



# **SELF STUDY REPORT**

**FOR**

**1<sup>st</sup> CYCLE OF ACCREDITATION**

**PRAKASAM ENGINEERING COLLEGE**

**O V ROAD KANDUKUR PRAKASAM DISTRICT  
523105**

**[www.prakasamec.com](http://www.prakasamec.com)**

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Submitted To

**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL**

**BANGALORE**

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# **1. EXECUTIVE SUMMARY**

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## **1.1 INTRODUCTION**

Prakasam Engineering College, Kandukur was established in 2001. It is situated in the village named dubagunta near by the town called kandukur in prakasam district Andhra Pradesh. It runs under Amma education society.

PEC is certified ISO 9001 – 2015, Affiliated by JNTU Kakinada, Approved by AICTE New Delhi. PEC was Christened after the legendary Freedom Fighter of Andhra Pradesh and the First CM of Andhra State Sri Tanguturi Prakasam Panthulu, Prakasam Engineering College leads by example in imparting value based education. In the year 2001 in Kandukur town of Prakasam District, the college earned its rightful distinction as the ‘Destination for Ideal Learning’ by equipping the students with most advanced knowledge while empowering them with the values of work-ethic, teamwork, self discipline and morals. Precisely, the reason why one can find our alumni continually leaving their indelible prints in whichever endeavour they team up with.

The Institute currently has Six academic departments and two management courses a few advanced research centres in various disciplines of engineering and management, with laboratories organized in a unique pattern of functioning, Central Library with state of the art facilities, Auditorium, Student Activity Centre, Mega Computer Centre, Seminar Halls with required infrastructure, Dispensary with state of art of facilities, etc. Faculty of repute, brilliant student community, excellent technical and supporting staff and an effective administration have all contributed to the pre-eminent status of Prakasam Engineering College, Kandukur. The Institute offers six undergraduate programmes (B.Tech.,) in engineering and four Diploma courses, three post graduate programmes (M.Tech., MCA and MBA) in engineering, and management and research programmes in engineering, humanities, physical education and management. The institute is well-known for its Research and Development, Industrial consultancy, Continuing education and Training programmes for teachers and industrial personnel.

### **Vision**

To emerge as a place of brilliance providing technological Knowledge and Research oriented exploration and making students to meet the global standards.

### **Mission**

Impart professional and communication skills by providing proficient faculty, qualitative infrastructure which assists students in learning, practicing and innovative applications and also infusing moral and value based education for their real life development.

## **1.2 Strength, Weakness, Opportunity and Challenges(SWOC)**

### **Institutional Strength**

- Highly qualified competent, experienced and dedicated teaching faculty with good retention.
- Pollution free well connected campus located in rural area.
- State-of-art infrastructure, well equipped Laboratories and latest software tools.
- Student centric teaching learning with mentoring/counseling
- Advanced learners have demonstrated potential through projects and various competitive examinations for higher education and professional career.
- Proactive Training and Placement Cell.
- Hostels for boys & girls with hygienic food facility.
- 80 Mbps dedicated internet connectivity with Wi-Fi campus.

### **Institutional Weakness**

- More faculty members need qualification up gradation and get acquainted with latest technology.
- Need to focus on quality publications, patent filing and explore commercial potential.
- Student's intake is from rural, educationally, socially and economically backward having poor communication skills.
- Limited scope for research and consultancy activities.

### **Institutional Opportunity**

- To acquire status of an Autonomous institution
- Potential for getting grant in aids/funds from various funding agencies.
- Scope for under taking inter-disciplinary & sponsored research projects.
- Scope for expanding base of Alumni network for academic & placement activities.
- Opportunities to expand activities like entrepreneurship, incubation, R & D centre.
- To enter in to more MOUs for increasing industry-institute interaction.

### **Institutional Challenge**

- Attraction of students to migrate towards metro cities for admissions.
- Surrounding institutes offers concession in fees to fill their seat at any cost.
- Govt. support in releasing tuition fee of students in time.
- Balancing the salaries with tuition fee of students.
- Research funding from funding agencies.
- Modernizing labs with advances in Technology / Industry growth.
- Development of curriculum.

## **1.3 CRITERIA WISE SUMMARY**

### **Curricular Aspects**

Prakasam Engineering College is affiliated with Jawaharlal Nehru Technological University Kakinada and

adopts the curriculum provided by JNTUK, which is revised after every Three years. Institute follows CBCS system in which students can opt for courses of their choice from the available options provided under elective courses category. The institute has its well-defined process to plan and execute activities for effective implementation of the curriculum delivery. Objectives and outcomes are defined for every course of every program and it is ensured that they are fulfilled at the end of every course. The curriculum imparted is very close to model course curriculum of AICTE. The curriculum is supplemented through value addition, enrichment and skill development courses. The institute promotes effective industry-institute interaction through various workshops, expert talks, online courses and academic projects. To enhance the employability of the students, transferable and life skill courses are conducted which have the contents beyond the syllabus. To assess and improve the academic requirement of students, feedbacks are taken from various stakeholders like students, alumni, employer, teachers and parents and accordingly corrective measures are taken.

### **Teaching-learning and Evaluation**

PEC puts its best efforts to guide the students of different backgrounds according to their abilities through effective teaching and learning methods. Use of different teaching aids engages the students in higher order thinking and critical investigation. PEC encourages students for industrial training programs and internships. Innovative teaching practices such as e-learning and use of simulation tools in class rooms which will enable the students to learn more effectively at their places. Academic calendar is prepared every semester in accordance with the University academic schedule. On the basis of Academic Calendar Timetables, Lesson Plans, Course Files, and Laboratory Manuals are prepared. Students are continuously assessed throughout the semester and evaluated based on the assignments, internal and external examinations and Project Works. The institute encourages faculty members to improve their qualifications, attend workshops, conferences, FDPs, Industrial trainings and Seminars to improve their competencies. Students are also supported with enrichment programs like Technical Symposia, Seminars, Workshops, Project Expos, Guest lectures, industrial visits and internships from time to time. Placement trainings such as Aptitude, Soft Skills, Group Discussions, Personality Development etc, are conducted by the Institution on frequent intervals. Institute provides effective mentoring system to improve regular interaction between student and teacher to resolve personal and academic issues. Internal Quality Assurance Cell (IQAC) has been constituted which takes care of quality aspects of the teaching learning process and assessment techniques to evaluate learning outcomes.

### **Research, Innovations and Extension**

The institute has taken an initiative to create an ecosystem for research by creating research infrastructure, developing industry & research projects and transferring knowledge through tailor made programs and consultancy. More workshops are organized in collaboration with industries in the past five years.

PEC has its own code of ethics to ensure quality and legitimate practices in research and has been published on the institute Website. Good numbers of research papers are published every year by faculty members in reputed Journals including UGC recognized Journals. As well through structured system, knowledge transfer is affected.

The faculty and students actively participate in the large number of extension activities like awareness for environment issues, blood donations, and social issues through various outreach programs and have won awards.

We have good linkages for internship, research and field work. The institute has functional MOU's with industry for acquiring training, educating faculty and offering help for industrial electives & employability skills.

### **Infrastructure and Learning Resources**

The institute has excellent infrastructures to cater complete learning practice for students and the faculty. Every department of the institute is well equipped with ICT enabled classrooms, laboratories, tutorial rooms, research laboratories, workshop, seminar hall etc. The institute ensures that the infrastructure in the institute is comfortable for physically challenged students. In addition to this, other facilities like photocopying, health care center, canteen etc. are available on the campus. The hostel facility for girls and boys is available. Institute is having adequate facilities for sports and cultural activities.

The Central Library has all study materials, text books, reference books, Journals, e-Journals/ e-Books and digital content. A considerable amount of the annual budget is utilized for procurement of library resources. The OPAC is available in intranet and accessible throughout the campus. Library is a member of National Digital Library of India and subscribes various e-Journals like DELNET etc. Video lectures such as NPTEL, eLSDM are made available in the Library. The digital library with 40 multimedia systems and 20 Mbps

Dedicated internet/Wi-Fi serves the needs of students and faculty. About 650 Computers with open source softwares as well as high-end softwares are procured.

The Institution has excellent infrastructure for sports & games. The outdoor and indoor facilities include: Basketball and Throw ball, Badminton court, Volley ball court, cricket play ground, table tennis, chess etc., with adequate sports equipment to conduct various sports and games events. Power supply is maintained on campus with enough generators and UPS apart from the main supply.

### **Student Support and Progression**

Institute is dedicated to support students for their progress and overall development by organizing various activities throughout the year. Students are continuously monitored for academic progress and overall development. Eligible students get scholarship and free-ship from government schemes. Institute provides scholarship to students who are financially weak.

Institute organizes various enhancement and development programs such as Guidance for competitive examinations, Career and personal Counseling, Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga and Meditation. Students undergo vocational Education and training to bridge gap between industry and institute.

Grievance cell, anti-ragging committee are established consisting of students' representative and faculty members. The committee conducts regular meetings as precautionary measures to maintain good-culture in college premises.

Training and placement cell conducts various pre-placement training on various subjects for enhancing the employability skills. Every year various companies visit for recruitment and around 60% students get placed through the same.

All departments of the institute provide coaching for various competitive exams to encourage students to go for higher studies.

Students participate in the various activities organized by the institute and also represent at state and national level sports tournaments & cultural competitions. Alumni association of our institute is a registered body. The objective is to bring the alumni together to keep them in contact with the Alma matter for the overall development of the institute. Alumni's are actively involved in overall through various bodies.

### **Governance, Leadership and Management**

The Institute is run by AMMA Education society. The Principal is Member Secretary of the Governing Council of the institute and convenes the meeting of Advisory Committee every three months. The policy decisions of the advisory committee are considered for implementation. The vision and mission of the institute have been framed in discussions with Internal & External stake holders.

The Institute has developed five years perspective plan which includes getting accreditation from NAAC & NBA, establishing Research & Incubation Centre, permanent affiliation and listing in NIRF ranking. Different Committees/Cells are constituted to conduct various activities effectively.

Different welfare schemes are in practice to support the faculty, which include supporting for higher studies, Group Insurance, Medical/Maternity leave facility, more no of faculties have attended Conferences/Workshops/STTP with financial support. Faculties have attended professional development programmes and institute hosts 2-3 workshops yearly. The Institution has well defined Appraisal System for staff and are assessed annually.

Tuition fee collected from students is major source of fund. The institute has made budgetary provisions for academic activities and its optimum utilization is monitored through regular audits.

Institution has constituted IQAC on 14/04/2014 for quality assurance, sustenance and improving academic standards and promote research activities. The IQAC has implemented soft tools for academic performance assessment of students.

### **Institutional Values and Best Practices**

Institution shows gender sensitivity in providing facilities such as Hostels for Girls and Boys with dedicated wardens and round the clock security. Energy conservation and renewable energy usage is practiced in the hostels through use of Solar water heaters. The NSS Unit and Red Cross Cell conduct blood donation camps frequently. Technology based education to children studying in government schools are conducted in association with NSS cell. Donations to old age homes, slum areas, orphanages are organized through NSS unit. Institute conducts Yoga and Meditation camps by eminent Spiritual Leaders.

As the student steps in the institute, apart from transforming him as an engineer, he is carved and moulded for the societal benefits also. The institute becomes an outstanding platform for accomplishing his desires as well. Along with inter- communication with peer groups he identifies what are the pre-requisite provisions he should provide for the society. Hence, he incessantly works himself in these dimensions.

