

**IQAC-EXTERNAL PEER TEAM REPORT ON  
PERFORMANCE OF THE INSTITUTION FOR  
THE ACADEMIC YEAR 2020-21**

Submitted to



University Grants Commission (UGC)  
Bahadur Shah Zafar Marg, New Delhi

By  
External Peer Team of  
Internal Quality Assurance Cell (IQAC)



**PRASAD V. POTLURI SIDDHARTHA INSTITUTE OF TECHNOLOGY(Autonomous)**  
Accredited by N.B.A., NAAC A+  
An ISO 9001:2015 Certified Institute, Permanently Affiliated to JNTUK, KAKINADA  
(Sponsored by SAGTE)  
Kanuru, Vijayawada-520 007, Krishna District.  
Andhra Pradesh, India  
Phone number 0866-2581699

# EXTERNAL PEER TEAM REPORT ON PERFORMANCE OF THE INSTITUTION

## Members of External Peer Team:

Dr. A. Sarat Babu, Professor, Department of Chemical Engineering, NIT Warangal.  
Dr. A. Venu Gopal, Professor, Department of Mechanical Engineering, NIT Warangal.

### 1. Data of the Institution

- ❖ Name of the Institution: Prasad V Potluri Siddhartha Institute of Technology
- ❖ Name of the Principal: Dr. K. Sivaji Babu
- ❖ Does the institution function from own campus: Yes
- ❖ Phone No. / Alternate phone No.: 08662581699 / 2583037
- ❖ Mobile No.: 9490217899 / 9490958212
- ❖ Registered Email: principal@pvpsiddhartha.ac.in
  - Alternate Email: sivajibabu@pvpsiddhartha.ac.in
- ❖ Address: Devabhaktuni Ramalingeswara Rao Road  
City/Town: Kanuru, Penamaluru, Vijayawada  
State/UT: Andhra Pradesh  
Pin Code: 520 007
- ❖ Year of Establishment: 1998
- ❖ Whether private or government or University maintained: Private / Self Financing
- ❖ Autonomous Status:
  - a) UGC granted Autonomous Status in the year 2012 for 6 years and in extended 2018.
  - b) UGC – Autonomous status extended for a period of 6years up to 2024, Ref. No. F22-1/2017 (AC), dated 5.08.19.
- ❖ Type of Institution: Co-education/Men/Women: Co-education
- ❖ Location: Rural/Semi-urban/Urban: Rural
- ❖ Financial Status: Grants-in aid/ UGC 2f and 12 (B)/ Self-financing: UGC 2f and 12 (B)/ Self-financing

2. Name of the Affiliating Univ.: Jawaharlal Nehru Technological University Kakinada,  
Kakinada (JNTUK)

A. C. Babu  
11/12/21

A. C. Babu  
11.12.21

3. Website address: **www.pvpsiddhartha.ac.in**

- Web-link of the AQAR: (Previous Academic Year):

[https://www.pvpsiddhartha.ac.in/IQAC2019/docs/6156c9f670562\\_aqar\\_report.pdf](https://www.pvpsiddhartha.ac.in/IQAC2019/docs/6156c9f670562_aqar_report.pdf)

4. Academic Calendar prepared during the year and it is uploaded in the Institutional website:

<http://202.53.81.85/autonomus/notices/III&IVB.Tech-Academic-Calender-AY-20-21.pdf>

[http://202.53.81.85/autonomus/notices/3-yea\(PVP14\)rv-ac.pdf](http://202.53.81.85/autonomus/notices/3-yea(PVP14)rv-ac.pdf)

[http://202.53.81.85/autonomus/notices/2-1\(PVP14\)AC.pdf](http://202.53.81.85/autonomus/notices/2-1(PVP14)AC.pdf)

<http://202.53.81.85/autonomus/notices/IV-Year-Revised-ac.pdf>

[http://202.53.81.85/autonomus/notices/3-Yeae\(PVP19\)-rv-ac.pdf](http://202.53.81.85/autonomus/notices/3-Yeae(PVP19)-rv-ac.pdf)

[http://202.53.81.85/autonomus/notices/IM.Tech-IISem\(PVP17\)Revised-AC-2020-21.pdf](http://202.53.81.85/autonomus/notices/IM.Tech-IISem(PVP17)Revised-AC-2020-21.pdf)

[http://202.53.81.85/autonomus/notices/2-1\(PVP20\)AC-21-22.pdf](http://202.53.81.85/autonomus/notices/2-1(PVP20)AC-21-22.pdf)

