - enabled facilities such as smart class, LMS, etc

4.1.3.1. Number of classrooms and seminar halls with ICT facilities

Answer before DVV Verification : 55

Answer after DVV Verification: 55

4.1.4 Average percentage of budget allocation, excluding salary for infrastructure augmentation during the last five years.

4.1.4.1. Budget allocation for infrastructure augmentation, excluding salary year-wise during the last five years (INR in Lakhs)

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
300.79	307.81	215.14	181.98	199.15

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
274.84	256.61	189.80	129.43	144.93

Remark : HEI input edited according to provided documents.

5.1.2 Average percentage of students benefited by scholarships, freeships, etc. provided by the institution besides government schemes during the last five years

5.1.2.1. Total number of students benefited by scholarships, freeships, etc provided by the institution besides government schemes year-wise during the last five years

Answer before DVV Verification:

--	--	--	--	--

2018-19	2017-18	2016-17	2015-16	2014-15
430	385	270	206	167

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
417	380	269	206	167

5.1.5 Average percentage of students benefited by Vocational Education and Training (VET) during the last five years

5.1.5.1. Number of students attending VET year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
559	450	443	251	513

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

5.2.3 Average percentage of students qualifying in State/ National/ International level examinations during the last five years (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)

5.2.3.1. Number of students qualifying in state/ national/ international level examinations (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil services/ State government examinations) year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
12	6	8	9	3

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
12	6	7	9	3

5.2.3.2. Number of students appearing in state/ national/ international level examinations (eg: NET/SLET/GATE/GMAT/CAT, GRE/TOEFL/ Civil Services/State government examinations) year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
52	16	17	13	5

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
52	16	17	13	5

5.3.3 Average number of sports and cultural activities / competitions organised at the institution level per year

5.3.3.1. Number of sports and cultural activities / competitions organised at the institution level year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
79	76	65	64	63

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
18	17	16	16	16

Remark : HEI input edited according to provided documents. Events not to be split into activities.

6.3.3 Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years

6.3.3.1. Total number of professional development / administrative training programs organized by the Institution for teaching and non teaching staff year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
47	42	30	36	34

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
3	12	5	2	6

Remark : HEI input edited because DVV consider program duration 3 days or more.

6.3.4 Average percentage of teachers attending professional development programs viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Program during the last five years

6.3.4.1. Total number of teachers attending professional development programs, viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Programs year-wise during the

last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
117	67	68	42	32

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
32	22	35	7	6

Remark : HEI input edited because DVV will not consider programs of duration less than one week .

6.5.3

Average number of quality initiatives by IQAC for promoting quality culture per year

6.5.3.1. Number of quality initiatives by IQAC for promoting quality year-wise for the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
29	20	17	15	10

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
19	13	9	9	6

Remark : HEI input edited according to provided documents.

7.1.1

Number of gender equity promotion programs organized by the institution during the last five years

7.1.1.1. Number of gender equity promotion programs organized by the institution year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
15	14	12	10	9

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
4	3	2	2	3

7.1.10

Number of Specific initiatives to address locational advantages and disadvantages during the last five

years 7.1.10.1. Number of specific initiatives to address locational advantages and disadvantages year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
15	14	12	11	9

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
6	6	5	5	5

2.Extended Profile Deviations

ID	Extended Questions																				
1.2	<p>Number of outgoing / final year students year-wise during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> </tr> </thead> <tbody> <tr> <td>586</td> <td>588</td> <td>617</td> <td>632</td> <td>575</td> </tr> </tbody> </table> <p>Answer After DVV Verification:</p> <table border="1"> <thead> <tr> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> </tr> </thead> <tbody> <tr> <td>586</td> <td>588</td> <td>617</td> <td>632</td> <td>602</td> </tr> </tbody> </table>	2018-19	2017-18	2016-17	2015-16	2014-15	586	588	617	632	575	2018-19	2017-18	2016-17	2015-16	2014-15	586	588	617	632	602
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