NAAC

## 2. PROFILE

### 2.1 BASIC INFORMATION

Name and Address of the College	
Name	PRAKASAM ENGINEERING COLLEGE
Address	O V ROAD KANDUKUR PRAKASAM DISTRICT
City	KANDUKUR
State	Andhra Pradesh
Pin	523105
Website	<a href="http://www.prakasamec.com">www.prakasamec.com</a>

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	MUPPA LA KSHMANA RAO	08598-222288	9849265251	08598-221300	principalf9@gmail.com
Associate Professor	VARAPARLA HARI BABU	08598-221188	7093283999	08598-221100	haribabubaraparla@gmail.com

Status of the Institution	
Institution Status	Private

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details	
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Date of establishment of the college	19-07-2001			
<b>University to which the college is affiliated/ or which governs the college (if it is a constituent college)</b>				
<b>State</b>	<b>University name</b>		<b>Document</b>	
Andhra Pradesh	Jawaharlal Nehru Technological University,Kakinada		<a href="#">View Document</a>	
<b>Details of UGC recognition</b>				
<b>Under Section</b>	<b>Date</b>		<b>View Document</b>	
2f of UGC	02-03-2012		<a href="#">View Document</a>	
12B of UGC				
<b>Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)</b>				
<b>Statutory Regulatory Authority</b>	<b>Recognition/Approval details Institution/Department programme</b>	<b>Day,Month and year(dd-mm-yyyy)</b>	<b>Validity in months</b>	<b>Remarks</b>
AICTE	<a href="#">View Document</a>	04-04-2018	12	

<b>Details of autonomy</b>	
Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	No

<b>Recognitions</b>	
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

<b>Location and Area of Campus</b>				
<b>Campus Type</b>	<b>Address</b>	<b>Location*</b>	<b>Campus Area in Acres</b>	<b>Built up Area in sq.mts.</b>
Main campus area	O V ROAD KANDUKUR PRAKASAM DISTRICT	Semi-urban	39.97	19119

## 2.2 ACADEMIC INFORMATION

<b>Details of Programmes Offered by the College (Give Data for Current Academic year)</b>						
<b>Programme Level</b>	<b>Name of Programme/Course</b>	<b>Duration in Months</b>	<b>Entry Qualification</b>	<b>Medium of Instruction</b>	<b>Sanctioned Strength</b>	<b>No.of Students Admitted</b>
UG	BTech,Electrical And Electronics Engineering	48	Intermediate	English	120	59
UG	BTech,Electronics And Communications Engineering	48	Intermediate	English	120	120
UG	BTech,Civil Engineering	48	Intermediate	English	60	30
UG	BTech,Mechanical Engineering	48	Intermediate	English	60	44
UG	BTech,Information Technology	48	Intermediate	English	60	60
UG	BTech,Computer Science And Engineering	48	Intermediate	English	120	120
PG	Mtech,Electrical And Electronics Engineering	24	Relevant B.Tech	English	18	11
PG	Mtech,Electrical And	24	Relevant B.Tech	English	18	3

	Electronics Engineering					
PG	Mtech,Electronics And Communications Engineering	24	Relevant B.Tech	English	18	0
PG	Mtech,Electronics And Communications Engineering	24	Relevant B.Tech	English	18	9
PG	MBA,Master Of Business Administration	24	Any UG	English	60	36
PG	MCA,Master s In Computer Applications	36	Any UG with Mathamatics in intermediate	English	60	5
PG	Mtech,Computer Science And Engineering	24	Relevant B.Tech	English	18	0
PG	Mtech,Computer Science And Engineering	24	Relevant B.Tech	English	18	9

### Position Details of Faculty & Staff in the College

<b>Teaching Faculty</b>												
	<b>Professor</b>				<b>Associate Professor</b>				<b>Assistant Professor</b>			
	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	16				36				99			
Recruited	15	1	0	16	34	2	0	36	62	37	0	99
Yet to Recruit	0				0				0			

<b>Non-Teaching Staff</b>				
	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Total</b>
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				115
Recruited	81	34	0	115
Yet to Recruit				0

<b>Technical Staff</b>				
	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Total</b>
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				18
Recruited	10	8	0	18
Yet to Recruit				0

**Qualification Details of the Teaching Staff**

<b>Permanent Teachers</b>										
<b>Highest Qualification</b>	<b>Professor</b>			<b>Associate Professor</b>			<b>Assistant Professor</b>			<b>Total</b>
	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Male</b>	<b>Female</b>	<b>Others</b>	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	15	1	0	10	2	0	0	0	0	28
M.Phil.	0	0	0	2	0	0	0	0	0	2
PG	0	0	0	22	0	0	62	37	0	121

<b>Temporary Teachers</b>										
<b>Highest Qualification</b>	<b>Professor</b>			<b>Associate Professor</b>			<b>Assistant Professor</b>			<b>Total</b>
	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

<b>Part Time Teachers</b>										
<b>Highest Qualification</b>	<b>Professor</b>			<b>Associate Professor</b>			<b>Assistant Professor</b>			<b>Total</b>
	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

<b>Details of Visting/Guest Faculties</b>				
<b>Number of Visiting/Guest Faculty engaged with the college?</b>	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Total</b>
		5	1	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
PG	Male	102	0	0	0	102
	Female	139	0	0	0	139
	Others	0	0	0	0	0
UG	Male	777	0	0	0	777
	Female	912	0	0	0	912
	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	35	39	26	15
	Female	50	51	28	14
	Others	0	0	0	0
ST	Male	0	0	2	1
	Female	0	0	2	0
	Others	0	0	0	0
OBC	Male	61	106	77	58
	Female	68	89	67	42
	Others	0	0	0	0
General	Male	127	108	111	114
	Female	165	179	166	129
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		506	572	479	373

### 3. Extended Profile

#### 3.1 Program

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

Response: 626

File Description	Document
Institutional Data in Prescribed Format	<a href="#">View Document</a>

Number of programs offered year-wise for last five years

2017-18	2016-17	2015-16	2014-15	2013-14
14	14	14	14	14

#### 3.2 Students

Number of students year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
2002	2084	2042	2134	2128

File Description	Document
Institutional Data in Prescribed Format	<a href="#">View Document</a>

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

2017-18	2016-17	2015-16	2014-15	2013-14
368	368	368	368	368

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

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

2017-18	2016-17	2015-16	2014-15	2013-14
545	523	435	511	533



File Description	Document
Institutional Data in Prescribed Format	<a href="#">View Document</a>

### 3.3 Teachers

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

2017-18	2016-17	2015-16	2014-15	2013-14
182	182	176	170	163

  

File Description	Document
Institutional Data in Prescribed Format	<a href="#">View Document</a>

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

2017-18	2016-17	2015-16	2014-15	2013-14
182	182	176	170	163

  

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

### 3.4 Institution

#### Total number of classrooms and seminar halls

**Response: 49**

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

2017-18	2016-17	2015-16	2014-15	2013-14
243.97	209.83	176.4	232.87	200.84

#### Number of computers

**Response: 650**

## 4. Quality Indicator Framework(QIF)

### Criterion 1 - Curricular Aspects

#### 1.1 Curricular Planning and Implementation

##### 1.1.1 The institution ensures effective curriculum delivery through a well planned and documented process

##### Response:

The Prakasam engineering college is affiliated to Jawaharlal Nehru Technological University (JNTUK), Kakinada, Andhra Pradesh. The PEC makes all necessary efforts to ensure effective curriculum delivery and well documentation of all plans & activities. The course curriculum is Choice Based Credit System. The course curriculum is planned on various Blooms' Taxonomy level. The Institute plan to allow students to pursue their choice in the form of electives. The institute has its well-defined process to plan and execute activities for effective implementation of the curriculum delivery through its academic calendar. The academic calendar includes teaching plan, schedule of assignments and Tests, stakeholders' meet, schedules of In-Sem Evaluation and End-Sem Evaluation, Industry visit, Internship, co curricular & extracurricular activities.

The college academic committee prepares the detailed institute academic calendar based on university academic calendar. On the basis of Institution academic calendar; department and teachers prepare their academic calendar and teaching plans for every theory and practical subject. Every semester, time-table preparation and subject allocation is done well in advance. The HODs allocate the Subject to faculty on the basis of area of specialization of faculty, qualification, number of times the subject taught and experience. Objectives and outcomes are defined for every subject (course) of program, and it is ensured that they are attained at the semester end. Delivery of course curriculum includes width and depth beyond course curriculum. For improvement in the performance of the weaker students, remedial classes are planned. As direct second year students join the semester late, make-up classes are conducted by faculty for every subject. The college also offers skill development and value-addition courses for students to enrich the curriculum. Our faculty uses various active learning strategies while delivering lectures so as to enhance the critical thinking and problem solving ability of the students. Faculty of the institute have created Open Educational Resources to enrich students learning using various ICT tools and techniques.

Assessment of students is done during the semester through Internal Assessment in In-Sem Evaluation; tests are conducted for every subject. Students are evaluated based on their performance in tests and additional assignments with respect to subject. For Internal Continuous Assessment, the students are evaluated for their performance throughout the semester. At the end of semester student has to appear for a university exam i.e. End Semester Evaluation Attainment of POs and PSOs is done by faculty members on the basis of inputs from various stakeholders. Indirect assessment of attainment is done through "Course exit survey". Student's performance in the Internal Assessment & percentage of attendance after every Internal Assessment is communicated to parents through SMS and Postal mail. Poor performers in the internal assessment are counseled by individual course teacher, mentors and also at the Department level. Special lectures and invited talks are organized frequently by eminent academicians & Industry persons. Student's feedback is collected twice in semester on teaching learning process &

analyzed for Improvement. Group of 10-15 students are allocated to each teacher for mentoring & mentoring is done on regular basis.

### 1.1.2 Number of certificate/diploma program introduced during the last five years

**Response:** 86

#### 1.1.2.1 Number of certificate/diploma programs introduced year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
19	20	19	17	11

#### File Description

#### Document

Details of the certificate/Diploma programs

[View Document](#)

### 1.1.3 Percentage of participation of full time teachers in various bodies of the Universities/ Autonomous Colleges/ Other Colleges, such as BoS and Academic Council during the last five years

**Response:** 0

#### 1.1.3.1 Number of teachers participating in various bodies of the Institution, such as BoS and Academic Council year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	0	0	0

#### File Description

#### Document

Details of participation of teachers in various bodies

[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:** 50.8

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

**Response:** 318

File Description	Document
Details of the new courses introduced	<a href="#">View Document</a>

### 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 programs in which CBCS/ Elective course system implemented.

Response: 14

File Description	Document
Name of the programs in which CBCS is implemented	<a href="#">View Document</a>

### 1.2.3 Average percentage of students enrolled in subject related Certificate/ Diploma programs/Add-on programs as against the total number of students during the last five years

**Response:** 81.27

1.2.3.1 Number of students enrolled in subject related Certificate or Diploma or Add-on programs year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
1814	1877	1749	1629	1355

File Description	Document
Details of the students enrolled in Subjects related to certificate/Diploma/Add-on programs	<a href="#">View Document</a>

## 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:**

**Gender:**

- The institute constituted a sexual harassment and eradication cell to address the gender Rights/ discrimination issues. This cell often organizes seminars and awareness programs for girls'

students. Girls and boys are encouraged to work together in various curricular, co-curricular activities. There is no discrimination made in offering the various committees to girls & boys. This holistic approach has led to increased opportunities in employment as well as in building new entrepreneurial development among the student community.

There are various courses in the curriculum which address cross cutting issues relevant to Environment, Sustainability, Human Values and Professional Ethics.