[http://202.53.81.85/autonomus/notices/4-year-\(PVP14\).pdf](http://202.53.81.85/autonomus/notices/4-year-(PVP14).pdf)

5. Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1 <sup>st</sup>	B	2.32	2013	from: 2013 to: 2018
2 <sup>nd</sup>	A+	3.38	2019	from:2019 to: 2024

6. Date of Establishment of IQAC: **20/07/2012**

7. The list of Special Status conferred by Central / State Government-

UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Institution/ Department/Faculty	Scheme	Funding agency	Year of award with duration	Amount

8. Composition of IQAC is as per latest NAAC guidelines and uploaded latest notification of formation of IQAC

<http://www.pvpsiddhartha.ac.in/iqac1/members.pdf>

9. No. of IQAC meetings held during the year: **4**

<http://www.pvpsiddhartha.ac.in/iqac2020/meetings.html>

10. IQAC received funding from any of the funding agency to support its activities during the year? : **yes**

A. S. Bhat  
17/12/21

APL  
11.12.21

AICTE sanctioned 'PARAMARSH Scheme' with a total grant of Rs. 15.0 Lakhs to the only self-financing institute in the state of Andhra Pradesh.

### 11. Courses Offered

S No	Name of the Program	Sanctioned Strength (Regular)	Actual Strength
<b>UG (Engineering)</b>			
1	B.Tech in Civil Engineering	240	244
2	B.Tech in Computer Science & Engineering	600	669
3	B.Tech in Electronics and Communication Engineering	480	538
4	B.Tech in Electrical and Electronics Engineering	480	499
5	B.Tech in Information Technology	480	516
6	B.Tech in Mechanical Engineering	480	513
<b>UG TOTAL:</b>		<b>2760</b>	<b>2979</b>
1	M.Tech (Computer Science & Engineering)	36	0
2	M.Tech (Power System Control & Automation)	36	1
3	M.Tech (Machine Design)	36	2
4	M.Tech (Microwave and Communication Engineering)	36	5
5	MBA	120	125
<b>PG TOTAL</b>		<b>264</b>	<b>133</b>
<b>UG &amp; PG TOTAL:</b>		<b>3024</b>	<b>3112</b>

### 12. Faculty Strength

Sl. No	Branch	Prof	Asso. Prof	Sr. Asst. Prof	Asst. Prof	Total	Ph.D
1	Principal	1	0	0	0	1	1
2	Mech	5	5	-	22	32	12
3	ECE	3	7	4	14	28	7
4	EEE	3	5	2	17	27	8
5	IT	3	1	1	20	25	12
6	CSE	4	2	3	26	35	9
7	CIVIL	2	1	-	10	13	5
<b>Total (Engg)</b>		<b>20</b>	<b>21</b>	<b>10</b>	<b>109</b>	<b>160</b>	<b>53</b>

8	MBA	1	-	-	6	7	4
9	Freshman Engg. (Science & Humanities)	-	2	2	27	31	8
Total		21	23	12	142	198	65

### 13.Results

Programme Code	Programme Name	Number of students who appeared in the final year examinations	Number of students who passed in the final year examinations
A01	B.TECH (CE)	63	63
A02	B.TECH (EEE)	135	128
A03	B.TECH (ME)	145	142
A04	B.TECH (ECE)	139	139
A05	B.TECH (CSE)	132	129
A12	B.TECH (IT)	113	113
E00	MBA	61	61
D15	M.TECH (MEMD)	1	1

**PVP Siddhartha Institute of Technology** established in 1998, under the Siddhartha Academy of General & Technical Education, Vijayawada. The Institution attained Autonomous status in 2012. It is approved by AICTE and permanently affiliated to JNTUK, Kakinada. The Institution is ISO 9001-2015 certified and obtained A+ grade by NAAC. All the UG Programmes offered by the Institute are accredited by NBA and Outcome Based Education is adopted. The Institution is highly acclaimed for Quality Assurance.

