P.A. COLLEGE OF ENGINEERING

Affiliated to VTU | Approved by AICTE Recognized by Govt. of Karnataka

ANNUAL REPORT

2021-22

Near Mangalore University, Konaje, Mangaluru - 574153

PRINCIPAL
P.A. COLLEGE OF ENGINEERING
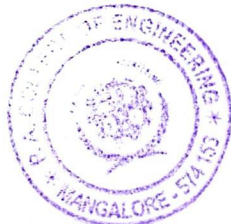MANGALORE - 574 153

Table of Contents

INTRODUCTION

P.A. College of Engineering (PACE) was established in the year 2000 under the aegis of PAET, with an aim to provide a career-oriented professional education and to produce technically competent engineers with moral and ethical values. The institution is dedicated to promote an effective learning environment that encourages excellence and diversity in thoughts and endeavour.

PACE is affiliated to the Visvesvaraya Technological University (VTU), Belgaum and is approved by the All India Council for Technical Education (AICTE), New Delhi, recognized by the Government of Karnataka.

P.A. College of Engineering which instituted with a total intake of 240 students- 60 students each in four disciplines of engineering, has now grown in leaps and bounds. Over the years, new undergraduate programs, postgraduate programmes in various branches of engineering, MBA courses and Research programmes were added to meet the growing demand in the industry and the intake has been increased in Engineering and management courses. Teaching and research facilities at PACE are already among the best and continues to improve. Well qualified faculty with international reputation, a well-developed campus and outstanding infrastructure makes PACE much sought after for technical and management education. The institution regularly invites experts from industry and academia for interaction with students. While helping the students to reach their full potential, PACE also offers innumerable opportunities for extracurricular activities that match nearly every interest.

PACE is located in Mangalore, a city which has established itself as the knowledge hub of South India and has become a haven for advanced study. Beautiful environment and salubrious climate make Mangalore a dream destination for learning. Mangalore is well connected to the rest of the country by air, rail and road. Nestled amidst lush greenery, P. A. College of Engineering celebrates the serene splendour of pristine nature. Spread across 60 acres, the college offers the perfect setting for an academic environment.

VISION AND MISSION

Vision

PACE is envisaged as a centre of evolution for excellence in Technological, Management and Research Education. The institution aspires to spread universal knowledge through villages and cities enabling expansion of human resources.

Mission

- To provide career-oriented professional education to produce technically competent engineers and managers with moral and ethical values.

- To foster and promote an effective learning environment in the campus to be recognized as place that encourages excellence and diversity in thoughts and endeavour.

- To provide research and intellectual resources to address problems facing the industry and the society while advancing the scopes of multidisciplinary applications.
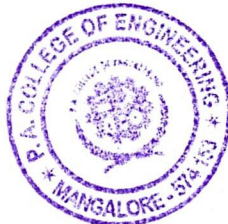
PRINCIPAL
P. A. COLLEGE OF ENGINEERING
MANGALORE - 574 153

GOVERNING COUNCIL

The Governing Council of P. A. College of Engineering is headed by the Managing Trustee of P. A. Educational Trust. The decisions of the Governing Council are executed through the Principal. The financial matters of the institution are monitored by the Director (Finance) under the aegis of Managing Trustee, through the internal auditor and the supporting staff. The academic body comprising of heads of various departments, teaching and non-teaching faculty members are under the supervision of the Principal. The supporting departments like Examinations, Library, Student Welfare Office, Office of the Dean (Student Affairs) and Physical Education are also under the supervision of the Principal. The Vice Principal support the Principal in academic and associate matters. The daily affairs of the various departments like Administrative Office under Office Superintendent, the HR Office under HR Officer, Transportation & Security managed by AGM, Purchase, Stores and Canteen/Mess supervised by Purchase Manager, Construction and Maintenance under Site Engineer are managed by the Principal under the guidance of the Managing Trustee.

.No	Name	Designation	Profession
1	Mr. Abdulla Ibrahim	Managing Trustee	Service
2	Dr. Abdul Rahiman M	Member	Academician
3	Mr. Ahmed Kutty	Member	Director Finance
4	Mr. M P Ahammed	Member	Industrialist

PRINCIPAL
P. A. COLLEGE OF ENGINEERING
MANGALORE - 574 153

5	Dr. Sufiyan Baig	Member	Academician
6	Mr. Zubair Ibrahim	Member	Service
7	Mr. Ameen Ibrahim	Member	Service
8	Dr. Abdul Sharief	Member	Academician
9	Director of Technical Education	Member	Director DTE
10	Director of SWRO AICTE	Member	Director SWRO
11	Mr. Aseef Mohammed	Member	Advocate
12	Dr. Sharmila Kumari	Member	Vice Principal
13	Dr. Ramis M. K.	Member Secretary	Principal