**Environment and Sustainability:**

- As a part of curriculum all the students are studying “Environmental science and technology” which gives them exposure to various environmental related policies and issues across local to global scales. Institute regularly conducts Clean & Green Activities to bring in the awareness among all the stakeholders about the climate change. Regularly our NSS unit organizes the Swatch Bharath activities. The Institute makes arrangements for workshops and seminars where in the experts are invited to share and deliver their experiences and knowledge on rainwater harvesting, environment protection etc.

**Human Values and Professional Ethics:**

- Institute often conducts Guest Lectures/Seminars on Human Values and Professional Ethics to highlight plausible implications of such a Holistic understanding in terms of ethical human conduct, trustful and mutually satisfying human behavior and mutually enriching interaction with Nature.

Detailed description of these courses is uploaded in additional information.

File Description	Document
Any Additional Information	<a href="#">View Document</a>

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

**Response:** 36

1.3.2.1 Number of value-added courses imparting transferable and life skills offered during the last five years

Response: 36

File Description	Document
Details of the value-added courses imparting transferable and life skills	<a href="#">View Document</a>

**1.3.3 Percentage of students undertaking field projects / internships**

**Response:** 67.18

1.3.3.1 Number of students undertaking field projects or internships

Response: 1345

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

## 1.4 Feedback System

**1.4.1 Structured feedback received from 1) Students, 2) Teachers, 3) Employers, 4) Alumni and 5) Parents for design and review of syllabus-Semester wise/ year-wise**

**A. Any 4 of the above**

**B. Any 3 of the above**

**C. Any 2 of the above**

**D. Any 1 of the above**

**Response:** A. Any 4 of the above

**1.4.2 Feedback processes of the institution may be classified as follows:**

**A. Feedback collected, analysed and action taken and feedback available on website**

**B. Feedback collected, analysed and action has been taken**

**C. Feedback collected and analysed**

**D. Feedback collected**

**Response:** A. Feedback collected, analysed and action taken and feedback available on website

## 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:** 0.05

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

2017-18	2016-17	2015-16	2014-15	2013-14
1	3	1	0	0

File Description	Document
List of students (other states and countries)	<a href="#">View Document</a>
Institutional data in prescribed format	<a href="#">View Document</a>

#### 2.1.2 Average Enrollment percentage (Average of last five years)

**Response:** 73.59

##### 2.1.2.1 Number of students admitted year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
524	532	511	635	624

##### 2.1.2.2 Number of sanctioned seats year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
768	768	768	768	768

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

#### 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:** 60.76

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

2017-18	2016-17	2015-16	2014-15	2013-14
249	230	175	230	234

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

## 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 counseled and their learning capabilities are analyzed based on their performance in the first internal assessment. The students are categorized into the advanced and slow learners. After interaction with these groups, strategies and its weightage are decided for the following actions for students' improvement and building their confidence. Those poor performing students are again re-examined after remedial classes for improvement.

The advanced learners are motivated to participate in different competitions at college and university levels. Further these students are supported by providing them materials required for competition, books, and financial assistance. These students are encouraged to apply the projects for various funding agencies like Kanchrla Foundation (NGO). The institute has a best practice of identifying students who have secured highest marks in internal assessment and critical subjects and rewarding them with competitive exam books, GATE books and some reference books.

### Programs for advanced learners

- Outside participation through National/International level Conferences and workshops through various technical festivals.
- Organization of various events at the national level technical symposium every year at the institute to showcase their leadership and interact with outside counterparts.
- Various co-curricular and extra-curricular events through Professional student's chapter (ISTE, CSI) and various student associations, Entrepreneurship Development cell, Soft-skill development center etc.
- Self-learning through online certification courses like NPTEL, MOOCs, Spoken tutorial etc.
- Preparing students for competitive exam for higher studies and employment

### Programs for slow learners



- Remedial/Revision classes
- Make-up classes
- Retests/additional test for improvement
- More practice in the form of Assignments, Lab practices, presentations etc.
- Use of Instructional strategies
- Counseling/personal guidance as per need
- Further counseling by mentor and HOD is in practice to improve their performance.

### 2.2.2 Student - Full time teacher ratio

**Response:** 11

### 2.2.3 Percentage of differently abled students (Divyangjan) on rolls

**Response:** 0.35

#### 2.2.3.1 Number of differently abled students on rolls

**Response:** 7

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

## 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:**

Institute has adopted several practices which are exclusively student centric and also help them in experiential learning. These include Hobby/Mini projects, Student's seminars, Project seminars, Quiz competitions and Group Discussions etc.

#### **Experiential Learning:**

Students are encouraged to conduct experiments individually in the laboratories to realize the theoretical concepts. Students undergo industrial internships during vacation through institution. Industrial visits are organized regularly for better understanding of full scale working of Engineering processes and machineries. Students are supported to select projects to address community, industrial and environmental issues at final year level for better understanding of real time problems and applying Engineering knowledge for resolving.

#### **Participative Learning:**

Every department encourages students to participate in co-curricular activities like Mini/Hobby projects

competitions and Seminars on innovations in Engineering and Technology. Also, every department organizes such events frequently through students associations. In addition to this the institute organizes PEC ISKRA every year which is a National Level technical event. In addition to outside students, our students of all departments and all classes take part in this Mega Event. The events of PEC ISKRA include Paper presentation, Circuit debugging, Technical quiz, Program coding, Trouble shooting, Robo-race competition etc. The institute is also providing financial support to the students for attending various activities - project competitions, Conferences, Workshops at premier institutions, which will help them to participate and learn cutting edge technologies and also update their knowledge on par with students of premier institutions. All departments form the project groups on merit basis, like each group consisting of slow learner, medium learner and advanced learner. The institute also conducts hands on workshop for students to enhance their learning skills. The learning method is made student centric through cooperative learning through Interdisciplinary projects.

### **Problem Solving:**

The students are supported to take part in competitions like Smart India Hackathon organized by All India Council for Technical Education, New Delhi, which enhances the problem solving ability. The institution provides platform for students to make use of modeling and simulation tools in the laboratories for solving complex Engineering problems.

### **Other additional student centric approaches for enhancing student learning**

- Use of technologies and tools like Apps development for course delivery or assessment, debugger tools, business intelligence tools etc..
- Effect of guided presentation for effective writing for first year and second year students

Now in the scenario of seat remaining vacant indicating slow learners are also admitted. Therefore, it is equally important to address learning for both slow and advance learner while opting for the appropriate method.

### **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:** 182

<b>File Description</b>	<b>Document</b>
List of teachers (using ICT for teaching)	<a href="#">View Document</a>

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

**Response:** 11

## 2.3.3.1 Number of mentors

Response: 182

### 2.3.4 Innovation and creativity in teaching-learning

#### Response:

The Institute is equipped with state-of-art teaching aids to improve learning processes. The Institute has highly qualified and motivated staff. This helped the institute to adopt many innovational and creative ideas in teaching learning methods. A few of them are: Use of ICT in teaching and learning Teaching with working demo/models teaching with charts Demonstration of Engineering Concepts through live projects. Organizing Expert talks from academicians and industry experts. Based on these initiatives, students in the third year level are encouraged to take mini projects which boost their creativity and innovation. Also, final year students choose main projects which address technical and socio-economic issues. Interdisciplinary projects are most encouraged at all levels.

#### Continuous use of different Instructional Strategies and ICT tools during course delivery:

Conventional teaching learning process is strengthened by blending following ET practices for active learning namely:

- Use of Google classroom
- Visualization (videos, Simulation, Animations etc.)
- Think-Pair-Share, Think-pair-solo
- Flipped Classroom
- Peer Instruction
- Role-play
- Gamification
- Project and Problem based learning

#### Internships

Students are encouraged to take up industrial internships in leading industries to challenge their scientific temper and creativity.

#### Seminars/ Workshops

The Departments and the institution engages in a continuous practice of arranging seminars/ guest lecturers/alumni meets and industry interactions to the students through association activities and professional society activities to gain industrial exposure and create scientific temper and awareness of research directions among the students.

## 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	<a href="#">View Document</a>

**2.4.2 Average percentage of full time teachers with Ph.D. during the last five years****Response:** 9.14**2.4.2.1 Number of full time teachers with Ph.D. year-wise during the last five years**

2017-18	2016-17	2015-16	2014-15	2013-14
31	20	10	10	10

File Description	Document
List of number of full time teachers with PhD and number of full time teachers for 5 years	<a href="#">View Document</a>

**2.4.3 Teaching experience per full time teacher in number of years****Response:** 9.03**2.4.3.1 Total experience of full-time teachers**

Response: 1644

**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:** 2.29**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**

2017-18	2016-17	2015-16	2014-15	2013-14
2	0	1	0	1

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

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

**Response:** 16.09

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

2017-18	2016-17	2015-16	2014-15	2013-14
34	33	26	24	24

File Description	Document
List of full time teachers from other state and state from which qualifying degree was obtained	<a href="#">View Document</a>

## 2.5 Evaluation Process and Reforms

### 2.5.1 Reforms in Continuous Internal Evaluation(CIE) system at the institutional level

**Response:**

The Institute ensures that all the stakeholders are aware of the internal evaluation system (CIE) that is operative through the following measures.

- A handbook which includes academic regulations, course structure and detailed syllabus is provided to all the students at the time of admission and it is available in the college website, library and every department.
- The Stakeholders of the college i.e. students and faculty members and even the parents of the students are informed about evaluation process by giving general instructions mentioned in the prospectus of the Institution.
- The periodic instructions issued by the Affiliated University are promptly communicated to the students.
- The faculty members read the instructions even in the classrooms and copy of the same is also displayed on the students notice-boards.
- Students are informed at the start of the session regarding the internal examinations.
- Students are clearly made aware of the eligibility conditions required to appear in the final exams.
- The Institution makes effective arrangements for the smooth application of the rules about the evaluation processes.
- The Institute has developed a proper mechanism for this system.
- Staff meetings are conducted periodically to review the evaluation process.

### **2.5.2 Mechanism of internal assessment is transparent and robust in terms of frequency and variety**

#### **Response:**

Continuous Internal Assessment is an ongoing process of evaluating students' performance throughout the semester. Internal assessment is comprised of In-semester evaluation for theory subjects and internal continuous evaluation for Laboratory subjects along with various other learning modes like experiential, Project Based Learning and self learning.

Our internal assessment is very transparent due to following features:

- Well defined assessment schedule for every semester which is a part of published academic Calendar
- Course curriculum for every test is predefined and made known to students well in advance
- Aggrieved students have an opportunity to put forward their grievance addressal and redressal, if not satisfied with grievance addressal
- Assessment results are in public domain along with answer books
- Students' performance in assignment and laboratories are communicated in stipulated cycle.
- For any queries they are free to contact subject teachers

For theory courses, Internal Semester evaluation is based on their performance in two tests uniformly spread over the semester. As well other modes of assessment are assignments, topic seminar, quizzes etc. Concern faculty member assesses the papers and discuss students' learning through their performances. The students raise their doubts to seek clarification. With this context student raise their grievance for the subject teacher's assessment with which they are not satisfied. In case, student is not satisfied with the respective teacher, they are at liberty to approach departmental Assessment committee.

Internal Assessment for laboratory courses on the basis of set of experiments which are already made known to students is carried out during the session and assessment is made know to student weekly. The underperforming student is given opportunity to improve their performance.

Internal Assessment is based on appropriate weightage to the following

- Regular attendance of the student
- Proactiveness during practical session and its accuracy
- Performance in weekly assignments
- Quality of assignments completed and adherence to schedule of submission of assignments
- Over a period of time, we have been giving a good hearing on the grievance of the students and accordingly the changes/alterations have been incorporated in the system making it more robust. Its robustness is proved again and again due to fact that grievances of the students are diminishing exponentially. We always encourage the input from the students in this regard.