14. Programmes/ courses focussed on employability/ entrepreneurship/ skill development during the Academic year (419 in number).  
Some of them are

Name of the Course	Course Code	Activities/Content with a direct bearing on Employability/ Entrepreneurship/ Skill development
Calculus and Linear Algebra	20BS1101	Skill Development
Problem Solving and Programming with Python	20ES1102	Employability/Skill Development
Problem Solving and Programming with Python Lab	20ES1152	Employability/Skill Development
Differential Equations and	20BS1201	Skill Development

Vector Calculus		
Mechanical Vibrations	ME7T4C	Skill development
Advanced Machining Processes	ME7T5B	Skill development
Simulation Lab	ME7L1	Employability & Skill development
Machine Dynamics Lab	ME7L2	Employability & Skill development
Mini Project	ME7L3	Skill development
Seminar	ME7L4	Skill development
Power Plant Engineering	ME8T1	Skill development
Non Destructive Evaluation	ME8T2A	Employability & Skill development
Automation in Manufacturing	ME8T2B	Skill development
Automobile Engineering	ME8T3B	Skill development
Mechatronics Lab	ME8L1	Employability & Skill development
Project Work	ME8L2	Employability & Entrepreneurship & Skill development
Dynamics of Machinery	ME5T1	Skill development
Metal Cutting and Machine Tools	ME5T2	Skill development
Heat Transfer	ME5T3	Skill development
Engineering Metrology	ME5T4	Skill development
Design of Machine Members – I	ME5T5	Skill development
CAD/ CAM	ME5T6	Skill development
Fuels and IC Engines Lab	ME5L1	Employability & Skill development
Machine Tools Lab	ME5L2	Employability & Skill development
CAD/CAM Lab	ME5L3	Employability & Skill development
Mechanical Measurements	ME6T1	Skill development
Design of Machine Members – II	ME6T2	Skill development
Operations Research	ME6T3	Entrepreneurship & Skill development
Refrigeration and	ME6T4	Skill development

Air Conditioning		
Industrial Engineering & Management	ME6T5	Entrepreneurship
Micro Controllers	FE	Skill development
MATLAB Programming and Applications	FE	Skill development
Renewable Energy Sources	FE	Skill development
Metrology and Instrumentation Lab	ME6L1	Employability & Skill development
Heat Transfer Lab	ME6L2	Employability & Skill development
Soft Skills Course	ME6L3	Employability & Skill development
Engineering Mathematics III (PDE, Complex Variables and Transform Techniques)	19BS1301	Skill development
Life Sciences for Engineers	19BS1303	Skill development
Design Thinking	19ES1302	Skill development
Engineering Mechanics	19ME3301	Skill development
Engineering Thermodynamics	19ME3302	Skill development
Material Science and Engineering	19ME3303	Skill development
Environmental Sciences	19MC1301	Entrepreneurship
Life Sciences for Engineers Lab	19BS1351	Skill development
Design Thinking Lab	19ES1352	Employability & Skill development
Computer Aided Machine Drawing	19ME3351	Skill development
Engineering Mathematics- IV (Numerical Methods, Probability and Statistics)	19BS1401	Skill development
AI Tools	19ES1401	Skill development

Strength of Materials	19ME3401	Skill development
Applied Thermodynamics	19ME3402	Skill development
Fluid Mechanics	19ME3403	Skill development
Manufacturing Processes	19ME3404	Skill development
Constitution of India	19MC1402	Skill development
AI Tools Lab	19ES1451	Employability & Skill development
Applied Thermodynamics Lab	19ME3451	Employability & Skill development
Fluid Mechanics Lab	19ME3452	Employability & Skill development
Communicative English I	20HS1101	Skill development
Calculus And Linear Algebra	20BS1101	Skill development
Chemistry Of Materials	20BS1105	Skill development
Problem Solving & Programming With Python	20ES1102	Employability & Skill development
Communicative English I Lab	20HS1151	Employability & Skill development
Chemistry Of Materials Lab	20BS1154	Employability & Skill development
Problem Solving & Programming With Python Lab	20ES1152	Employability & Skill development
Basic Workshop	20ES1153	Employability & Skill development
Life Sciences For Engineers	20MC1101	Skill development
Communicative English II	20HS1201	Skill development
Differential Equations And Vector Calculus	20BS1201	Skill development
Applied Physics	20BS1205	Skill development
Basic Electrical & Electronics Engineering	20ES1201	Skill development
Engineering	20ES1204	Skill development



