MAHATMA EDUCATION SOCIETY'S

PCE

PILLAI COLLEGE OF ENGINEERING

Autonomous

- COMPUTER ENGINEERING
- INFORMATION TECHNOLOGY
- ELECTRONICS & COMPUTER SCIENCE
- ELECTRONICS & TELECOMMUNICATION ENGINEERING
- MECHANICAL ENGINEERING
- AUTOMOBILE ENGINEERING

Pillai

50 YEARS OF

1970-2020

Contents

Mahatma Education Society

Mahatma Education Society (MES) began its endeavour of *Education for All* in Chembur English School in 1970. MES has now become living proof of our country's dreams. Born in a time when education was deemed service, the Pillai Group of Institutions brought about socio-economic development by ensuring the personal proactive development of every student welcomed to join the fold. This progress was made possible thanks to the national and international vision of Dr. K. M. Vasudevan Pillai (Chairman & CEO) and Dr. Daphne Pillai (Secretary & Rector). Their dedication and undaunted spirit has nourished MES to grow from a single school into a network of multiple institutions at multiple locations delivering quality education to students of all levels.

Today MES manages over 48 institutions spread across six elegant campuses: Borivali, Chembur, Powai, New Panvel(W), New Panvel (E) and Rasayani. Our educational institutions comprise of Schools, International Schools, Degree Colleges, Night Colleges, Management Institutions, Engineering Colleges, Architecture Colleges, Colleges of Education (including Physical Education) and Polytechnic Institutions. As a result, MES can offer support to students from Pre-Primary to Doctorate Level (Ph.D.). Furthermore, the Pillai Group of Institutions comprises of Teacher Training Institutions allowing MES to define it's own superior academic standard and proceed to achieve constant full results.

It does so through an esteemed and dedicated faculty whom design state-of-the-art learning environments powered with the latest technologies. Equipped with vital facilities we may discover a spirit of innovation which reaches for the highest levels of academic excellence based on an approach which recognizes sharing knowledge as a true manifestation of a unified world. MES has now grown to become an educational enterprise of consisting of more than 35,000 students, 2,000 teachers and 1500 members of support staff.

Formerly Pillai Institute of Information Technology, Engineering, Media Studies & Research, (PIIT) and now Pillai College of Engineering (PCE)(Autonomous) is managed by a Governing Body whose members are constituted as per University Grants Commission norms for Autonomous Colleges : Distinguished MES Trustees, Educators, as well as representatives/nominees of statutory bodies including University Grants Commission, New Delhi, State Government of Maharashtra and the University of Mumbai.

A Message from MES Chairman & CEO

Dr. K. M. Vasudevan Pillai
Chairman & C.E.O
Mahatma Education Society

Today, I believe that globalization is a process taking place independently of us. We have no option but to recognize it, understand it, and avail to its opportunities. In a globalized world, there is no room for an economy disconnected from world trade and progress. If we do not gain the necessary skills to engage and compete in the global system, we will be left behind.

The world is looking at us seriously today because of India's vast youth population. Only through a complete education can the youth be given self-worth and the confidence to discover their full capabilities. I believe by empowering youth, we can create an Indian generation that is capable of affecting the world; a generation that can define intellect and courage as its most powerful assets to claim the 21st century as its own. I firmly believe that MES can create a nation in which every child enjoys every opportunity to grow into an independent, ambitious individual, capable of bringing their knowledge to serve their God , their family, and their country. Only when we create access to quality education through collective will and persistent effort will we be able to discard stigma of being a developing nation. We will not only be a knowledge economy offering skills in Information Technology (IT) and Engineering, but also an industrial economy that drives worldwide forces of production. The rural economy will continue to mechanise the land in which it thrives. We at Pillai College of Engineering MES seek to impart a sense of responsibility on the emerging generation of young leaders to realize the dream of an India empowered.

A Message from MES Secretary

Dr. Daphne Pillai
Secretary & Rector
Mahatma Education Society

Our commitment is to provide a holistic sense of education to a new generation of academics. An educated youth will have a choice of global career options from which to select their competing field as well becoming as key contributors to society itself. We strive to build and empower our nation by emphasizing each individual's merit. This is achieved through the practice of mentoring.

In this fiercely competitive world, success has several dimensions far more widespread than the vortex of academia. One must be capable of adapting to a variety of fields to truly become a scholar. The objective of Mahatma Education Society is to provide our students the correct environment to fulfill all their aspirations and ambitions. We have endured our tenacious struggle so that every student may realise their full potential. Our educational strategy will give support and guidance to individuals beginning their lifetime journey to success.