### **2.5.3 Mechanism to deal with examination related grievances is transparent, time-bound and**

**efficient**

**Response:**

PEC has a well established Grievance Redressal Cell. Besides the general grievances it also addresses grievances related to examination. Our staff members take utmost care of examination issues right from the beginning which includes the online filling, verification and submission of examination forms on university web portal. In order to handle semester end examinations smoothly and effectively, the institute has exclusively appointed department-wise examination coordinators who take care of both Internal and External examinations (Practical & Semester End Examinations).

The examination related grievances include time bound evaluation of internal assessments, assignments, improper evaluation, revaluation & re-totaling and rectifications in the marks in the university exams. Though the results of semester end examinations are not in the control of Institute, grievances raised by the students are effectively communicated to affiliating university for needful actions. Besides this the issue is being closely monitored by dedicated staff member of the institute till it gets resolved. If delayed beyond expected time the examination section officials of our institute will contact the university officials and try to get the solution at the earliest. Once the solution is obtained from the university, the same is brought to the notice of concerned student without any delay.

**Mechanisms for redressal of grievances at the college level:**

The answer scripts of internal examinations are shown to the students after evaluation to bring out the discrepancies, if any, to the notice of teacher concerned, and the necessary corrections will be made. If student is not satisfied with the marks awarded in any subject/laboratory after bringing it to the notice of the faculty concerned, student may represent the same to the principal through the HOD concerned. All such representations are taken positively and reassessment will be made by a competent teacher if necessary.

**Mechanisms for redressal of grievances at the University level:**

**Step I:** Publishing of results. On line access to marks obtained- if found dissatisfactory,

**Step II:** Apply Revaluation or Recounting of answer scripts

**Step III:** Wait for revaluation result. If found Dissatisfactory

**Step IV:** Further apply for 'Challenge' evaluation

**2.5.4 The institution adheres to the academic calendar for the conduct of CIE**

**Response:**

Every year an academic calendar is prepared at institute level to plan the curricular, co-curricular and extracurricular activities and published before the commencement of the semester. All components of stakeholders like alumni meet, parents meet, industry interactions etc. are considered while preparing

academic calendar. Head of the department along with faculty members prepares an academic calendar for the department based on institute academic calendar. Every department strictly follows this academic calendar. Government/ University/Local Holidays which come in the duration of semester, tentative dates of practical & semester end examinations etc. Calendar of events is communicated to students and faculty members well in advance preferably one week before the commencement of semester. In addition to this dates of important events are reminded to concerned students through Institute/Department notice boards and by sending SMSs. For example internal assessments dates with detailed time table is displayed at least a week before their commencement. Regardless of all our efforts, under some unavoidable circumstances which are unexpected at the time of preparation of calendar of events (like election holiday, sudden declaration of holiday by University/Government, Local events etc.) some of events are postponed/preponed. However, these are also managed very effectively and the events are successfully conducted at later stage by informing students and faculty through SMSs.

File Description	Document
Any additional information	<a href="#">View Document</a>

## 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:

The course outcomes were framed as per the syllabus prescribed/framed by the affiliating university while framing the course outcomes Bloom's taxonomy (modified) has been taken into considered and appropriate action verbs were used. Around 6 course outcomes were prepared per each course.

The course outcomes are mapped to the program outcomes and program specific outcomes. Each course outcome is correlated to all/some of the program outcomes and program specific outcomes. The correlation levels on a scale of 1 to 3 are given for the mapped items. These correlation levels are determined by the subject experts in the department. Based on the CO-PO matrix, the correlation level of each course with all the program outcomes and Program specific outcomes are determined. The course correlation level with a particular program outcome is obtained by calculating the average value of correlation levels of CO-1 to CO-N with the program outcome.

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

#### Response:

The course outcomes are prepared by using action verbs of modified Bloom's Taxonomy. All the course



outcomes are prepared in such a way that they are measurable by means of written and oral skills, presentations etc. They gather the data for evaluation course outcomes are as follows.

#### **i. Internal (Mid) Examinations:**

Two Mid Examinations are conducted for all the students in each semester as per the university prescribed norms. Mid-I is conducted from the units of first, second and third with three questions each carrying 5 marks are given out of which students to answer three questions for a maximum of 5 marks each. Mid-II is conducted for remaining three units. Each question is related to one or more course outcomes. It is expected that a student should score at least 3 marks (60%) out of 5 marks for the attainment of that course outcome.

#### **ii. Assignment Questions:**

About 4 assignment questions are given in each assignment. Each question is mapped to one or more course outcomes. Each assignment carries 5 marks. It is expected that a student should reach that course outcome. Two assignments are given in each course.

#### **iii. End semester university examinations:**

The question paper for each course is set by the affiliating university. The question paper contains two parts A and B. Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 16 marks and may have a, b, c as sub questions. Since the answer scripts are regarding the attainment levels of each course outcome cannot be ascertained. However the marks scored by the students in the end semester examination are used to assess the attainment level of the whole course and the outcome attainment level, while calculating the overall attainment level. It is expected student should score at least 40% of the maximum marks of the course (i.e. 28 out of 70) for the attainment of course outcomes.

### **2.6.3 Average pass percentage of Students**

**Response:** 76.88

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

Response: 419

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

Response: 545

<b>File Description</b>	<b>Document</b>
Institutional data in prescribed format	<a href="#">View Document</a>

## **2.7 Student Satisfaction Survey**

**2.7.1 Online student satisfaction survey regarding teaching learning process**

**Response:**

NAAC

## Criterion 3 - Research, Innovations and Extension

### 3.1 Resource Mobilization for Research

**3.1.1 Grants for research projects sponsored by government/non government sources such as industry ,corporate houses, international bodies, endowment, chairs in the institution during the last five years (INR in Lakhs)**

**Response:** 24

3.1.1.1 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)

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	7	8	9

**File Description**

**Document**

List of project and grant details

[View Document](#)

**3.1.2 Percentage of teachers recognised as research guides at present**

**Response:** 1.1

3.1.2.1 Number of teachers recognised as research guides

Response: 2

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

**Response:** 0.01

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

Response: 2

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

Response: 873

### 3.2 Innovation Ecosystem

**3.2.1 Institution has created an ecosystem for innovations including incubation centre and other initiatives for creation and transfer of knowledge**

**Response:****Eco system for innovations**

The institute has remarkable research culture wherein most of faculty members, research scholars & students are engaged in research work. Number of workshops is organized for assimilation & dissemination of knowledge for teachers and students not restricted to our institute. Laboratories are well equipped and provide an adequate infrastructure used for research. The institute has research guides that help in developing research projects. At UG level we encouraged students to take up real time projects, out of such projects, quite a good no. of projects are sponsored by society. This has inculcated a research environment. The library is well equipped with the number of reference books and standard National & International Journals and e-Journals that permit an extensive literature review.

The institute provides a budget for research and development activity, which help in funding for research work, publications and travel for research activities. This encourages faculty to publish their research work.

The Institute is organizing workshops, seminars, guest lectures, for the students to enhance the learning process in their respective areas with the eminent personalities from the Industry and R&D organizations. The Institute is regularly conducts the technical symposia/seminar etc., for the benefit of both students and faculty members to enhance their knowledge for carrying out the research. The Faculty members are encouraged to share their technical exposure / specialized knowledge with other faculty members at regular intervals through discussions. Faculty members are constantly motivated to acquire higher qualifications and actively involved in research work and good numbers of papers are being published in national and international journals. Faculty members are encouraged to attend seminars, conferences, workshops and short- term courses by providing TA/DA and registration fee, Necessary books and journals are provided for those who are pursuing research. Sufficient freedom is allowed to the staff for innovation and reforms in the teaching and learning process. The Faculty members are sanctioned study leave for pursuing PhD and Post Doctoral Programme in the premier Institutions. The institute encourages the faculty to carryout fund supported research from various funding agencies like UGC, DST, AICTE etc., The institution is in the process of initiating courses related to extension services such as certification and diploma courses etc. The initial draft is under preparation.

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

**Response:** 180

#### **3.2.2.1 Total number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices year-wise during the last five years**

2017-18	2016-17	2015-16	2014-15	2013-14
43	44	36	31	26

File Description	Document
List of workshops/seminars during the last 5 years	<a href="#">View Document</a>

### 3.3 Research Publications and Awards

<b>3.3.1 The institution has a stated Code of Ethics to check malpractices and plagiarism in Research</b>	
Response: Yes	
File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

<b>3.3.2 The institution provides incentives to teachers who receive state, national and international recognition/awards</b>	
Response: Yes	
<b>3.3.3 Number of Ph.D.s awarded per teacher during the last five years</b>	
Response: 0.5	
3.3.3.1 How many Ph.Ds awarded within last five years	
Response: 1	
3.3.3.2 Number of teachers recognized as guides during the last five years	
Response: 2	
File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	<a href="#">View Document</a>

<b>3.3.4 Number of research papers per teacher in the Journals notified on UGC website during the last five years</b>				
Response: 0.09				
3.3.4.1 Number of research papers in the Journals notified on UGC website during the last five years				
2017-18	2016-17	2015-16	2014-15	2013-14
6	1	3	4	2

File Description	Document
List of research papers by title, author, department, name and year of publication	<a href="#">View Document</a>

### 3.3.5 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:** 0.36

3.3.5.1 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

2017-18	2016-17	2015-16	2014-15	2013-14
25	29	1	5	2

File Description	Document
List books and chapters in edited volumes / books published	<a href="#">View Document</a>

## 3.4 Extension Activities

### 3.4.1 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:**

Our students continued their efforts to resolve Social, Agricultural and Industrial problems through their academic projects. Many projects are successful, rewarded, appreciated and received funds from Non-Government Agencies.

The institute involves the students in the community programmes so that the students learn values and responsibilities required for an excellent citizenship, service oriented mind and holistic development. The institute has NSS Unit approved by JNTUK, Kakinada and organizes many social service and community development programme and inculcates the importance of social responsibility and service in the minds of students.

**The institute promotes the institution- neighborhood community network by organizing the following activities.**

The institute encourages students and staffs various NSS programme in contributing good citizen ship and service orientation. NSS & NCC students also are participating in community development programme viz., Blood donation camps, Health checkup programmes, Plantation of plants, e-literacy programme at

villages, near college campus etc. to understand the rural life, village problematic issues. A Campus cleaning Programme was taken up under Swachh Bharat Programme by student volunteers in the College premises. NSS unit donating the clothes during the time floods in other states. Institution organizes the lectures and programs on value based education from time to time. Management motivates the students' social participation to achieve its goal of providing higher technical education to create ethical values.

Extensive support from the students are witnessed during tree plantation, blood donation etc. the Alumni association is also involved in all these extension activities. The institution has taken the initiative to make aware the society about social and health problems like female feticide, dowry system, environment protection, consumer protection awareness, anti corruption, HIV awareness, anti tobacco and cleanliness awareness etc.