Graphics		
Communicative English II Lab	20HS1251	Employability & Skill development
Applied Physics Lab	20BS1253	Employability & Skill development
Basic Electrical & Electronics Engineering Lab	20ES1251	Employability & Skill development
Mechanical Behaviour Of Materials	17MEMD1T2	Skill development
Advanced Mechanics of Solids	17MEMD1T1	Skill development
Mechanical Vibrations	17MEMD1T3	Skill development
Geometric Modelling	17MEMD1T4	Skill development
Rapid Prototyping	17MEMD1T5C	Skill development
Mechanics of Composite Materials	17MEMD1T6B	Skill development
Machine Dynamics Lab	17MEMD1L1	Employability & Skill development
Computer Aided Modelling Lab	17MEMD1L2	Employability & Skill development
Mechanism Design And Synthesis	17MEMD2T1	Skill development
Advanced Optimization Techniques	17MEMD2T2	Skill development
Finite Element Methods In Engineering	17MEMD2T3	Skill development
Advanced Robotics	17MEMD2T4	Skill development
Fracture Mechanics	17MEMD2T5A	Skill development
Concurrent Engineering	17MEMD2T6C	Skill development
ANALYSIS LAB	17MEMD2L1	Employability & Skill development
Term Paper/Mini Project	17MEMD2L2	Skill development
Pedagogy Training /Industrial Training	17MEMD3TR	Skill development
Dissertation-Part-A	17MEMD3DSA	Employability & Skill development

Dissertation-Part-B	17MEMD4DSB	Employability & Skill development
Engineering Mathematics III (PDE, Complex Variables and Transform Techniques)	19BS1301	Skill development
Life Sciences for Engineers	19BS1303	Skill development
Design Thinking	19ES1302	Skill development
Engineering Thermodynamics	19ME3302	Skill development
Material Science and Engineering	19ME3303	Skill development
Environmental Sciences	19MC1301	Entrepreneurship
Life Sciences for Engineers Lab	19BS1351	Skill development
Design Thinking Lab	19ES1352	Employability & Skill development
Engineering Mathematics- IV (Numerical Methods, Probability and Statistics)	19BS1401	Skill development
AI Tools	19ES1401	Skill development
Strength of Materials	19ME3401	Skill development
Applied Thermodynamics	19ME3402	Skill development
Fluid Mechanics	19ME3403	Skill development
Manufacturing Processes	19ME3404	Skill development
Constitution of India	19MC1402	Skill development
AI Tools Lab	19ES1451	Employability & Skill development
Applied Thermodynamics Lab	19ME3451	Employability & Skill development
Fluid Mechanics Lab	19ME3452	Employability & Skill development
Communicative English I	20HS1101	Skill development

Calculus And Linear Algebra	20BS1101	Skill development
Chemistry Of Materials	20BS1105	Skill development
Problem Solving & Programming With Python	20ES1102	Employability & Skill development
Problem Solving & Programming With Python Lab	20ES1152	Employability & Skill development
Basic Workshop	20ES1153	Employability & Skill development
Life Sciences For Engineers	20MC1101	Skill development
Communicative English II	20HS1201	Skill development
Differential Equations And Vector Calculus	20BS1201	Skill development
Applied Physics	20BS1205	Skill development
Communicative English I	20HS1101	Skill Development
Calculus and Linear Algebra	20BS1101	Employability
Engineering Physics	20BS1103	Employability
Basic Electrical & Electronics Engineering	20ES1101	Employability
Problem Solving Techniques	20ES1103	Employability
Communicative English I Lab	20HS1151	Skill Development
Engineering Physics Lab	20BS1152	Employability
Basic Electrical & Electronics Engineering Lab	20ES1151	Employability
Communicative English II	20HS1201	Skill Development
Engineering Chemistry	20BS1202	Employability
Probability and Statistics	20BS1204	Employability
Programming for	20ES1202	Employability

Problem Solving		
Communicative English II Lab	20HS1251	Skill Development

15. In National Institutional Ranking Framework (NIRF) India rankings 2021 Engineering category the college is within the band of 201-250. The college has secured PLATINUM rating in AICTE-CII Survey for the academic year 2019 and for the academic year 2020 the report is submitted for evaluation. The Annual Quality Assurance Report for the year 2019-2020 was submitted to NAAC in August 2021.