In recent years, Pillai Group of Institutions has maintained a wave of momentum which has aligned MES into being equal amongst the most prestigious institutions affiliated with the University of Mumbai. This bears testimony to the relentless efforts of our dedicated teachers who ignite a passion in students to excel. Through a vast student talent pool, a dedicated teaching faculty and internationally accredited infrastructure, we can truly set our sights upwards for the coming years.

Our main endeavour is to make every effort to ensure every Pillai Graduate becomes a successful professional, an excellent researcher, a dedicated teacher and crucially an entrepreneur with personal vision and ambition.

From the Principal's Desk

Dear Students,

I am delighted that you have chosen Engineering as your profession and pleased even further that Pillai College of Engineering is your chosen pathway to the career of your dreams. The career opportunities for engineering graduates in this era of globalisation are immense. It is imperative that students are fully prepared to take advantage of these opportunities. The four years that you will spend on this course will develop all the skills that you will need in your professional life. PCE will make every effort to create the perfect environment for you to hone required professional skills. One's personal initiative will become vital in order to make full advantage of the extracurricular activities and social opportunities available at PCE.

With the number of educational institutions growing increasingly, India is poised to take full advantage of the globalization process. Pillai College of Engineering is equipped to meet the growing national demand of knowledge professionals offering both Bachelors and Masters level study programs in various disciplines to cater to the requirements of modern industry. Our students have full access to our state-of-the-art laboratories so that they may develop vocational skills. We also have the best education process to deliver course content to these students through our experienced and distinguished faculty members. The performance of each student is monitored and appropriate actions are taken to make sure that they receive the appropriate support to meet all requirements of the education program. Many lectures and seminars given by experts from industry as well as academia are given regularly to give the students insights into latest happening in business and technology and evoke their natural curiosity.

I assure you that your engagement with Pillai College of Engineering in the coming years will be enriching experience for you. These years of higher education will prove vital to your professional growth as co-curricular activities help you to become a well-rounded personality. Our goal is to continue to prepare a future generation of engineers which are innovative leaders and creative problem solvers. Our Management and Faculty are committed to continually improving their delivery of competitive quality technical education to the utmost satisfaction of students, their parents and potential employers.

I am confident that with the contemporary education and strong moral values at PCE, you will march ahead triumphantly to capture all glory and success in your professional, social as well personal life. I wish you all the best for your career. Thank you for entrusting us to shape your career.

Regards,

Dr. Sandeep M. Joshi

PILLAI COLLEGE OF ENGINEERING (PCE)

Mahatma Education Society's Pillai College of Engineering was established in the year 1999. The Mahatma Education Society has acquired the reputation in the field of education in past 52 years and celebrated its Golden Jubilee in the year 2020.PCE has been conferred an Autonomous institution status by University Grants Commission from the academic year 2021-22. PCE is recognized by the University Grants Commission under section 2(f) and 12(b) scheme in which college is eligible to receive certain grants for specific schemes. The institute is permanently affiliated to University of Mumbai since the academic year 2013-14. The College is accreditedby National Assessment and Accreditation Council (NAAC), Bengaluru with A+ Grade upto 31 st December 2026. National Board of Accreditation (NBA), New Delhi has given accreditation to our Automobile Engineering, Computer Engineering, Electronics and Telecommunication Engineering, Information Technology andMechanical Engineering courses upto 30th June 2025. PCE is ISO 9001:2015 certified. PCE is recognised in the band "PERFORMER" under the category"College/Institutes (Private/Self Financed) (Technical) in (ARIIA) 2021.

PCE offers Undergraduate (Bachelor of Technology), Postgraduate (Masters of Technology) and Doctor of Philosophy in Science & Technology (Ph.D) programs. Offering state-of-the-art facilities and a distinguished teaching faculty of numerous disciplines, PCE creates students of higher academic capabilities. PCE has Green Infrastructure, spacious classrooms, well-equipped laboratories, workshops, state-of-the-art computer labs and library to provide a stimulating learning environment in the college. MoU with industries for Industry Academic Innovative Practices, Research activities, training for placement, compulsory internship, promotion of cultural and sports activities, Ongoing Conferences, Workshops and seminars, support for startup's etc. are giving students a cutting edge advantage . We believe in mentoring students with faculty members offering personal guidance to approximately twenty students on a one to one basis.