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

**Response: 6**

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

2017-18	2016-17	2015-16	2014-15	2013-14
4	0	1	0	1

#### File Description

#### Document

Number of awards for extension activities in last 5 years

[View Document](#)

### 3.4.3 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: 68**

#### 3.4.3.1 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

2017-18	2016-17	2015-16	2014-15	2013-14
14	19	14	10	11

File Description	Document
Number of extension and outreach programs conducted with industry,community etc for the last five years	<a href="#">View Document</a>

### 3.4.4 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:** 100

3.4.4.1 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

2017-18	2016-17	2015-16	2014-15	2013-14
2002	2084	2042	2134	2128

File Description	Document
Average percentage of students participating in extension activities with Govt or NGO etc	<a href="#">View Document</a>

## 3.5 Collaboration

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

**Response:** 64

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

2017-18	2016-17	2015-16	2014-15	2013-14
17	15	12	10	10

File Description	Document
Number of Collaborative activities for research, faculty etc	<a href="#">View Document</a>



**3.5.2 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:** 15

3.5.2.1 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)

2017-18	2016-17	2015-16	2014-15	2013-14
6	4	1	2	2

File Description	Document
Details of functional MoUs with institutions of national, international importance, other universities etc during the last five years	<a href="#">View Document</a>

## 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:**

All the physical facilities have been established for an effective teaching and learning system in the campus to comply with the AICTE and Jawaharlal Nehru Technological University, Kakinada norms. The institute has a policy for creation and enhancement of infrastructure depending on the requirements of any change in the curriculum, student admission and introduction of any additional courses. The budget for this requirement is prepared in consultation with Heads of the Department, Principal and the proposal is subsequently submitted to the Governing Council and Board of Management for approval. Once it is approved, the same is implemented with the help of competent authority in the concerned area.

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

**Response:**

For the overall development of students, the institution is providing adequate facilities for psychological and physical development. Exclusive infrastructure and human resource have been made available to promote indoor/outdoor games to motivate students for participation in various events. Institute has separate Yoga center with meditation and Gymnasium for the students and staff. The institute has cultural coordinator to promote the cultural activities in the institute and motivate students to participate in University/State/National level competitions. The institute provides financial assistance for all sports and games. Sports equipments of higher standard are provided generously. The outstanding performers in sports are honored and rewarded on the Institute annual day.

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

**Response:** 100

**4.1.3.1 Number of classrooms and seminar halls with ICT facilities**

**Response:** 49

File Description	Document
Number of classrooms and seminar halls with ICT enabled facilities	<a href="#">View Document</a>

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

**Response:** 100

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

2017-18	2016-17	2015-16	2014-15	2013-14
243.97	209.83	176.4	232.87	200.84

File Description	Document
Details of budget allocation, excluding salary during the last five years	<a href="#">View Document</a>

## 4.2 Library as a Learning Resource

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

**Response:**

The library is the heart of all academic activities of the Institute. Students are motivated to make the best use of library facilities to promote affinity towards reading and learning which are vital for the holistic development of the students. The library extends vital support to the academic and research needs of the college by providing updated and comprehensive collection of reading material.

The library is automated by Integrated Library Management Systems. The library is a member of DELNET which provide web access to adequate number of books, Journals, Periodicals, Thesis and Dissertations. Transactions in the library are automated by using bar code reader. The following features can be accessed from Computer/Smart phone/Laptop within the campus.

- Digital accounting and circulation of books
- Availability of books subject wise / Author wise
- Access to the e-resources /NPTEL /Pro-Quest video lectures
- Access to the e-Journals

Institutes central library fully satisfies student's requirement of textbooks as per AICTE norms

- Text books & reference books prescribed in the syllabus are provided in sufficient volumes.
- Apart from Text books on regular curriculum, Library contains some value education books, books for GATE and competitive examinations.
- The library comprises of sections like Digital library, dedicated reference section, current journal section, book issue/return section, periodicals section.
- A Separate space is reserved for faculty and PG students
- 40 Computer terminals with internet connectivity are available to the students for accessing e learning resources.
- Spacious and well furnished space with ergonomic consideration is allocated for reading section in the library.
- To identify and to minimize the theft cases CCTV cameras are installed in the reading and reference section.

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

##### Response:

The Institution has the practice of collecting and maintaining rare books, manuscripts, special reports or any other knowledge resources to benefit students and faculty for their knowledge enhancement, research and exploring new things apart from the standard books.

**Rare books:** The Institute library is enriched with good numbers of rare books. Various rare books are downloaded from Rare Book Society of India (RBSI). The E-Book collections are made available and accessible to the students and faculty as reference material for enrichment of their knowledge. Separate racks are provided for rare books in a library.

**Manuscripts:** Manuscripts in hard and soft form are available in the central library for students and faculty use. The number of manuscripts available in the central library during the assessment period is as below

Manuscript type	2017-18	2016-17	2015-16	2014-15	2013-14
M.Tech Thesis	8	9	27	24	18
MBA Thesis	49	55	48	58	59
MCA Thesis	28	36	28	11	40

#### 4.2.3 Does the institution have the following:

- 1.e-journals
- 2.e-ShodhSindhu
- 3.Shodhganga Membership
- 4.e-books
- 5.Databases

**A. Any 4 of the above**

**B. Any 3 of the above**

**C. Any 2 of the above**

**D. Any 1 of the above**

**Response:** B. Any 3 of the above

File Description	Document
Details of subscriptions like e-journals,e-ShodhSindhu,Shodhganga Membership etc	<a href="#">View Document</a>

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

**Response:** 9.35

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

2017-18	2016-17	2015-16	2014-15	2013-14
11.57	9.54	10.46	8.4	6.8

File Description	Document
Details of annual expenditure for purchase of books and journals during the last five years	<a href="#">View Document</a>

#### 4.2.5 Availability of remote access to e-resources of the library

**Response:** Yes

#### 4.2.6 Percentage per day usage of library by teachers and students

**Response:** 71.25

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

**Response:** 1556

### 4.3 IT Infrastructure

**4.3.1 Institution frequently updates its IT facilities including Wi-Fi****Response:**

Institute upgrades the IT facilities as per the requirements and the norms prescribed by AICTE and affiliated University time to time. The Internet bandwidth has been upgraded as per the requirement with secured Wi- Fi throughout campus including hostel premises. The total bandwidth is divided for all the computers through LAN and Wi-Fi hotspots. The up gradation of internet bandwidth is as follows:

<b>AY</b>		
2017-18		
2016-17		
2015-16		
2014-15		
2013-14		
System softwares		
<b>Sl.no</b>		
1		
2		
3		
4		
5		
Application softwares		
<ul style="list-style-type: none"> <li>• MS office</li> <li>• Visual studio</li> <li>• DOT net</li> <li>• MAT lab</li> <li>• CAD/CAM</li> <li>• Mentor graphics</li> </ul>		
Details of Network Equipment		
<ol style="list-style-type: none"> <li>1. Clients -350</li> <li>2. D-Link - Giga byte Switches -16 (Web Smart Switches -DGS-1210-28)</li> <li>3. Patch Cards-750</li> <li>4. Network 9U racks -7</li> <li>5. Patch Pannels-16</li> <li>6. Routers-5</li> <li>7. Wireless Network-Equipment -5</li> </ol>		

**4.3.2 Student - Computer ratio**

**Response:** 3.08

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

**>=50 MBPS**

**35-50 MBPS**

**20-35 MBPS**

**5-20 MBPS**

**Response:** >=50 MBPS

**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	<a href="#">View Document</a>

#### 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:** 99.9

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)

2017-18	2016-17	2015-16	2014-15	2013-14
243.94	209.67	176.3	232.6	200.4

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	<a href="#">View Document</a>

**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:**

The institution has the structured system for creation and maintenance of infrastructure to facilitate

effective teaching - learning along with co-curricular and extracurricular activities to ensure overall development of the institution.

### **Academic and support facilities:**

#### **Laboratory:**

The Laboratories are regularly maintained by the Laboratory faculty In-charge and laboratory assistant along with menial staff. Steps are taken for location, upkeep and maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.). During the maintenance, if anything is required to be procured need to be raised through requisition.

- Records of equipment's are maintained in stock registers as per the process.
- Equipments / appliances are maintained properly and serviced periodically as required.
- Equipments are calibrated.
- Preventive maintenance is carried in-house by the department.
- Some of the maintenance activities are carried out through annual maintenance contract
- Overall record of repair and maintenance is kept.
- .Major Break down maintenance, if any is carried out by suppliers of the equipment or external agencies are deployed.
- Equipment's that are not in working condition and not repairable are written off from the stock.

#### **Classrooms:**

The classrooms of all departments are maintained at department level. Electrical maintenance, audio systems and LCD projectors are regularly monitored and maintained. Curtains are purchased as per requirement for maintaining adequate light.

Smart Classroom: The smart classes are maintained regularly by monitoring equipments, antivirus and the addition or deletion of software on the machines.

#### **Computers:**

The institute has adequate number of the computers with internet connections and utility softwares distributed in different locations. The softwares are renewed regularly as per the need. The Campus has an intranet for internal communication which is maintained by a committee who maintains the server, structured cabling & fiber optics and internet connection. They are assisted by laboratory assistants.

#### **Library:**

Library is monitored and maintained by the library committee. Pest control has been done in library regularly for maintain books safe from termites.

### **Physical and support facilities:**

The Sports facilities are maintained by the sports In-Charge and menial staff. Regular procurement of sports goods as per requirements is carried out through requirements received from In-Charge. The landscaping in the form of gardening is maintained by a gardener. This gardener is supported by assistants.



Electricity and physical facilities related maintenance done regularly as per requirements. Institution Security is looked after by a security In-Charge. He is assisted by security guards who work in two shifts round the clock.

Sweepers and a supervisor are also regularly allotted to maintain common area of the college. Separate toilet is made available for boys and girls as well as male and female staff and clean by clean twice in a day.

**Other knowledge resource:** The Institute library is enriched with books on developing analytical skills, soft skills management, business communication, entrepreneur skills, placement, higher study and competitive exam preparation books are available in a library. Newspapers are made available in the library to enrich the General Knowledge and Current Affairs of students.

NAAC

## 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:** 69.5

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

2017-18	2016-17	2015-16	2014-15	2013-14
1474	1512	1456	1403	1368

#### File Description

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

#### Document

[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:** 42.09

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

2017-18	2016-17	2015-16	2014-15	2013-14
876	986	845	864	798

#### 5.1.3 Number of capability enhancement and development schemes –

1. 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

**A. 7 or more of the above**

**B. Any 6 of the above**

**C. Any 5 of the above**

**D. Any 4 of the above**

**Response:** A. 7 or more of the above

File Description	Document
Details of capability enhancement and development schemes	<a href="#">View Document</a>

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

**Response:** 50.73

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

2017-18	2016-17	2015-16	2014-15	2013-14
1344	1152	957	852	946

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	<a href="#">View Document</a>

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

**Response:** 73.3

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

2017-18	2016-17	2015-16	2014-15	2013-14
1485	1672	1542	1453	1458

File Description	Document
Details of the students benefitted by VET	<a href="#">View Document</a>

### 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
Details of student grievances including sexual harassment and ragging cases	<a href="#">View Document</a>

## 5.2 Student Progression

### 5.2.1 Average percentage of placement of outgoing students during the last five years

**Response:** 60.5

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

2017-18	2016-17	2015-16	2014-15	2013-14
327	357	275	295	284

File Description	Document
Details of student placement during the last five years	<a href="#">View Document</a>

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

**Response:** 13.39

#### 5.2.2.1 Number of outgoing students progressing to higher education

**Response:** 73

File Description	Document
Details of student progression to higher education	<a href="#">View Document</a>

### 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:** 12.07

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

2017-18	2016-17	2015-16	2014-15	2013-14
3	5	6	8	7

5.2.3.2 Number of students who have appeared for the exams year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
50	64	46	62	34

File Description	Document
Number of students qualifying in state/ national/ international level examinations during the last five years	<a href="#">View Document</a>

### 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:** 0

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

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	0	0	0

File Description	Document
Number of awards/medals for outstanding performance in sports/cultural activities at national/international level during the last five years	<a href="#">View Document</a>

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

#### Response:

PEC is committed for the overall development of students by educating them in state of art infrastructure, promoting leadership and organizational skills through different initiatives taken at the institute level. A student council at the institute level is formed wherein students from all classes of society can represent through different bodies/committees.