PROGRAMMES

B.E. - UG Course Details

Sl No	Courses	Intake	Accreditation Status
01	B.E. COMPUTER SCIENCE & ENGINEERING	120	NBA Accredited
02	B.E. BIO TECHNOLOGY	30	--
03	B.E. CIVIL ENGINEERING	60	
04	B.E. ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING	30	--
05	B.E. ELECTRICAL AND ELECTRONICS ENGINEERING	30	--
06	B.E. ELECTRONICS AND COMMUNACATIONS ENGINEERING	60	--
07	B.E. MECHINICAL ENGINEERING	60	NBA Accredited

Post Graduate: MBA

Sl No	Courses	Intake	Accreditation Status
01	MBA	60	--

Ph.D

P.A. College of Engineering has eight VTU recognized research centers offering Ph.D. and M.Sc. (Engg.) by Research courses. Various faculty members are available as research guides in various departments to supervise the research scholars on recent advances in

PRINCIPAL
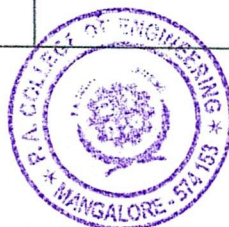P. A. COLLEGE OF ENGINEERING
MANGALORE - 574 153

various fields.

ADMISSIONS

Programme name	Number of Students admitted
B.E. COMPUTER SCIENCE & ENGINEERING	122
B.E. BIO TECHNOLOGY	13
B.E. CIVIL ENGINEERING	13
B.E. ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING	32
B.E. ELECTRONICS AND COMMUNACATIONS ENGINEERING	46
B.E. MECHINICAL ENGINEERING	24
MASTER OF BUSINESS ADMINISTRATION	50

ACTIVITIES OF 2021-2022

1. As part of our efforts to minimize educational gaps, the college offered seven additional certification courses, enrolling a total of 603 students. Upon successfully completing their evaluations, each student received a certificate.

2. The teaching faculties were able to receive Grants up to 16, 50,000/- in the academic year.

Particulars	Name of the Principal Investigator	Name of the Funding Agency	Amount
Photo-protective and Water-repellant Nano-finished Cloth and Film from Fish Waste and	**Dr. Krishna Prasad**	VGST (CISEE)	10 lakhs

PRINCIPAL
P. A. COLLEGE OF ENGINEERING
MANGALORE - 574 153

Weed Leaf			
Application of Nanomaterial's for Cost Effective Thermal Management System and Pollution Control	**Dr. Asif Afzal** **Co-principal** **Investigator: Dr.** **Abdul Razak**	VTU	6.5 lakhs

2. In the year 2022 the faculties of the college has published a total of 53 articles and 8 conference proceedings/book chapters.

3. The institute has organized approximately 8 extension and outreach activities in collaboration with the National Service Scheme (NSS) and the Youth Red Cross (YRC) units of the college. These initiatives aimed to engage students in community service, promote social responsibility, and address local community needs. Through these activities, students had the opportunity to apply their knowledge and skills in real-world settings, fostering a sense of civic duty and enhancing their personal and professional development.

4. During the academic year 2021-2022, the institute established two key Memorandums of Understanding (MOUs) to strengthen collaboration, drive innovation, and broaden opportunities for both students and faculty. The first MOU was with Novigo Solutions, targeting improvements in training and placement processes. The second MOU was with Abone Surgicals Pvt. Ltd. Bangalore, focusing on providing valuable internships, seminars, and workshops..

5. The institute hosted a total of 12 workshops and seminars during the academic year, covering a range of topics. These included 8 sessions on Research Methodology, 1 on Intellectual Property Rights, and 3 on Entrepreneurship.

6. Each department is equipped with specialized research facilities tailored to support the needs of research scholars working in their respective domains. In addition, the institute boasts 8 dedicated research centers, each designed to foster advanced research and innovation across various disciplines. These facilities and centers collectively enhance our research capabilities and contribute to the academic and professional growth of our scholars.

PRINCIPAL
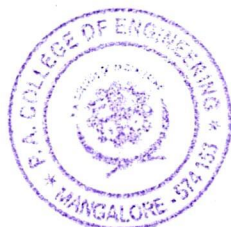P. A. COLLEGE OF ENGINEERING
MANGALORE - 574 153

7. During the academic year 2021-2022, our institution successfully facilitated financial support for 828 students through various scholarship programs. The total scholarship amount distributed was significant, with funding coming from both government and institutional sources.

