

PACE INSTITUTE OF TECHNOLOGY AND SCIENCES

**Report on
Performance of Institution for the Academic Year 2022-2023
by External Peer Team of IQAC**

Submitted to



University Grants Commission (UGC)
Bahadur Shah Zafar Marg,
New Delhi – 110002

PACE Institute of Technology and Sciences
(Autonomous)
Ongole – 523272, Andhra Pradesh

IQAC-EXTERNAL PEER TEAM REPORT ON
PERFORMANCE OF THE INSTITUTION - ACADEMIC YEAR 2022 -23

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- 1. Name of the College** : PACE Institute of Technology & Sciences,
NH-16, Ongole – 523272
- 2. Name of the Principal** : Dr G.V.K. Murthy
- 3. Mobile/ Email** : 9703020577
principal@pace.ac.in

- 4. Year of Establishment** : 2008
- 5. Whether private or government or University maintained** : Private / Self Financing
- 6. Autonomous Status** : UGC granted Autonomous Status in the year 2018
- 7. Name of the Affiliating University** : Jawaharlal Nehru Technological University Kakinada, Kakinada
- 8. Courses Offered** :

UG Courses: B.Tech.,

S. No	Program Name	Sanctioned Intake
1	Civil Engineering	120
2	Electrical & Electronics Engineering	120
3	Mechanical Engineering	60
4	Electronics & Communication Engineering	180
5	Computer Science & Engineering	180
6	CSIT	60
7	Information Technology	60
8	CSE(IOT&CSBT)	60
9	AI & DS	180
10	AI & ML	60
11	CSE-R	60

PG Courses: M.Tech., MBA

S. No	Program Name	Sanctioned Intake
1	Structural Engineering	18
2	VLSI and Embedded Systems	18
3	Computer Science & Engineering	18
4	MBA	120

9. Students on Rolls :

Year of study	B.Tech.,	M.Tech.,	M.B.A.	Total
1 st Year	1165	38	132	1335
2 nd Year	1200	38	132	1370
3 rd Year	1143	-	-	1143
4 th Year	1013	-	-	1013
Total	4521	76	264	4861

10. Faculty Strength:

Department	Professor	Associate Professor	Assistant Professor	Total
CE	04	07	31	42
EEE	05	03	28	36
ME	02	03	11	16
ECE	04	07	47	58
CSE	07	09	37	53
IT	01	02	09	12
CSIT	00	02	10	12
CSE (IoT & CSBT)	01	01	08	10
AIDS	01	02	09	12
AIML	01	01	07	9
H & S	01	05	48	54
MBA	01	02	12	15
Total	28	44	257	329

11. Examination Results

Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final semester/ year examination	Pass Percentage
B.Tech	Civil Engineering	182	176	96.70%
B.Tech	Electrical and Electronics Engineering	125	122	97.60%
B.Tech	Mechanical Engineering	124	110	88.71%
B.Tech	Electronics & Communication Engineering	209	206	98.56%
B.Tech	Computer Science and Engineering	196	195	99.49%
B.Tech	Computer Science and Information Technology	64	61	95.31%
B.Tech	Information Technology	70	67	95.71%
B.Tech	Auto Mobile Engineering	32	32	100.00%
M.Tech	Computer Science and Engineering	13	13	100.00%
M.Tech	Structural Engineering	8	8	100.00%
M.Tech	VLSI & Embedded Systems	10	10	100.00%
MBA	Master of Business Administration	108	103	95.37%

PACE Institute of Technology & Sciences, located in Ongole, Andhra Pradesh, was established in 2008 under the aegis of Srinivasa Educational Society. The institution is approved by the All India Council for Technical Education (AICTE) and is affiliated with Jawaharlal Nehru Technological University, Kakinada (JNTUK). In recognition of its academic excellence and

institutional quality, the University Grants Commission (UGC) granted autonomous status to the college in 2018, which has been extended up to the year 2028.

To ensure effective academic and administrative operations, PACE ITS has implemented a robust Management Information System (MIS). This system is designed to monitor and manage both academic and non-academic activities efficiently. Key areas tracked include student and staff attendance, academic performance, and internal assessments. The institute leverages advanced e-communication tools and digital platforms to facilitate seamless interaction among faculty, students, and stakeholders, thereby supporting the continuous enhancement of the Teaching-Learning Process (TLP).

Student performance is regularly evaluated through a structured framework involving attendance, assignments, tutorials, and internal assessments—monitored using the E-CAP system, which forms a core part of the MIS. Academically underperforming students receive focused attention, including counseling and remedial classes, to help improve their outcomes.