#### Presence of Active Student Council:

The role of Student Council at the Institute level is to contribute for the overall development of

Students by set of Institute level activities. It acts as a bridge between Institute administration and students. Student Council has following composition:

- General Secretary
- Sports Secretary
- Cultural Secretary
- Ladies Representative
- Technical Secretary
- NSS Secretary
- All Class Representatives (CR's)

#### Role of Student Council:

The roles and responsibilities of Student Council mainly include smooth conduction and organization of events and maintaining academic ambience. Members of Student council are actively involved in planning and executing technical, social, techno-social, sports and cultural activities initiated by the institute. Student council coordinates functioning of departmental student associations in the institute and provides necessary inputs for overall development of students. Student council is actively engaged in grooming of newly admitted students and

guiding students as per their needs.

- **Anti-Ragging Committee:** College Anti-Ragging Committee is headed by Principal, HOD's of all departments, and one senior faculty from each department, Police officer of nearest police station and students members. The work of this committee is to prohibit ragging in the campus. Senior students are actively involved in making PEC campus ragging free.

- **NSS:** PEC has active NSS cell which in collaboration with JNTU, Kakinada organizes Blood donations camps, Village Visits and Camps, Celebration of National Festivals etc. 100+NSS volunteers are actively involved in the activities.
- **Students Association:** Every department has Student Association led by a group of 10-15 students. This group ensures involvement of all other students of department in organizing activities throughout the year.
- **Hostel and Mess Committee:** The Committee is formed to check the quality of the food and facilities provided in the hostel for the student residing in Hostel and availing Mess facility. Students are also the member of this committee.

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

**Response:** 12

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

2017-18	2016-17	2015-16	2014-15	2013-14
12	12	12	12	12

File Description	Document
Number of sports and cultural activities / competitions organised per year	<a href="#">View Document</a>

## 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:**

**The Alumni Association:**

The institute has an alumni association **Registration number: 6 of 2019, dated on 08.01.2019.** The association interfaces between the eminent alumni and the institute creating a strong network. Some of the students, who intend to become entrepreneurs, are placed with our aluminas who have already established themselves as successful entrepreneurs.

The functions of the association are :

- To bring the Alumni together to keep them in contact with the Alma-mater.
- To foster the relationship between Alumni and the present students.
- To get participation of Alumni in the developmental activities of the Institute.
- To develop Industry-Institute interaction through Alumni members.
- To improve placement opportunities for fellow alumni fresh graduates.

The management of the activities of the Association is entrusted and vested in accordance by the Governing Body. The Governing Body includes President, Secretary, Joint secretary, Treasurer and other members. The governing body shall meet at least twice in a year. The General Body meetings of the Alumni Association of PEC, Kandukur shall be held at least once in a year.

The Alumni of different batches come together and have meets of their batches. So far alumni association of PEC has successfully conducted such Alumni Meets at Kandukur, Hyderabad, Bangloor and Settle in U.S.A.

Following bodies have alumni representatives on various statutory bodies:

#### **Governing Bodies:**

**Internal Quality Assurance Cell (IQAC)** of the institute has alumni as a member who is involved in the development and application of quality benchmarks for various academic and administrative activities of the institution.

#### **Departmental Advisory committee:**

Alumni are part of the departmental advisory committee. They have active participation in the development activities of the department. They suggest changes in the course content and new courses to be introduced in various programmes.

#### **Industry Expert:**

Some of the alumni work as an industry expert. Alumni who are working in different organizations share their professional experience with the students enhancing teaching learning process. This helps students for a transition from campus to corporate.

#### **Internship & Entrepreneurship Awareness:**

Alumni from different domains help students to get internship at industry. The Entrepreneurship

Development Cell (EDC) of the institute organises lectures by alumni to inculcate entrepreneurship skills in the students. Alumni are invited as judges for various technical competitions organized at the institute.

#### **Student's employability enhancement & Placement:**

Alumni significantly contribute in the student placement activity. Some alumni act as linkages between the student and company to check that the requirements of the industry are satisfied before they are finally selected.



**Alumni Feedback:**

The institute takes regular feedback from alumni in various issues which help in overall development of the students. They share their professional experience and make students aware of recent technologies and tools used in the industry.

File Description	Document
Any additional information	<a href="#">View Document</a>

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

4 Lakhs - 5 Lakhs

3 Lakhs - 4 Lakhs

1 Lakh - 3 Lakhs

**Response:** ? 5 Lakhs

File Description	Document
Alumni association audited statements	<a href="#">View Document</a>

**5.4.3 Number of Alumni Association / Chapters meetings held during the last five years**
**Response:** 7
**5.4.3.1 Number of Alumni Association /Chapters meetings held year-wise during the last five years**

2017-18	2016-17	2015-16	2014-15	2013-14
2	2	1	1	1

File Description	Document
Number of Alumni Association / Chapters meetings conducted during the last five years	<a href="#">View Document</a>

## 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:

The Institution is run by AMMA Education society, purely on charity basis. Mrs.K.Dhana Lakshmi is the Sole Trustee and President of AMMA Education society, Kandukur. The President appoints the Advisory Committee, selecting seven people from different walks of life for a specified period. The advisory committee provides quality inputs and suggestions for the administration of the Institute during its annually meeting. Day to day decisions is taken at the Head of the Institute Level. At department level Head of the Department receive instructions from Head of the Institute for timely implementation of decisions of the management.

The Governing council of Institute is constituted as per AICTE guidelines from time to time. Two members from teaching faculty, one is of the Professor cadre and other of the Assistant Professor cadre is nominated on the Governing Council of the institute. Through this platform teachers suggest their views in the major administrative decisions of the management.

##### Management

The management of our institute plays important role to provide facilities like excellent infrastructure, facilities for healthy teaching and learning environment in tune with vision. The management periodically reviews the progress of the institute. Thus the management proactively encourages and motivates faculty and staff for realizing the vision of the institute.

##### Head of the institute (Principal)

Head of the institute provides academic leadership and tries to percolate the qualities of leadership among Head of the Departments and faculty by disseminating powers. Head of the institution is also appreciated for the execution of best practices of the institute.

##### Head of Department (HOD)

Heads of the department are supported by Head of the institute and management to carry out activities at department level in order to roll out the academic calendar of department in line with the academic calendar of the institution. They prepare budget requirement and forward it to the Head of the institute. Heads of the department are given freedom to distribute the responsibilities of organizing the activities to the faculty and staff of their department

##### Faculty

Leadership in faculty is groomed by giving them responsibility of various activities at department and

Institute level. Faculty extends their services as student mentors to guide and council students on academic and personal issues.

In-charges for committees

In-charges are empowered by Head of institute to form their committees and implement concern activities. Administrative officer, Office superintendent, Accountant, Training & Placement officer and Librarian are appointed for implementing concerned divisions.

Perspective Plan:

The Institute has a perspective plan for development for next five years in line with the vision and mission of the institute. It addresses the issues from the stake holder's perspective and takes steps to fulfill their requirements.

### **6.1.2 The institution practices decentralization and participative management**

**Response:**

The principal is given sufficient freedom by the management to function & fulfill the vision and mission of the institution.

The principal delegates the authority and responsibilities to the respective individual departments by thoroughly mentioning the institutional vision, mission and strategies needed to achieve under the duly laid institutional polices. Various heads of the departments divide all the department responsibilities equally among all the staff members. The responsibilities of all the faculty is duly known to everyone i.e., time table preparation & subject allotment, conduct internal examination within the department etc., and the same will be reminded to every faculty in every meeting. The head of the institution holds regular meetings with the teaching and non-teaching staff to discuss various issues relating to the institution and will take final decision. The heads of various departments monitor the respective departments. The participative decision making ensures participation of all the people concerned. The office administration of the institute is headed by the office administrative in-charge, senior clerks, junior clerks and other sub staff. The office administrative in-charge in consultation with the principal co-ordinates the day-to-day activities. The decentralization of the department and human resources personnel of the institution helps in improving the quality of education.

The following committees are in existence to decentralize the academic and administrative activities.

- Anti Ragging committee
- Student counseling and Grievance redressel Committee
- Disciplinary committee
- Research and development cell
- Training, placement & career guidance cell
- NSS committee
- Social welfare (BC/SC/ST) committee
- Sports committee

- Transportation committee
- Arts/cultural/literary hobby club
- Examinational/timetable/admissions
- Library advisory committee
- Website committee
- Alumni committee
- Internal quality assurance cell (IQAC)
- Entrepreneurship Committee
- Women Protection and sexual harassment committee
- Right to information cell
- Professional society's activities committee
- Electrical/computer networks maintenance committee
- Faculty, staff grievance
- Finance and Purchase Committee

#### Case study: Decentralization and Participative Management in the Institute

Academic Review: academic review committee is responsible for drafting, regulating and implementing different academic policies. It is meant for smooth & uniform conduction of academics throughout the year.

Composition: It is headed by the Principal and Heads of all the Departments are members.

Activities conducted:

- It prepares the academic calendar of the institute which is in line with University's academic calendar that includes curricular, co-curricular, extracurricular activities and monitors the teaching learning process.
- The committee reviews weekly attendance and syllabus coverage report of all departments. Ensures the smooth conduction of practicals and lectures.
- The HOD supervises all academic activities of department and ensures conduct of academics as per schedule/Time Table.

Outcome:

The meetings are conducted weekly at institute level and department level to discuss the academics related activities in the Institute. The institute encourages teachers, students, parents, employers, alumni, staff, class coordinators and class representatives to share their ideas, opinions, suggestions. The inputs received from various stakeholders of the institute are reviewed and those which are in line with our institute's Vision and Mission Statements will be considered for the decision making.

## 6.2 Strategy Development and Deployment

### 6.2.1 Perspective/Strategic plan and Deployment documents are available in the institution

**Response:**

## Perspective Plan:

The institute has designed its perspective plan for next five years as below.

- To obtain the accreditation from competent authorities like NAAC and NBA by 2020.
- To establish the Centre of excellence in the respective area by signing MOUs with reputed industries/Organizations.
- To prepare for listing in National Institutional Ranking Framework (NIRF) with high ranking.
- To strengthen the teaching learning process by procuring high quality sophisticated equipment's through funding from Government/Non-Government organizations for enhancing research and consultancy.
- To the institute will work for establishing and developing Incubation Centre to guide and support the prospective entrepreneurs.

## Strategic Plan for:

Title: A National level Technical Symposium PEC-ISKRA

## Objective of the Practice

- To provides students across the country with a top notch platform to display their technical prowess.
- To encourage generation of new thoughts and help these thoughts find expression.
- To provide an arena for the best engineering minds from all over the country to bring to life their innovative ideas and convert them into solutions.
- To invite students from all over the country to share our vision and be part of what ensures to carry forward the legacy of technical excellence.
- To provide a competitive platform to ascertain among the students and learn from others.

## Need Addressed and the Context

Considering the rapid pace of development of technology a need is felt to conduct a symposium to encourage participants to stay abreast to the most recent progress in their fields.

### **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 institute has a well structured organization which at its apex has the Governing body headed by the Chairman, The Head of Institute / Principal is the secretary of the Governing body. The Head of the Institute is supported by the Heads of Departments who are responsible for the administration at

Department level. The HODs are supported by the Laboratory In charges and faculty of the Department. The Laboratory assistants and menial staff support in the working of the Laboratories and other departmental units.