    - Government Scholarships: A substantial portion of the scholarships, amounting to ₹1,14,75,000, was provided through the National Scholarship Portal (NSP) and State Scholarship Portal (SSP). These platforms offer a range of scholarships funded by government bodies to support students from diverse backgrounds and ensure equitable access to education.

    - Institutional Scholarships: In addition, the institution itself awarded ₹76,80,861 in scholarships. These institutional scholarships are designed to support students based on merit, need, and various other criteria set by the institution. This funding helps to alleviate financial burdens and encourages academic excellence among our students.

    Together, these scholarship programs play a crucial role in enabling students to pursue their education with greater financial ease and focus on their academic and personal growth.

8. The institute organized several special sessions aimed at student development during the academic year:

    - **Resume Building**: Held on March 2, 2022, this session aimed to help students develop effective resumes, enhancing their job application skills and improving their career prospects.

    - **RPA using UiPath Technology**: Conducted on December 17, 2021, this session introduced students to Robotic Process Automation (RPA) with UiPath technology, providing practical knowledge and skills in automation tools.

    - **Health and Fitness Program**: Organized on March 17, 2022, this program was designed to promote physical well-being and encourage students to maintain a healthy lifestyle.
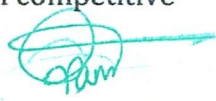
PRINCIPAL
P. A. COLLEGE OF ENGINEERING
MANGALORE - 574 153

- **Webinar on Leadership Skills**: Held on March 21, 2022, this webinar focused on cultivating leadership skills, preparing students for future roles and responsibilities in their careers and personal lives.

These sessions were specifically aimed at fostering the overall development of students, equipping them with essential skills, knowledge, and wellness strategies to support their academic and professional growth.

9. During the academic year 2021-2022, the institution engaged 693 students in specialized programs tailored to enhance their preparation for competitive examinations and offer career counseling. These initiatives were meticulously designed to provide students with comprehensive guidance and effective strategies for excelling in competitive exams. Additionally, the career counseling sessions offered personalized insights and actionable advice to help students chart their professional paths.

10. In the academic year 2021-2022, the institution's Training and Placement Cell played a crucial role in helping students transition from academia to the professional world. Out of the 365 students who sought placement assistance, 274 successfully secured positions with various employers.

11.   During the academic year 2021-2022, six students achieved notable success by qualifying for prestigious state and national-level exams. Specifically, five students excelled in the IELTS (International English Language Testing System), a key exam for those seeking to study or work in English-speaking countries. Additionally, one student successfully passed the GATE (Graduate Aptitude Test in Engineering), which is a crucial exam for those pursuing advanced studies or seeking employment in engineering and technology sectors.

12. During the academic year 2021-2022, eight students were awarded medals and accolades for their outstanding performance in sports. These students excelled in various events at the university, state, and national levels, demonstrating their exceptional athletic abilities and dedication.

13. In the academic year 2021-2022, the college hosted 35 sports and cultural programs, offering students numerous opportunities to actively participate and demonstrate their talents. These events served as a platform for students to engage in competitive

PRINCIPAL
P. A. COLLEGE OF ENGINEERING
MANGALORE - 574 153

activities and celebrate their achievements, while also contributing to the development of a vibrant and dynamic campus culture.

14. During the academic year 2021-2022, the registered alumni association, PACENEXT, made significant contributions under the leadership of its President, Nishanth Narayanan.

15. During the academic year 2021-2022, financial support totalling ₹1.64 lakhs was awarded to 30 teachers. This funding facilitated their attendance at various conferences, workshops, and seminars, contributing to their professional growth and academic development.

16. During the academic year 2021-2022, 51 teaching staff engaged in Faculty Development Programs (FDP) and other professional development activities, while 20 non-teaching staff participated in administrative training programs, enhancing their skills and expertise.

17. Throughout the academic year, faculty and students actively participated in planting saplings across the campus, guided by the Environment Cell. This ongoing effort aimed to significantly increase the green cover on campus, promoting environmental sustainability and contributing to a healthier, more eco-friendly campus environment.

18. During the academic year 2021-2022, the DHI ERP system, implemented in 2018, continued to be a vital asset for our college. It played a key role in streamlining administrative and academic processes, significantly enhancing our operational efficiency and supporting our ongoing institutional objectives.