Another integral component of the MIS is E-Asset, a digital tool used for the effective tracking and management of institutional assets such as laboratory equipment, machinery, furniture, and computer systems, ensuring optimal resource utilization and maintenance.

Leadership and governance at PACE ITS follow a well-established organizational structure aligned with UGC and AICTE guidelines. Faculty members actively contribute to both academic and administrative functions, fostering a collaborative and empowered institutional environment.

The Internal Quality Assurance Cell (IQAC) of PACE was established on June 10, 2016. Since its inception, the IQAC has played a pivotal role in maintaining academic standards and driving quality improvement initiatives across the campus. Its efforts are directed towards the holistic development of the

institution and include curriculum development, faculty enrichment, infrastructure upgrades, and stakeholder feedback mechanisms.

The institution has shown significant progress across several key performance indicators during the academic year 2022–2023, reflecting its commitment to excellence and continual development.

CURRICULAR ASPECTS (2022–2023)

- Syllabus revision was undertaken across 13 programmes during the academic year, ensuring that curricular content remained aligned with industry trends, technological advancements, and academic requirements.
- Twenty-four new courses emphasizing employability, entrepreneurship, and skill development were introduced across various UG programmes to enhance student competencies and improve job-readiness.
- The institution offered 35 value-added courses, enabling students to acquire transferable skills, life skills, soft skills, and professional competencies essential for holistic development.
- A total of 919 students were sent on field projects, internships, and project-based learning assignments, giving them hands-on industry exposure and real-world learning experiences.
- The UG programme portfolio was strengthened through CBCS, with 15 programmes offered under the Choice-Based Credit System, including multidisciplinary open electives and minor degree options that support emerging technologies and industry needs.
- The institution integrates cross-cutting issues such as environmental sustainability, gender equity, professional ethics, and human values through mandatory courses—including Environmental Science, Professional Ethics, and Universal Human Values—and through the activities of Women Empowerment Cell and the Internal Complaints

- Skill development initiatives were strengthened through collaborations with organizations like Codetantra, Eduskills, CISCO, MOOCs, Infosys Springboard, and Spoken Tutorials, helping students gain additional
- Academic Bank of Credits (ABC) implementation was completed, with the institution registered on the NAD portal, ABC accounts created for students, and awareness programs conducted to ensure proper utilization of the framework.
- Comprehensive feedback on curriculum was collected from all four stakeholders—students, teachers, employers, and alumni. Feedback was analysed, and Action Taken Reports were documented to support
- An AICTE-mandated Induction Programme was conducted for all first-year students, supporting smooth academic transition and orientation to institutional values.

TEACHING – LEARNING AND EVALUATION (2022–2023)

- A total of 1335 students were admitted during the year, reflecting strong demand across all academic programmes.
- 543 seats were filled under reserved categories, strictly following government reservation norms.
- Student learning levels were assessed through diagnostic tests, internal assessments, and performance analysis, enabling the institution to design targeted support programmes for both slow and advanced learners.
- Slow learners received remedial classes, counselling, and supplementary study materials, while advanced learners were encouraged to participate in expert lectures, hackathons, competitive exam training, and professional society memberships.
- Teaching is delivered through Outcome-Based Education (OBE) and incorporates student-centric practices such as seminars, mini-projects, group discussions, problem-solving sessions, and interdisciplinary project work.

- ICT-enabled teaching is implemented across the campus, with smart classrooms, projectors, e-learning resources, online examinations, and access to platforms such as NPTEL, SWAYAM, Virtual Labs, and IIT-Bombay Spoken Tutorials.
- A structured Mentor–Mentee system is in place, supported by 329 mentors who guide students in academic and personal matters
- The Academic Calendar and course-wise Teaching Plans were prepared and strictly adhered to, supported by regular internal academic audits to ensure consistent delivery of syllabus and timely assessments.
- The institution employs 329 full-time teachers, including Ph.D. holders, contributing to strong academic and research capabilities.
- Examination processes are fully digitized, including online payment of fees, automated hall ticket generation, computerized mark entry, automated grade and CGPA calculations, and digital exam scheduling.
- Results were declared within 16 days of the last examination, demonstrating efficiency and prompt evaluation.
- No grievances regarding evaluation were reported during the entire academic year, reflecting transparency and student satisfaction with the examination system.

RESEARCH, INNOVATIONS, AND EXTENSION (2022–2023)

- The institution maintains a well-defined Research Promotion Policy, offering seed funding and partial internal funding to faculty and students, while encouraging applications to external funding agencies.
- Research is governed through a structured framework including the Research Advisory Committee, Ethics Committee, Research Ethics coursework, and plagiarism checks using authentic software, ensuring ethical and quality research output.