16. Significant contributions made by IQAC during the current year

- Took new initiatives to make on-line learning interesting during the COVID-19 lockdown period
- Motivated faculty to published a good no. of papers in Scopus Indexed journals and also present papers at various conferences organized by the reputed institutions and Faculty published 92 papers in international conferences 05 in national conferences , 189 in various international journals, 73 UGC/Scopus/SCI journals , 39 books/books chapters
- Motivated students to write GATE, GRE and CAT examinations
- Offered training to the students to secure jobs in MNCs during the campus placement drives
- Encouraged students to participate in co-curricular activities conducted by IETE, ISTE student forum and IEEE student chapter
- Special training classes were conducted for third and final year students on programming -languages and soft skills.
- Motivated Faculty members to register to various Certification courses.
- Faculty members participated in STTP/ FDP/Seminars/workshops organised by reputed institutes like IIT, NIT and NITTR etc.
- Success rate is improved.
- Number of Quality placements with high pay package is improved.
- Internships to students with stipend from good quality companies are improved.
- Quality publications are improved.
- Number of doctorates in the department is increased.
- Consumer club was started on 24<sup>th</sup> December 2020 to bring awareness to the students on Consumer rights, Consumer Protection acts and Consumer Forums.
- Faculty members utilized seed money of Rupees 6.35 Lakhs provided by SAGTE.
- Out of 82 Patents, 10 patents were filed, 60 Patents were published and 12 were granted.

17. Quality Initiatives undertaken and activities performed during the year 2020-21  
The various Quality initiatives by IQAC during the year for promoting quality culture are as follows:

- Implementation of Quality circles

- Participation in the revision of curriculum and introduction of Bridge courses.
- Effective mentoring to improve the Success rate and Quality placements with high pay package, Paid Internships from good quality companies.
- Motivated for increase in Quality publications and Number of doctorates
- Took new initiatives to make on-line learning interesting during the COVID-19 lockdown period

Plan of action chalked out by the departments and IQAC in the beginning of the Academic year towards Quality Enhancement and the outcome achieved by the end of the Academic year

Plan of Action	Achievements/Outcomes
Improve social responsibility in students	To encourage students to participate in extension activities like Sports, NCC, NSS and Cultural activities. Consumer club was started on 24th December 2020 to bring awareness to the students on Consumer rights, Consumer Protection acts and Consumer Forums.
Improve quality placements, higher studies and internships	Placement offers, internships with stipends and number of students opting for higher studies increased. Students got admissions into master's program in reputed institutes like IIMs and universities abroad. Created awareness on Availability of internships in various platforms like AICTE/Internshala, APSSDC etc. Invited resource persons from industries to address the student about internships Motivated students to write GATE, GRE and CAT examinations. Conducted hands on live project experience in the concerned industry. Trained students to secure jobs in MNCs during the campus placement drives Various Technical training sessions conducted from II year onwards and Reasoning and Aptitude classes are also conducted for placement purpose. Technical knowledge through hands on experience is focused. students are encouraged to participate in Hackathon like coding competitions Apart from this all students are encouraged to take part in platforms like Hacker Rank, Code chef, India bix and Geeks for Geeks to get improvement in critical thinking, problem solving skills and coding practice. Conducted training sessions like Smart Interview training and Edyst training (Java) to improve placement opportunities
Publish papers in reputed national & international journals	Faculty are encouraged to participate in FDPs Published a good no. of papers in Scopus Indexed journals and also presented papers at various conferences organized by the reputed institutions
Modernization of Laboratory &	Labs are modernized at par with modifications happened in the curriculum For example Power systems Lab is modernized under MODROBS scheme

equipment	
Development of e-learning resources	Providing e-learning platform to students so as to access content any time online. Students were able to get access to Lecture notes and material provided by the faculty and attend class work without physical presence through MOODLE, google classroom
Improve strong technical knowledge	Students have participated in various events and won prizes. students have done internships. Conducted training programs like PCB design, and LAB view.
Introduce teaching methods like flip classes, blended learning, Team teaching	Giving a provision for interactive Sessions. For students flip and blended classes were conducted and as a result there is an enhancement in student learning and improved performance in examinations.
Inculcate experiential learning in students and faculty	A number activities are conducted through the CourseEra, EduSkills, Coding Platforms for Skill up gradation of students and faculty. Encouraged students to participate internal and external events co-curricular activities conducted by IETE, ISTE student forum and IEEE student chapter etc.

18. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to Assess the functioning? **Yes** Date: March 2019

19. Institutional data is submitted to AISHE for Year: 2019-20, Date of Submission: 04-02-2020

#### 20. The Institution have Management Information System

The website maintains the profiles of students and staff. The student's records like internal and external examination marks, grades, daily attendance, previous question papers, credits details are maintained in the website. The fee particulars, examination schedules, timetables are also maintained in the website. The Course Structure, Syllabus, Academic Calendar is maintained in the website. It has Online Exam Fee Payment System for Autonomous Section. Also, website maintains the placement data at the end of every Academic Year, branch wise as well as year wise. Website maintains the AP Skill Development Program Activities and professional activities like CSI, ACM, NPTEL and Web-Mail facility to the entire Faculty in this institution. All the Service Rules for Teaching & Non-Teaching Staff are displayed on the website.

#### 21. Mentoring system

It is our policy to entertain the hopes and aspirations of students from different places. Many of our students are from rural areas and they lack proper guidance and motivation required for gaining technical knowledge and skill.

Mentoring of students thus, is an essential feature to render equitable service to all our students having varied background. Student-mentorship has the following aims:

- To enhance teacher-student contact hours
- To enhance students' academic performance and attendance
- To minimize student drop-out rates

- To identify and understand the status of slow learners and encourage advanced learners
- To render equitable service to students

Mentoring system is initiated in the institute. All faculty members act as mentors and are allotted 15-20 students each. They conduct meetings once in every 15 days and the student's performance is monitored through the Mentor Record, wherein the academic and co-curricular activities of the student are updated regularly during four years of study. The faculty provides counselling on academic, personal growth and career planning of the student. A progress report on academic performance and attendance is generated in every semester and is periodically sent to the parents. Critical cases will be discussed with HOD, parent and solution is arrived.

## **22. Student Council**

The Institute has student council and students actively get involved in various committees like IQAC, Women's Cell, Literary and Cultural Committee, Library Committee, Grievance Redressal cell, Canteen Committee, sports committee, placement cell, Disciplinary Anti ragging, SC/ST CELL and members of various professional society chapters like IEEE, IGS, ISTE, CSI, and ACM. Members of student council share their Ideas, interests, concerns, opinions and suggestions to the respective faculty coordinator, make appropriate recommendation to the concerned authorities, and thus do be part to take measures for better academic environment. The committee meets at least twice in each semester.

## **23. Training and Placement:**

The Training Placement officer works in perfect coordination with his team comprising the assistant Training and placement officer, soft skills, Reasoning Aptitude Trainers and a Faculty coordinator from each Department. Under the chairmanship of the Principal, Meetings are held at the beginning of the Academic year and the target is fixed. The mechanism reflects participation of all concerned leading to stakeholder satisfaction. The student of this Institution is qualitatively better, competent and confident to face the challenges of the Global- The Soft Skills, RA Trainers impart the Required Training, and Transfer the skill set and makes them ready to face the Recruitment Drives. Students have been successfully placed in reputed Industries. The feedback from the employers regarding the performance of the Selected Students is Encouraging.

## **24. Quality improvement strategies adopted by the institution for each of the following**

### **Curriculum Development:**

Curriculum is framed by following the model curriculum given by the statutory bodies like AICTE, APSCHE and the curriculum of IITs, NITs and some of the reputed autonomous institutions are taken into consideration according to industry needs. Stakeholders' feedback is taken for curriculum design. BOS members from Industry, Academia, Alumni and parents, review it. The curriculum is approved by BOS and finally ratified by the Academic Council.

### Teaching and Learning:

Teaching and learning is strengthened by adopting course delivery methods like ICT and active teaching learning methods like Flip class, Role play etc. Learning Management System like MOODLE is being used for effective teaching learning. Some of the courses have been offered through MOOCs. Subjects.

### Autonomous

- All internal and external Question papers are set according to Bloom's Taxonomy covering all course outcomes. For external examination setting of question papers and evaluation of answer, scripts are done by outside members.
- Cognitive levels and course outcomes of each question of the internal examinations are specified in the question paper (i.e. Blooms taxonomy is considered)
- Two internal continuous assessment exams are conducted to evaluate the students in every semester as per the norms of the Institute.

### Research and Development:

- Research groups have been formed and meetings are conducted regularly to share ideas on the latest trends in research.
- Research facilities of the department are being improved by procuring additional equipment such as EDM, 3D Printer, Ball Mill, Ultra Sonicator, and FFT Analyser.
- Seed Money is provided to the faculty members to carry out their research with the emphasis on publishing Scopus journals.