The Library is the third unit under the Head of the Institute. It is led by a Librarian and supported by Assistant Librarian, Clerks / attendants and menial staff.

The second unit under Head of the Institute is the Office. The Office is headed by Administrative Officer for administration activities supported by the OS, Clerks, typists, attendants and menial staff and Finance Officer heads the accounts section supported by the accountant, clerks, attendants and menial staff.

The Head of the Institute chairs other statutory bodies like CGC, special cell, standing committee, and sexual harassment, prohibition committee for women, anti-ragging committee and Grievance committee etc..

The Head of the Institute coordinates the Extracurricular and curricular activities supported by in charges for these activities. He also coordinates the Training and Placement activities supported by the Officer for Training and Placement for the pictorial representation of the organization please refers to the additional information uploaded.

### 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

- A. All 5 of the above
- B. Any 4 of the above
- C. Any 3 of the above
- D. Any 2 of the above

**Response:** A. All 5 of the above

File Description	Document
Details of implementation of e-governance in areas of operation Planning and Development,Administration etc	<a href="#">View Document</a>

### 6.2.4 Effectiveness of various bodies/cells/committees is evident through minutes of meetings and

**implementation of their resolutions****Response:**

The Principal conducts the meeting of following committee, the convenor of respective committee calls the meeting and maintains minutes of meeting (MoM). Every committee will be assigned with specific tasks pertaining to the requirements of conducting institute Events. Conveners of the various committees monitor the work execution.

All the conveners and members of respective committees are required to frame roles, responsibilities and functions of the committee. The minutes of various bodies and key committees are provided in additional information tab.

**6.3 Faculty Empowerment Strategies****6.3.1 The institution has effective welfare measures for teaching and non-teaching staff****Response:**

- Faculty members are supported for higher studies in the fields of specialization in reputed institutes and University.
- Various leaves available to teaching and non-teaching staff are Vacation Leave, Casual Leave and Earned Leave.
- Employee Provident Fund facility non-teaching staff.
- Free Transport for Teaching and Non-teaching staff
- Free medical facility for common ailment.
- Tuition fee concession for supporting staff children studying at PEC
- Group Life Insurance.
- Salary advances to the needy staff.
- Maternity leave for lady faculty members.
- Personal loans are also being arranged with corporate guarantee.
- Free uniforms for class IV employees.
- Accident insurance policy for drivers.

**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:** 21.58

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

2017-18	2016-17	2015-16	2014-15	2013-14
65	35	37	23	30

File Description	Document
Details of teachers provided with financial support to attend conferences,workshops etc during the last five years	<a href="#">View Document</a>

### 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:** 8.4

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

2017-18	2016-17	2015-16	2014-15	2013-14
13	7	5	6	11

File Description	Document
Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff	<a href="#">View Document</a>

### 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:** 66.09

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

2017-18	2016-17	2015-16	2014-15	2013-14
106	157	109	69	136



File Description	Document
Details of teachers attending professional development programs during the last five years	<a href="#">View Document</a>

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

#### Response:

The institution has its own performance appraisal mechanism to appraise the performance of staff. The performance appraisal system is implemented. The report of the performance appraisal of the faculty is submitted to the principal through the respective heads of the departments. Actual performance intimated to the faculty at the end of the academic year. Student feedback is taken on semester basis and the summaries of the feedback are given to the faculty members. The head of the department along with all the staff members discuss about the performance issues and implement the corrective measures.

## 6.4 Financial Management and Resource Mobilization

### 6.4.1 Institution conducts internal and external financial audits regularly

#### Response:

The accounts of the Institute are audited regularly as per the Government rules. In every financial year the Institute will conduct internal audit through departmental staff as well as external audit by the statutory Auditors. The internal financial accounting would be completed before 10th of every month considering all the previous month transactions. The external statutory auditors shall visit the institute office once in a year for vouching audit and submitting the final audit report. The report of external auditor of the last year along with audited Balance Sheet and Income & Expenditure account is enclosed. After approval, the financial accounts, documents could be used for all statutory purposes.

Internal audit – Internal staff appointed by the Management/principal.

External – CA (financial).

### 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: 0

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

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	0	0	0

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

#### Response:

The institute has very effective mechanism to monitor effective use of financial resources. Financial budget relating to functioning of the institution for the forthcoming academic year will be prepared by duly considering probable expenses and incomes. The principal of the Institute ensures that expenses are incurred for the purpose of implementing institutional plans. For any requirement for equipment or other major items, requisition is submitted to the principal by the respective head of the departments. Quotations invited and evaluated, comparative statement is prepared, suppliers are called for personal discussion and after comparing all aspects from various suppliers, orders are placed. This ensures that right equipment is purchased at most competitive price. Further accounts of the institution are subject to internal and external audit. Any discrepancy in internal audit will be brought to the notice of the principal. Further budget is prepared at the beginning of the year and actual expenses incurred during the year are compared with budget and any major variation is discussed by the principal with concerned person.

## 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:

The IQAC was established in the Year 2014, Prior to IQAC, academic Committee looks after quality sustaining activities.

#### The functions are as follows

- To help the institute in planning and monitoring, ensuring timely, efficient and progressive performance of academic, administrative and financial tasks.
- To increase the credibility of evaluation procedures.
- For research sharing and networking with other institutions.
- For the relevance and quality of academic & research programmes, equitable access to and affordability of academic programmes for various sections of society.
- For optimization and integration of modern methods of teaching and learning.
- To ensure the adequacy, maintenance and functioning of the support structure and services.
- To organize workshops, seminars on quality related themes and promotion of quality circles.
- For documentation of the various programmes / activities leading to quality improvement.
- To encourage students for organizing co-curricular activities.
- To organize the eco friendly activities in the Institute.

- To obtain feedback from all stake holders on curriculum, infrastructure facilities, performance of teachers and departments.
- To encourage the research activities in the college through R&D committee.
- For monitoring regular academic audits of the departments by academic audit committee.
- For promotion of the quality of education, counseling system and monitoring the progress of the students.

### **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:**

Institution provides the following training programmes for effective implementation of the quality assurance procedures and innovative processes adopted in the teaching and learning:

- Executing OBE Progressing the usage of ICT Arranging the trainings on pedagogy methods in teaching-learning.
- Organizing faculty enabled programs on latest technologies.
- Encouraging faculty for online certification Courses (NPTEL, MOOCS, SWAYAM Etc.). principal /Senior Faculty Members are provide guidance to the staff for effective implementation of the Quality assurance procedures.

The IQAC arranges training for the staff in some of the Quality assurance procedures by eminent personalities.

- Comprehensively framed institutional mechanism continuously reviews the teaching learning process.
- All the staff members are made to prepare lesson plans and should submit a copy to the heads of respective departments at least a week before the starting of semester.
- Staff members are mandatorily made to record the topics covered in each session.
- Classes in charges are appointed to monitor the attendance of the students.
- Class review committee meeting is conducted with respective class students, in charge, academic co-coordinator and HOD.
- Quality of teaching is been monitored through various sources like, written and oral feedback from the students, student's performance in internal and external examinations, lab manuals, course files, regular meetings with class representatives.

Evaluation procedure:

- Evaluation of a teacher will be based on the feedback relating to syllabus coverage, teaching skills, topic beyond the syllabus, subject knowledge etc.
- Head of the institution interacts with a few students of each class and takes the feedback.
- Self appraisals of faculty members are also taken at the end of a academic year.

- The academic audit will be done by IQAC every semester.
- The university every year by forming a fact finding committee will conduct academic audit.
- Apart from that external agency will do the quality audit with the parameters of NBA and NAAC.
- Based on the audit report of the audit committee, suitable guidelines are framed to improve the quality of activities, that helpful for the betterment of the teaching-learning process.

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

**Response:** 18.2

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

2017-18	2016-17	2015-16	2014-15	2013-14
22	20	17	16	16

File Description	Document
Number of quality initiatives by IQAC per year for promoting quality culture	<a href="#">View Document</a>

### 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

**A. Any 4 of the above**

**B. Any 3 of the above**

**C. Any 2 of the above**

**D. Any 1 of the above**

**Response:** C. Any 2 of the above

File Description	Document
Details of Quality assurance initiatives of the institution	<a href="#">View Document</a>

### 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:

PEC is an integrated campus, affiliated to JNTUK, Kakinada and approved by AICTE. We strive to continuously improve and sustain quality in all the aspects of education. The Governing Body, principal, HoDs, the teaching fraternity, administration, the various departments, students and other stake holders jointly contribute towards making the institution pursuing excellence. The following are the quality initiatives have been made by the institution.

#### Curricular Aspects

Outcome based approach has been implemented at PEC. Careful study of the content of the curriculum and syllabi of all the UG/PG programs offered by JNTUK, a set of PEOs, POs, PSOs and COs have been comprehensively framed for each program.

Few salient points are:

- Professional Ethics and Human Values and Environmental Studies courses are introduced as Mandatory Courses
- Open Elective Courses/CBCS
- NPTEL courses
- Internship

#### Teaching, Learning and Evaluation

- Number of PhD holders in the campus increased.
- Subject allotment is based on the competency matrix and experience of the teacher.
- Attainment of the COs, POs and PSOs are the recent additions.
- Faculty/Students are utilizing the NPTEL lectures and e-resources.
- Award and reward to the deserving students and faculty.
- Eminent senior faculty members are appointed to hold key positions.
- Reputed academicians and distinguished industry personnel visit the campus to enlighten the faculty and students.
- A systematic procedure has been evolved to review the overall performance of the departments

## 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:** 44

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

2017-18	2016-17	2015-16	2014-15	2013-14
10	9	11	6	8

#### File Description

#### Document

List of gender equity promotion programs organized by the institution

[View Document](#)

#### 7.1.2

##### 1. Institution shows gender sensitivity in providing facilities such as:

1. Safety and Security
2. Counselling
3. Common Room

#### Response:

The Institute organizes special programmers for gender sensitization. The institute is following an open and transparent system of selection purely based on merit for recruiting whether male or female. The staff selection is carried out through an open advertisement followed by presentation interview/test respectively. The institution has highly secured ladies hostel under the supervision and control of senior lady faculty as warden. The ladies hostel warden stays in the staff quarters and provides round the clock service to the students. It can be stated with due pride that in the institution the incidents of sexual harassment of women students are nil due to the discipline in the campus. The campus is proved to be very secure due to its well maintained security system. The management is very concerned about health and security and thus provided with a vehicle to attend any kind of emergency. A doctor is available between 5-7pm every day at ladies hostel. The Maternity leaves are provided as per institute rules. We organize workshops for stress free life (Yoga, Spiritual speeches) by the selected resource persons. Faculty counselors are always available to counsel the students. Separate common room for girls is available.

#### 7.1.3 Alternate Energy initiatives such as:

### 1. Percentage of annual power requirement of the Institution met by the renewable energy sources

**Response:** 33.49

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

Response: 72

7.1.3.2 Total annual power requirement (in KWH)

Response: 215

File Description	Document
Details of power requirement of the Institution met by renewable energy sources	<a href="#">View Document</a>

### 7.1.4 Percentage of annual lighting power requirements met through LED bulbs

**Response:** 61.54

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

Response: 40

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 65

File Description	Document
Details of lighting power requirements met through LED bulbs	<a href="#">View Document</a>

### 7.1.5 Waste Management steps including:

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

**Response:**

#### Solid waste management

- Transport arrangements for solid waste as well as composting arrangements to convert into manures are made available.