- Our faculty members were recognized as research guides during the year, strengthening postgraduate and doctoral research supervision.
- The institution recorded notable research productivity with 149 Scopus citations and an institutional h-index of 6 for the assessment year.
- The Institution's Innovation Council (IIC) conducted numerous activities such as idea competitions, prototype demonstrations, hackathons, entrepreneurship boot camps, and innovation-oriented technical events, promoting creativity and entrepreneurship among students.
- A total of 12 national-level workshops/seminars were organized on Research Methodology, IPR, Entrepreneurship, and Skill Development, enhancing research capability and awareness.
- The institution generated ₹16.9 lakhs through consultancy and corporate training activities, demonstrating strong industry engagement and multidisciplinary expertise.
- An equivalent amount of ₹16.9 lakhs was invested in strengthening consultancy facilities and training teachers/staff for consultancy-related assignments
- Extensive community outreach was implemented through active NSS and NCC units, focusing on sanitation, literacy, digital education, women empowerment, environmental protection, health, and social awareness.
- The institution adopted five villages, conducting regular development-oriented programs on rural sanitation, school digital learning support, women's welfare, and youth career development.
- Under Unnat Bharat Abhiyan, awareness programs on cleanliness, rainwater harvesting, hygiene, tree plantation, and health camps were conducted for rural communities.
- A total of 35 extension and outreach activities were conducted through NSS, NCC, Red Cross, and various clubs, including campaigns on Swachh Bharat, AIDS awareness, gender sensitization, blood donation, road safety, and environmental protection.

- 5115 students actively participated in extension activities during the academic year, highlighting strong student engagement and social responsibility.
- The NCC unit affiliated with the 37(A) Battalion Ongole conducted programs to instill discipline, leadership, patriotism, adventure training, and national integration.
- The institution completed 14 collaborative activities during the year with higher education institutions, industries, and research organizations involving internships, student exchange, on-the-job training, joint research, and project work.
- MoUs and partnerships facilitated industry-oriented internships, technical training, expert lectures, and real-time project exposure, enriching the academic ecosystem and offering career pathways for students.

INFRASTRUCTURE AND LEARNING RESOURCES (2022–2023)

- The institution functions on a **12.87-acre**, clean, green and well-maintained campus, providing an excellent academic environment.
- The institution spent ₹226.93 lakhs on maintenance of academic and physical facilities, indicating strong investment in upkeep.
- A SOPHOS firewall is deployed for campus-wide cybersecurity.
- The college library was fully automated using the upgraded **ECAP LMS software**.
- The institution invests significantly in learning resources, with **₹12.86 lakhs** spent on books/journals/e-resources.
- Internet bandwidth of **≥ 50 Mbps** supports e-learning and academic operations.
- Facilities for e-content development include a Media Centre, Audio-Visual Centre, Lecture Capturing System and editing software.

STUDENT SUPPORT AND PROGRESSION (2022–2023)

- The institution organized various **capability enhancement and development schemes**, including:
- Soft skill training
 - Aptitude development
 - Communication and personality development workshops
 - Career guidance sessions
 - Competitive exam preparation

Name of the Capacity Development and Skill Enhancement programme	Year of implementation	Number of students enrolled	Name of the agencies/consultants involved with contact details, if any
Domain Specific training for III B.tech Isem	2023	762	Dept. of Training & Placements, PACEITS
TOLL Plus company specific training for IV B.Tech Isem	2023	97	Dept. of Training & Placements, PACEITS
24/7 company specific Training for IV B.Tech II sem	2023	111	Dept. of Training & Placements, PACEITS
Osi Digital & Thermo fishers company specific training for IV B.Tech II sem	2022	56	Dept. of Training & Placements, PACEITS
Deloitte company specific training for IV B.tech II sem	2023	108	Dept. of Training & Placements, PACEITS
Plintron Company specific training for IV B.Tech II sem	2023	149	Dept. of Training & Placements, PACEITS
CRMIT & SYOVASYS company specific training for IV B.Tech I Sem	2023	366	Dept. of Training & Placements, PACEITS
Deltax & Zessta complany specific Training for IV B.Tech I sem	2022	29	Dept. of Training & Placements, PACEITS