### Honors and recognitions received by teachers

(received awards, recognition, fellowships at State, National, International level from Government, recognized bodies)

Name of the teacher awarded national/ international fellowship/financial support	Name of the Award/Fellowship	Month and Year of Award	Awarding Agency
Mrs. D. Hareesha	Fellowship	Jun-21	Capricot Technologies Private Limited, New Delhi

- Institution to various departments of the institution and grant received is Rs.17,80,401
- 13 PhDs were awarded in the academic year 2020-21.
- An amount of Rs. 7,52,185.00 was generated through Consultancy during the year 2020-21.
- A number of quality research papers have been published in SCI/SCOPUS journals along with a substantial number of International and National conference papers. In addition, a number of book chapters and two books (one in EEE and the other in MED) are also published. Overall there is a significant improvement in the quantity and quality of Research publications.
- Patents published/awarded There is a significant improvement in the number of patents published/awarded. This is due to the liberal financial support for filing patents and incentives for their award given by the Management.



- 656 Details of collaborative activities for research, faculty exchange, student exchange, internship, on-the-job training, project work, etc. during the year
- Institution Innovation Council (IIC) is established under the MHRD's Innovation Cell and college achieved 4.5 star ranking for the activities organized with respect to Innovations, IPRs, Start-ups and Entrepreneurship.

### **Entrepreneurship Development Cell & Institution Innovation Council (IIC)**

#### **List of Events/Activities Organized/Conducted/attended under EDC & IIC July 2019 - June 2020**

The EDC and IIC have been quite active and conducted a number of training programs and value added workshops. Under the aegis of EDC and IIC a total number of 31 different events have been organized for the benefit of students.

Good number of Workshops/Seminars conducted on Intellectual Property Rights (IPR), Research Methodology, Entrepreneurship and Skill Development

#### **Library, ICT and Physical Infrastructure / Instrumentation:**

- There are Established Systems for Maintaining and Utilizing facilities in the Library. The Central Library has adopted Open Access System. All the books are arranged classified as per Dewey decimal classification 21st edition which is helpful to the users to locate his / her desired book. Name of the LMS Software: LIBSYS10 LMS, Nature of automation Fully, Version: 10, Year of automation: 12-02-2018. Central Library is Fully Automated using LIBSYS10 LMS (Library Management Software). It is Web Centric having support for Twenty Thousand Unique Records with five Concurrent housekeeping clients along with twenty five concurrent users for web OPAC (On – line Public Accessing Catalogue) on server Under Windows 2012 platform. This Software is supporting Barcode system for issue & return of books. The Library is an Institutional member of DELNET. It provides web access to 1,21,08,793 records of Books, Periodicals, Thesis, Dissertations. It is connected with 2196 libraries. Access to the e – resources / NPTEL / SONET video lectures. The Library has a collection of 54010 volumes and 11149 Titles on various subjects and more than 2553 reference books covering Biographies, Dictionaries, Encyclopaedias, and Yearbooks etc. It subscribes to 102 National, 08 International (print) Journals and e – Journals (18222). 63 Volumes of Pearson e - Books purchased perpetual based. (Life time usage) worth of Rs.2,80,729.00, 5700 volumes of packt e – Books, 862 Courses and 3122 videos were purchased worth of Rs.1,16,820/- an annually based (Subscription period is one year) i.e. September 12th 2021 to September 11th 2022. The Central Library organizes Book Exhibitions / Book Display regularly by inviting various reputed publishers nationwide. The Librarian receives book indent regularly from various HOD'S for their departmental needs. Purchase orders will be placed after the Indent is approved by the Head of the Institution. The Central Library holds more than 120 books in its rare book collection. It includes the Documents on Indian Constitution, Ancient Indian Culture, Various Cultures, Religions and subjects like Astronomy, Economy, Literature, Science and Technology etc. The Central Library has a collection of Dictionaries, Encyclopedias, Hand Books, Books on World War History, Science, Engineering, Technology, History of world-famous scientists, Books on

Scientific Inventions, Biographies of National Leaders. The Central Library holds books published by the Publication Division, Govt. of India. Our Institution is Life Member to The Institute of Engineers, Kolkata. Our Institutional Library is member of N-List & NDLI (National Digital Library of India). Central Library has Wi-Fi facility.