- Maintaining garbage bins at the prominent places for wastage.

### **Liquid waste management**

- Drinking water facility is given in each building of the campus.
- Wastage of drinking water is limited through proper monitoring.
- Waste water is properly drained out to maintain the greenery in the campus.
- Proper drainage system is arranged for all the buildings of the campus

### **E-waste management**

- The computer systems which are outdated are transferred to other Junior Colleges/Schools, battery damaged is properly recycled.
- The computer accessories are disposed through outside agencies.
- Awareness programmes are initiated on waste management.

### **7.1.6 Rain water harvesting structures and utilization in the campus**

#### **Response:**

#### **Rain Water harvesting**

Rainwater Harvesting is a simple technique of catching and holding rainwater where its falls. Either, we can store it in tanks or we can use it to recharge groundwater depending upon the situation. Our institute prefers second method, since campus has natural rainwater harvesting structure for all the buildings. The rainwater is accumulated in to the water harvesting pits in the campus and deposited to increase the underground water level. The roof water from building is directed to a lake through open conduits and is stored for long time. The surface water of the entire campus is directed towards the lake. Because of this the underground water level has increased and the bore wells and open wells are charged. With these initiatives even in summer, the institution maintains lush green campus with beautiful plants and trees and do not suffer from any water crises.

### **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:**

Institute makes every effort to keep the carbon footprint as small as possible. Some of the majors are as follows:

- Encouragement to car pooling for employees.
- Conservation of electricity.
- Use of renewable energy.
- Reuse of paper.
- Implementation of ERP to reduce the paper consumption.
- Use of energy efficient monitors for computers.
- Massive tree plantation.
- Reuse of waste water.
- Plantations are organized regularly to create clean and green campus.
- NSS coordinator organizes plantation in-campus and off-campus time to time.
- Efforts are made to minimize the usage of plastic.

**Energy conservation**

Creating awareness among the students and faculty on energy conservation by placing flexes and notice boards. Students and staff are instructed to switch off the fans and lights when ever not required. Providing good ventilation and sun lighting system in to the class by placing big windows. Using LED bulbs in the institute to save electricity.

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

**Response:** 3.38

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)

2017-18	2016-17	2015-16	2014-15	2013-14
8.11	7.25	7.12	6.98	6.22

File Description	Document
Details of expenditure on green initiatives and waste management during the last five years	<a href="#">View Document</a>

### 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:** C. At least 4 of the above

File Description	Document
Resources available in the institution for Divyangjan	<a href="#">View Document</a>

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

**Response:** 20

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

2017-18	2016-17	2015-16	2014-15	2013-14
6	4	3	3	4

File Description	Document
Number of Specific initiatives to address locational advantages and disadvantages	<a href="#">View Document</a>

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

**Response:** 20

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

2017-18	2016-17	2015-16	2014-15	2013-14
6	4	3	3	4

**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

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

**Response:** Yes

**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	<a href="#">View Document</a>

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

**Response:** Yes

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

**Response:** Yes

**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:** 64

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

2017-18	2016-17	2015-16	2014-15	2013-14
12	16	10	14	12

File Description	Document
List of activities conducted for promotion of universal values	<a href="#">View Document</a>

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

**Response:**

Institute organizes several national festivals and birth/death anniversaries of the great Indian personalities such as:

- Teacher's day.
- Women's day celebrations.
- Yoga day
- Independence day
- Energy conservation day
- Republic day
- Engineers day
- National science day
- Mathematic day
- National youth day
- Voters day
- Tele Communications day
- Environmental day
- World Photography day
- World Water day

The details of the activities of national festivals and birth / death anniversaries of the great Indian Personalities organized by the institute are made available at institutional website.

**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 by auditing all financial report by the government authorities, also the financial budget of the institution are approved by the governing body. All audited statements are available on the institute website. Service conditions like procedures for recruitment and promotional polices are made available on the website for information. Policy for deputation of faculty for higher studies is published on the institute website. Promotional policies for employees of PEC are published on the institute website and are strictly followed on merit.

All information regarding Rules and regulations for students and notices from time to time are displayed prominently and most of them are available on our website. The students are guided from time to time to follow the rules of discipline in the institute premises. All instruction sessions are conducted as scheduled. Co-Curricular and extracurricular activities are conducted beyond college hours. Our Institute provides a structured environment where students learn values of cooperation, hard work etc by working as organizer for almost all programs organized at institute level except annual day and fresher's welcome. Everybody is provided with an opportunity to showcase their skills, leadership and team spirit. At the start of semester, academic calendar is prepared by the college and by the departments which will be followed by all. Academic calendar reveals curriculum delivery and method of evaluation throughout the semester along with details of co curricular and extracurricular activities. Grievances regarding evaluation can be conveyed by a student to the concerned teacher or through the grievance redressal cell of the Department/Institution level. Academic improvement of the students are continuously monitored by allocating mentors, coordinators etc.

A committee is set up before taking any serious disciplinary action in which the student is given a chance to put forward his opinion after which a decision is finalized. Positive and negative motivations are provided to students to ensure discipline in the campus. Co-curricular activities, workshops and the expert lectures are arranged for faculty and students also get an exposure to industry culture and practices. Students and faculties are involved in these events to maintain transparency in the organization of such events and give equal opportunity to the participants and resource persons for these events. Care is taken that different faculty and students are selected each time for industrial trainings so that more faculty and students get exposure to industry environments and then contribute to teaching industry electives or offer industry projects implemented at the institute. It has prominently contributed to the growth of the department and the institution. For inculcating human values in students and faculty, courses are included in the curriculum, programs are organized at institute level for inculcating values like cleanliness, respect for gender, anti-ragging, antiterrorism, anti-child abuse, ethical development etc involving social interactions. Ragging is strictly prohibited. Faculty members are encouraged to take up various workshops, seminars for knowledge upgradation.

## 7.2 Best Practices

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

#### Response:

#### Title: Best practice -1

Honoring social responsibilities by the students

#### Objective

The institute not only engulfs for the development of student's academic progress but also for the real time implementation of the knowledge in which the student gained. This is the foremost objective of the institute for the wide enhancement of student encountering the society and applying their vast resource of knowledge in every aspect of need. Hence, this objective widens the scope of student's perceptions and intuition levels additionally.

#### Context

As the student steps in the institute, apart from transforming him as an engineer, he is carved and moulded for the societal benefits also. The institute becomes an outstanding platform for accomplishing his desires as well. Along with inter- communication with peer groups he identifies what are the pre-requisite provisions he should provide for the society. Hence, he incessantly works himself in these dimensions.

#### Practice

Student after his technological inventions, he directly meets the needy people and explains the practicality of the instruments or tools which he invented. Therefore, the instruments or tools are sold only for the main cost without taking service charges. People who utilized the instruments encouraged for further more developments, which provided a positive boost-up for the student. It is publicized in various newspapers that the institute and student gained an appreciation from Government of Andhra Pradesh.

#### Problems Encountered and Resources Required

The student is acquiring knowledge and providing his knowledge for the society in the form of his inventions. In this process he encountered various problems that, the making of tools and instruments are taking high costs in which, the student could not bear the expenditure. The amount of retention which the student obtains from the consultancy is very less. Therefore, if the Government or AICTE is ready to grant the necessary funds or resources required for the students, more benefits the society could gain. Therefore, student will have ample scope for the nurturing of their knowledge and initiating numerous services to the society as well.

#### Title: Best practice-2

Honoring Social Responsibility through NSS:

#### Objectives

Analyze and apply social work values, ethics and principles in relation to diverse contexts and at multiple system levels.

#### The Context

In view of vision of PEC and to inculcate social responsibility among students the institution is providing a platform for practicing social values and ethics by involving in social service and allied activities while imparting education and be able to promote social change.

#### The Practice

The PEC College NSS Unit undertakes periodical programs of Campus Clean and Green. Every year special camps are organized by NSS unit where the students are exposed to various programs interacting with the people of area. All kinds of programs like Tree plantation, yoga classes, Swacch Bharat and Digital India are organized and the students provide useful information to the people.

Blood Donation camps are conducted every year which are organized by College NSS unit.

The students are encouraged to take part in Mega skill development camp, Eye check camps, Orphanage Home visit.

#### Evidence of Success

- The students have satisfaction beyond any scale that they are able to serve the people of the adopted village.
- Certificate of Appreciation for conducting Blood Donation Camp.
- Participated in "Clean and Green Campus " organized by AICTE.

#### Problems Encountered and Resources Required

- Village People are not ready to discard their superstitious practices.

File Description	Document
Any additional information	<a href="#">View Document</a>

## 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:**

It is well understood from the vision and mission statements of PEC to emerge as a place of brilliance providing technological Knowledge and Research oriented exploration and making students to meet the global standards.

The various programs and activities that have been implemented to achieve the above are listed below:

Advanced Science Laboratory classes were introduced at the 1st year level to appreciate the importance of mathematics in engineering and its practical applications. Advanced Technology Laboratory classes were introduced at the 2nd year, 3rd year and 4th year levels. Laboratory Learning is enriched at the institutional level by incorporating with advanced add-on experiments and Hobby Projects. Students are encouraged to present technical seminars by collecting literature on advanced technology through power point presentations. Technology workshops are organized with active student participation. Internships and Industry-Oriented mini-projects are made part of their curriculum to impart practical knowledge in industrial processes. Intensive soft skill training programs and Business English Communication certifications have been conducted for all years of students.

As a result of the above initiatives PEC distinctiveness is reflected in the following mentioned achievements.

Distinctive features of the institution:

- PEC is ISO 9001: 2015 certified and found compliant with the Quality management system.
- Students Centric learning methods such as Experience Learning, Participative Learning and Problem solving methods are implemented.
- The institution follows strict implementation of curriculum planning and delivery.
- The college strictly adheres to the academic calendar as prescribed by university.
- The latest educational practices like outcome based education are implemented.
- The college has achieved 60% record in placements for eligible students.
- Students are encouraged to take up entrepreneurship by imparting training.
- Students are encouraged to participate in cultural and sports events.
- College conducts many extension activities through NSS.
- The Institution received recognition for its significant contribution.



## 5. CONCLUSION

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### Additional Information :

The Institute is well known for its dedicated faculty, staff and the state-of-the art infrastructure conducive to a healthy academic environment. The Institute is constantly striving to achieve higher levels of technical excellence. Evolving a socially relevant and yet internationally acceptable curriculum, implementing innovative and effective teaching methodologies and focusing on the wholesome development of the students are our concerns. Prakasam Engineering College is one of eleven colleges selected for applied Robotic centres (Robotics lab introduced by ARC-ECMC) in collaboration with Aachen university, Germany. Prakasam also has siemens lab in association with APSSDC .

### Concluding Remarks :

- The institution strives to achieve excellence by developing healthy liaison with all stakeholders to enrich teaching-learning process for producing employable engineers who will be instrumental in national development.
- Campus is vibrant with lot of all around activities throughout the year supported by professional bodies like ISTE, CSI, student associations and various cells such as Soft skill development cell and Entrepreneurship development cell.
- PEC has been keeping pace with the changing time by adopting blended teaching learning and expanding our knowledge base. This is due to pro active faculty members with a proper blend of young & experienced.
- Today faculty are upgrading their knowledge base through qualification upgradation.15% faculty members are possessing doctoral degree. We have been successful in maintaining gender diversity while simultaneously maintaining heterogeneous culture of the institute. Best of infrastructure has ensured excellent academic delivery.
- This all has been possible due to transparent good Governance and a very substantial participation by alumni who have proved their leadership in their respective profession. Institute's success has been acknowledged by society through various awards and recognition