FACULTY DATA

List of full time teachers during the academic year 2021-2022 is as given below:

Sl. No.	Faculty Name	Designation	Department
1.	Dr. Krishna Prasad N.	Professor	Biotechnology
2.	Dr. Ronald Valder	Associate Professor	Biotechnology
3.	Mrs. Shainy Mathew	Assistant Professor	Biotechnology
4.	Ms. Yashaswini B. M.	Assistant Professor	Biotechnology
5.	Dr. Arunodaya H. S.	Assistant Professor	Biotechnology
6.	Mrs. Laila Jaseela	Assistant Professor	Biotechnology
7.	Dr. Sharmila Kumari M.	Professor	Computer Science

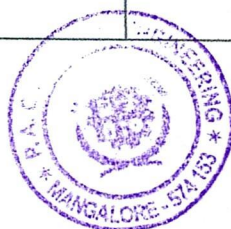| 8.	Dr. Sayed Abdulhayan	Associate Professor	Computer Science
9.	Mr. Javad Baig	Assistant Professor	Computer Science
10.	Mr. Mohammed Hafeez M. K.	Assistant Professor	Computer Science
11.	Mr. Mohammed Asif Raibag	Assistant Professor	Computer Science
12.	Mrs. Sakeena	Assistant Professor	Computer Science
13.	Mr. Abdul Majeed K. M.	Assistant Professor	Computer Science
14.	Mrs. Shamna N. V.	Assistant Professor	Computer Science
15.	Mr. Habeeb Ur Rehman P. B.	Assistant Professor	Computer Science
16.	Mr. Nishant Narayanan	Assistant Professor	Computer Science
17.	Mr. Muhammad Saifuddeen	Assistant Professor	Computer Science
18.	Ms. Avvanhi	Assistant Professor	Computer Science
19.	Mrs. Divya K. K.	Assistant Professor	Computer Science
20.	Mrs. Ankitha Bekal	Assistant Professor	Computer Science
21.	Ms. Saniya P. M.	Assistant Professor	Computer Science
22.	Dr. Palakshappa K.	Professor	Civil Engineering
23.	Mr. Praveen Suvarna S.	Assistant Professor	Civil Engineering
24.	Mrs. Jameela	Assistant Professor	Civil Engineering
25.	Mr. Jasim P. P.	Assistant Professor	Civil Engineering
26.	Mr. Chethan K.	Assistant Professor	Civil Engineering
27.	Ms. Aysha Afeeza	Assistant Professor	Civil Engineering
28.	Mrs. Safa Sanah C.	Assistant Professor	Civil Engineering
29.	Mr. Mohammad Hussain K.	Assistant Professor	Electronics & Communication
30.	Mrs. Chandana B. R.	Assistant Professor	Electronics & Communication
31.	Mrs. Littimol Mathew	Assistant Professor	Electronics & Communication
32.	Mr. Tenson Jose	Assistant Professor	Electronics & Communication
33.	Mr. Mohammed Zakir B.	Assistant Professor	Electronics & Communication
34.	Mrs. Asia Hazareena	Assistant Professor	Electronics & Communication
35.	Mr. Mohammed Saleem	Assistant Professor	Electronics & Communication
36.	Ms. Safra	Assistant Professor	Electronics & Communication
37.	Mr. John Valder	Associate Professor	Electrical & Electronics
38.	Mr. Vittal Bhat M.	Assistant Professor	Electrical & Electronics
39.	Mr. Sleeba Mathew C.	Assistant Professor	Electrical & Electronics
40.	Mrs. Fathimath Raihan	Assistant Professor	Electrical & Electronics
41.	Ms. Nandini S.	Assistant Professor	Electrical & Electronics
42.	Ms. Nishitha K. R.	Assistant Professor	Electrical & Electronics
43.	Mrs. Divya P	Assistant Professor	Electrical & Electronics
44.	Dr. Ramis M. K.	Professor	Mechanical Engineering
45.	Dr. Prashanth Pai M.	Associate Professor	Mechanical Engineering
46.	Mr. Chandrakant V. Pujar	Associate Professor	Mechanical Engineering
47.	Dr. Asif Afzal	Associate Professor	Mechanical Engineering
48.	Dr. Abdul Razak	Associate Professor	Mechanical Engineering