- E-content was developed by teachers such as SWAYAM, other MOOCs platform NPTEL/NMEICT/ and Government initiatives & institutional (Learning Management System (LMS) etc.
- Facility for e-content

Name of the Teacher	Name of the module developed	Platform on which module has been developed	Date of launching the e-content	Link to the relevant document and facility available in the Department	List of the e-content development facilities available
Mr.T.Prasanna Kumar	DTP	Google Class room	17.08.2020	<a href="http://meet.google.com/cpm-mtkb-gan">http://meet.google.com/cpm-mtkb-gan</a>	3
Dr.K.Ramesh	EM	Google Class room	17.08.2020	<a href="https://meet.google.com/lookup/au34h6ursx?authuser=0&amp;hs=179">https://meet.google.com/lookup/au34h6ursx?authuser=0&amp;hs=179</a>	3
Dr.A.Adilakshmi	FM	Google Class room	17.08.2020	<a href="https://meet.google.com/lookup/hridqyh6sr?authuser=0&amp;hs=179">https://meet.google.com/lookup/hridqyh6sr?authuser=0&amp;hs=179</a>	3
Mr.P.S.V.Barath	Surveying	Google Class room	17.08.2020	<a href="https://meet.google.com/lookup/fak2g3l6jz">https://meet.google.com/lookup/fak2g3l6jz</a>	3
Mr.K.Venkat Rao	LCS	Google Class Room	July 2020	<a href="https://drive.google.com/file/d/1EKURJJVD4nO4-0O9VkBfzVWGf9XUalW/view">https://drive.google.com/file/d/1EKURJJVD4nO4-0O9VkBfzVWGf9XUalW/view</a>	1.PPT
					2. NPTEL videos
					3. LCD
					4. Tablet
					5. CDs
Mr. A.Chandra Sekhar Babu	Engineering Mathematics-III	Google class	02.11.2020	<a href="http://202.53.81.121/course/index.php?categoryid=66">http://202.53.81.121/course/index.php?categoryid=66</a>	Audio-visual centre , Mixing equipment's and software for editing
Mr. Kiran Kumar K					
Dr. G Lalitha Kumari	AI Tools	Google class	02.11.2020	<a href="http://202.53.81.121/course/index.php?categoryid=66">http://202.53.81.121/course/index.php?categoryid=66</a>	Audio-visual centre , Mixing equipment's and software for editing
Mrs. M. Radha Devi	Design Thinking	Google class	02.11.2020	<a href="http://202.53.81.121/course/index.php?categoryid=66">http://202.53.81.121/course/index.php?categoryid=66</a>	Audio-visual centre , Mixing equipment's and software for editing
Mr. B. Bala Sai Babu	Electrical Circuit Analysis	Google class	02.11.2020	<a href="http://202.53.81.121/course/index.php?categoryid=66">http://202.53.81.121/course/index.php?categoryid=66</a>	Audio-visual centre , Mixing equipment's and software for editing
Mr. M. Hemanth Sai					
Mr. Patchala Karunakar	Electronic Devices & Amplifier Circuits	Google class	02.11.2020	<a href="http://202.53.81.121/course/index.php?categoryid=66">http://202.53.81.121/course/index.php?categoryid=66</a>	Audio-visual centre , Mixing equipment's and software for editing
Dr. R.Swathi					
Mrs. J. Hema Latha	Signals & Systems	Google class	02.11.2020	<a href="http://202.53.81.121/course/index.php?categoryid=66">http://202.53.81.121/course/index.php?categoryid=66</a>	Audio-visual centre Mixing equipment's

- Fifty percent of the course fee is reimbursed by the management for obtaining AAA/AA rating in NPTEL courses
- Fifty percent membership fee is reimbursed by the management in professional bodies.
- Free transport facility to faculty is being provided.
- Incentives for quality research publications are resulting in substantial improvement in quality and quantity of publications.
- Merit scholarships, Gold medals, Best project and Innovative project are supported by management.
- Regular revision of curriculum with CBCS is also implemented.

**Concluding Remarks:**

- Obtaining NAAC A+ accreditation for 5 years is a significant achievement.
- Management support for quality publications and patents is observed to result in significant growth in quality and quantity of publications as well as publishing and grant of patents.
- It is observed that all the necessary systems and facilities are in place, and the faculty are given freedom to excel in Academic, Administrative and Research and Consultancy areas.
- The curriculum is being revised by following all the guidelines stipulated by AICTE and APSCHE. Minor and Honors programs have been initiated for the first time.
- Departments have established quality circles in deficient areas to improve the performance.
- There is a consistent and concerted effort by every stakeholder of the Institute to improve quality in all the key performance indicators.
- Allocating regular PhD fellowships to the institute may improve research output.

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