Brllio& Tech Mahindra company specific Training for IV B.Tech I sem	2022	153	Dept. of Training & Placements, PACEITS
TCS,DXC & HCL company specific Training for IV B.Tech I sem	2022	615	Dept. of Training & Placements, PACEITS
TCS Training	2022	210	Dept. of Training & Placements, PACEITS
Physical Fitness	2022	350	V.Ravindra, Physical Trainer
8th International YOGA Day	2022	120	S.Mohan Rao , Rtd.Major & Trainer
Blood donation camp	2022	60	RIMS Hospital Blood bank and Indian Red Cross Society
Awareness programme on Drug Abuse	2022	300	N. Surya Chandra Rao, Addl SP.,J.D,SEB, B. Babu rao, CEP (FAC), P. D., DRDA and RVS Krishna Mohan, D.T, DYWO, Ongole
Booster dose COVID vaccination	2022	150	Primary Health Centre , Valluru
Eye checkup camp	2022	100	Dr.B.Naga Madhuri, Smart Vision Eye Hospital,Ongole
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Blood donation camp	2022	37	RIMS Hospital Blood bank
Eye checkup camp	2022	100	DR.B.Naga Madhuri, Smart Vision Eye Hospital, Ongole
Eye checkup camp	2022	100	DR.B.Naga Madhuri, Smart Vision Eye Hospital,Ongole
Eye awareness campaign	2022	250	DR.B.Naga Madhuri, Smart Vision Eye Hospital,Ongole

Blood donation camp	2022	100	Dr.Jawahar Blood Centre,Chimakurthy
Free Health Checkup program	2023	203	Dr. Ramanjaneyulu Garu and Dr.Naga Tejaswini Garu General & Gynec from KIMS Hospita
Distribution of Deworming drug	2023	419	Health Wellness Centre,Valluru
Medical health checkup camp for staff	2023	100	Apollo diagnostics & Horlicks Plus, Ongole
Leprosy screening test	2023	20	Primary Health Centre, Tangatur & Valluru
Blood donation camp	2023	50	RIMS Hospital Blood bank and Indian Red Cross Society
Mental health awareness programe for students	2023	150	Dr. J. Chandra Sekhar, Psychiatrist, DMHP, RIMS, Ongole
Distribution of Deworming drug	2023	400	Primary Health Centre, Valluru
Awareness on Myths & facts about menstrual hygiene for girls students	2023	300	Dr. K. Jyosthna, M.B.B.S, M.S Obstetrics & Gynecology, Laparoscopic surgeon, Infertility specialist, Upas hospital, Ogole
Awareness on Suicidal Prevention among students	2023	150	Dr. J. Chandra Sekhar, Psychiatrist, DMHP, RIMS, Ongole
Awareness on Substance Abuse	2023	160	Dr. J. Chandra Sekhar, Psychiatrist, DMHP, RIMS, Ongole

How to plan start-up by following legal and ethical steps	2023	62	Dr.Ramesh Babu Kakumanu. DEAN EDC & Assoc.Prof Vignana Bharathi Institute of Engineering & Technology.
Entrepreneurship orientation day	2023	66	Dr.Raj kamal. ch, DEAN EDC Kristu Jayanthi College (Autonomous), Banglore .
Business plan Development and Youth Entrepreneurship	2022	52	Dr.N.Rama Satyanarayana, Assistant Professor, Dept.of HRM, Acharya Nagarjuna University, Guntur.AP.
Course- Start and Improve Business and Industry visit	2022	66	Dr.J.Arun Kumar, Assistant Professor Acharya Nagarjuna University Ongole campus, Ongole
Out of the box Thinking for Problem solving	2022	150	Prof. V.Kamakoti, Director , IT Madras
International Conference on Future Generation Functional Materials & Research (ICFMR-2022)	2022	22	1.Dr. Ch.Murali Mohan,Pukyong, National University Busan, South Korea. 2. Mr.K.VenkataCharan Global Quality Director, Electrexinc, USA. 3. Dr.T.Niranjan, Assistant Professor, Department of Mechanical Engineering, Mahatma Gandhi Institute of Technology, Hyderabad-500075.
My Story Motivational Session by Successful Innovators	2022	115	Dr.Gujjala Raghavendra, Asst. Professor, Department of Mechanical Engineering, NIT Warangal.