49.	Mr. Varun Hegde	Assistant Professor	Mechanical Engineering
50.	Mr. Mohammed Avvad	Assistant Professor	Mechanical Engineering
51.	Mr. Mohammed Kareemullah	Assistant Professor	Mechanical Engineering
52.	Mr. Navaneeth I. M.	Assistant Professor	Mechanical Engineering
53.	Mr. Chethan K. M.	Assistant Professor	Mechanical Engineering
54.	Mr. Maruthi Prashanth B. H.	Assistant Professor	Mechanical Engineering
55.	Mr. Rayid Muneer	Assistant Professor	Mechanical Engineering
56.	Mr. Kiran Kumar B.	Assistant Professor	Mechanical Engineering
57.	Mr. Asif Mulla	Assistant Professor	AI & ML
58.	Mr. Ismail S.	Assistant Professor	Basic Science & Humanities
59.	Mr. Ismail Shaffi A. M.	Assistant Professor	Basic Science & Humanities
60.	Dr. Mitra Kunjaru	Associate Professor	Basic Science & Humanities
61.	Ms. Sareen Sheikh	Assistant Professor	Basic Science & Humanities
62.	Mrs. Sumangala Rao	Assistant Professor	Basic Science & Humanities
63.	Mrs. Savitha Rai K.	Assistant Professor	Basic Science & Humanities
64.	Mr. Abdul Majeed	Assistant Professor	Basic Science & Humanities
65.	Mr. Mohammed Faizal	Assistant Professor	Basic Science & Humanities
66.	Mrs. Chandrakala	Assistant Professor	Basic Science & Humanities
67.	Mrs. Prameela	Assistant Professor	Basic Science & Humanities
68.	Dr. Sayyad Ameen Ahammad	Associate Professor	Master of Business
69.	Mr. Zoheb Ali	Assistant Professor	Master of Business
70.	Mrs. Shama Hakeem	Assistant Professor	Master of Business
71.	Mrs. Shafinaz Syed Ismail	Assistant Professor	Master of Business
72.	Ms. Azvin	Assistant Professor	Master of Business
73.	Ms. Ankitha	Assistant Professor	Master of Business

STUDENTS DATA

Our institution proudly hosts a diverse and dynamic student body, with a total enrollment of 1,107 students. These students are distributed across 7 undergraduate (UG) programs and 2 postgraduate (PG) program. This vibrant academic community reflects our commitment to providing a broad range of educational opportunities and fostering an environment of academic excellence and growth.

SN	Name of the Program	4th year	3rd year	2nd year	1st year	Total
1	B. E. in Artificial Intelligence and Machine Learning	0	0	0	32	32

2	B. E. in Biotechnology	21	21	14	13	69
3	B. E. in Computer Science and Engineering	125	106	116	122	469
4	B. E. in Civil Engineering	71	38	23	13	145
5	B. E. in Electronic and Communication Engineering	25	21	18	46	110
6	B. E. in Electrical and Electronics Engineering	29	8	3	0	40
7	B. E. in Mechanical Engineering	67	34	24	24	149
8	Masters of Business Administration	0	0	39	52	91
9	Masters of Technology	0	0	2	0	2
Total number of students per year		338	228	239	302	1107

IQAC

- in the presence of the Executive Director the Internal Quality Assurance Cell (IQAC) was established and made operational on September 14, 2021. Dr. Ramis M.K. was appointed as the Chairperson, and Dr. Prashanth Pai was designated as the IQAC Coordinator.

- The IQAC of the institute has conducted 3 meetings in the academic year 2021-2022.

- The NBA visit for the Mechanical Engineering and Computer Science & Engineering departments has been successfully completed. Both departments have been accredited by the National Board of Accreditation (NBA) for a period of three years.

- The AAA was conducted on February 11 and 12, 2022, under the observation of Dr. Abdul Rahiman. The visiting team included Dr. Mohammed Gulzar, Prof. Naveen P. Mascarenhas, and Dr. Sriranga Bhat, with Dr. Chandrashekar K.R. serving as the Chairman.
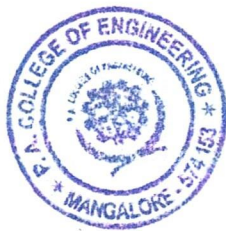
PRINCIPAL
P. A. COLLEGE OF ENGINEERING
MANGALORE - 574 153

CONCLUSION

The academic year 2021-2022 was a transformative period for our institution, marked by significant achievements and advancements. The establishment of the Internal Quality Assurance Cell (IQAC) on September 14, 2021, with Dr. Ramis M.K. as Chairperson and Dr. Prashanth Pai as Coordinator, reinforced our commitment to maintaining high standards of quality in education.

Environmental sustainability remained a priority, with faculty and students planting saplings across the campus to increase the green cover, guided by the Environment Cell. The NBA visit led to the accreditation of the Mechanical Engineering and Computer Science & Engineering departments for three years, underscoring our dedication to maintaining high academic standards.

Overall, the year was characterized by a strong commitment to professional development, student success, environmental responsibility, and academic excellence, setting a solid foundation for future growth and achievements.

PRINCIPAL
P. A. COLLEGE OF ENGINEERING
MANGALORE - 574 153