Education-Talk to Help you Choose the Right Universities and Career Path in the US	2022	98	Mr.K.Venkata Charan, Global Quality Director, Electrexinc, USA.
Recent Developments and Research Progress in Friction Stir Welding: An Overview	2023	92	Dr. K. Tejonadha Babu, Associate Professor, KHIT, Guntur.
The Roll of Friction in Severe Plastic Deformation (SPD) Processes	2023	95	Dr. S. Surendarnath, Associate Professor, DVR & Dr.HS MIC College of Technology (A), Vijayawada.
Workshop on CATIA	2023	120	APPSSDC
JNTUK - a cyber-security awareness programme on "Countering Cyber-attacks & cyber Frauds on women	2023	120	Dr. M H M Krishna Prasad, Principal UCEK(A), JNTUK, Kakinada.
Tech Champ - Empowering Girls on Cloud Tech	2023	50	Mr Vivek Rajan, Assistant Director, EDUSKILLS Foundations, Bhuvaneswar, Odishna
Anroid application Development	2023	143	PACEITS
Data analysis using python	2022	131	PACEITS

- 19 students are passed in the competitive examinations and 322 students are placed.
- 70 students are benefitted with an amount of Rs 35,00,000 through NSP and 04 students are benefitted with an amount of Rs 3, 92,000 through the ONGC scholarships

- 370 students secured placements through campus recruitment drives facilitated by the Training & Placement Cell.

GOVERNANCE, LEADERSHIP AND MANAGEMENT:

- The institution follows a well-defined, participative, and decentralized governance structure led by the Principal and supported by statutory bodies such as the
 - Governing Body,
 - Academic Council,
 - Boards of Studies, and
 - IQAC.
- Academic autonomy (since 2018) enables flexibility in curriculum design, Outcome-Based Education (OBE), and timely academic reforms.
- The IQAC plays a pivotal role in quality assurance through regular meetings, academic audits, faculty development programs, accreditation processes, and promotion of innovative teaching-learning practices.
- Strategic planning and implementation are ensured through annual action plans, systematic monitoring, and outcome analysis, leading to improved teaching quality and student engagement.
- The institution practices transparent financial management, effective resource allocation, and supports research through seed funding and infrastructure development.
- Faculty empowerment and human resource management are strengthened through participative decision-making, professional development opportunities, and performance monitoring.
- E-governance and ICT-enabled systems enhance efficiency, transparency, and accountability in academic, administrative, and examination processes.
- Robust grievance redressal and ethical governance mechanisms ensure a safe, inclusive, and student-friendly environment.

INSTITUTIONAL VALUES AND BEST PRACTICES:

The following initiatives are taken by the institution to make the campus eco-friendly.

- Cleanliness and sanitation awareness programmes
- Rainwater harvesting
- Health and hygiene awareness camps
- Increase in plantation and greenery area
- Solar power systems and power backup facilities

Best Practices of the Institution:

- The institution implements a structured practice focused on enhancing career guidance to help students choose suitable careers, improve employability, set clear career goals, enhance communication skills, and encourage higher studies. The practice includes early career counselling, continuous mentorship, domain-specific guidance, hands-on training, skill development courses, professional skill enhancement, industry partnerships, and collaboration with professional organizations. The outcomes of this practice include improved student performance in interviews and competitions, better employment opportunities, increased participation in internships, and greater inclination towards higher education. Challenges include addressing diverse student backgrounds through bridge courses, providing special attention to average and slow learners, and the requirement of additional faculty support.

Practice: Early career counselling and continuous mentorship, Domain-specific guidance and hands-on training, Skill development

courses and professional skill enhancement, Industry partnerships and collaboration with professional organizations.

- The institution follows a practice aimed at cultivating professional skills to improve employability and motivate students towards higher education and entrepreneurship. This practice involves engagement in technical events, workshops, faculty development programs, paper presentations, guest and expert lectures, add-on certification courses, and institute-led industrial visits. Faculty members and students actively participate in professional bodies such as ACM, IEEE, CSI, ISTE, IEI, and IAENG. The effectiveness of this practice is reflected through the establishment of multiple Memoranda of Understanding, organization of guest and expert lectures, and conduct of industrial visits, which together enhance professional exposure and skill development among students.

Practice: Engagement in various technical events, workshops, faculty development programs (FDPs), paper presentations, guest/expert lectures, add-on certification courses, and institute-led visits. Both faculty members and students actively participate in professional bodies such as ACM, IEEE, CSI, ISTE, IEI and IAENG.


Significant contributions made by IQAC during the current year:


1. Cultivating a culture of continuous improvement through self-assessment, peer review, and benchmarking.
2. Leading accreditation efforts and participation in rankings, awards, and external evaluations.
3. Enhancing teaching, learning, and research through FDPs, curriculum revision, and assessment improvements.

4. Conducting internal audits, peer reviews, and quality assurance initiatives.
5. Promoting innovative teaching methodologies such as flipped classrooms, project-based learning, and experiential learning.

Concluding Remarks:

- PACE Institute of Technology and Sciences has consistently maintained high academic standards across curriculum design, teaching-learning processes, evaluation practices, timely declaration of results, and research and development activities.
- Significant and measurable improvements are evident across all key performance indicators as assessed by national regulatory and accreditation bodies.


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