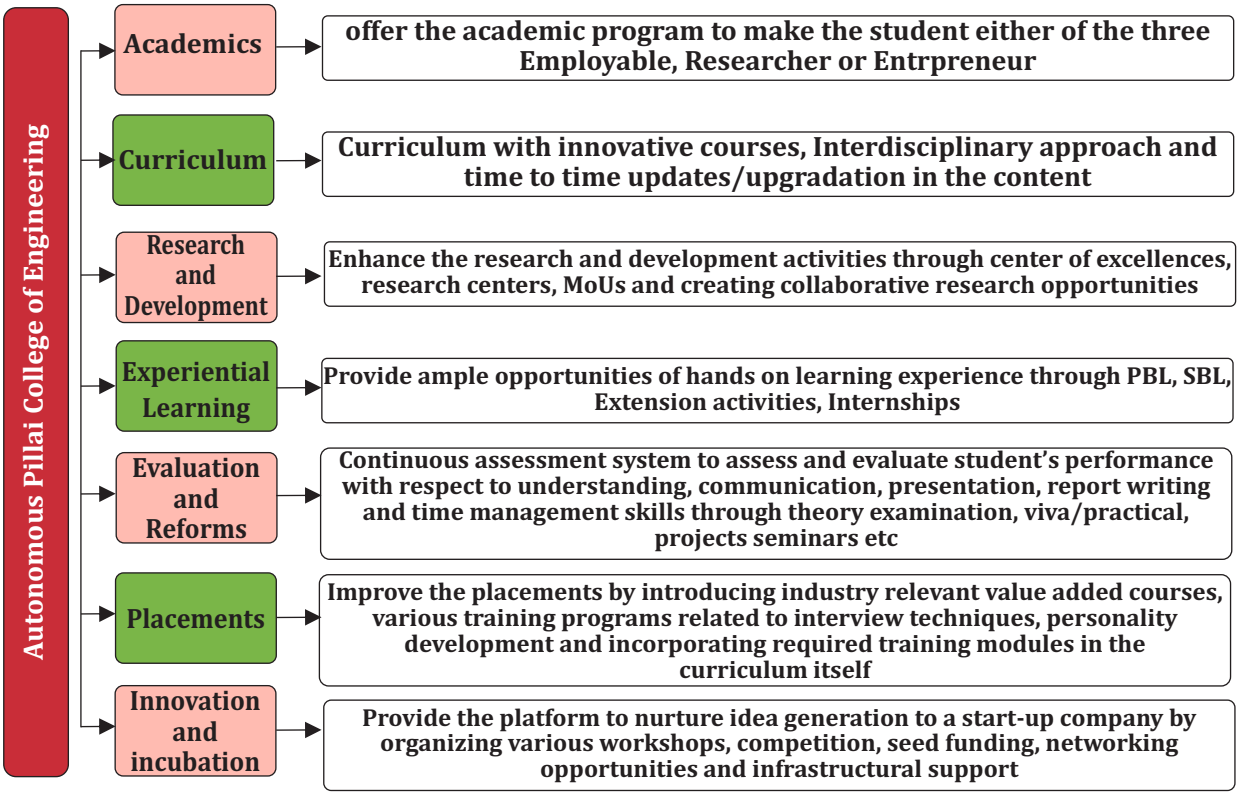
The College is well located in New Panvel, Navi Mumbai on the banks of the Kalundre River and close to large hubs of commerical and industrial activity. The location is less than 10 km from the proposed Navi Mumbai International Airport as well as less than 20 km from Jawaharlal Nehru Port and hence PCE has now become a premier educational institution located in the heart of economic activity in Navi Mumbai. The area also has significant green zones such as Karnala Bird Sanctuary and Matheran which provides ample opportunity for its students to conduct activities such as trekking and hiking. We believe in encouraging students by creating an atmosphere where learning is fun and where students are encouraged to learn through an interactive process of experimenting and competing.

Bachelor of Technology, Master of Technology and Ph.D. Programs

DEGREE	COURSES	YEAR OF ESTABLISHMENT	SANCTIONED STRENGTH
B. Tech.	1. Computer Engineering	1999	180
	2. Information Technology	1999	120
	3. Electronics & Computer Science	1999	90
	4. Mechanical Engineering	2002	90
	5. Electronics and Telecommunication Engineering	2007	90
	6. Automobile Engineering	2009	60
M. Tech.	1. Information Technology	2008	12
	2. Computer Engineering	2009	12
	3. Electronics Engineering	2009	12
	4. Mechanical Engineering (Thermal)	2011	18
	5. Mechanical Engineering (CAD/CAM & Robotics)	2008	18
	6. Defence Technology	2021	30
Ph.D.	1. Computer Engineering	2017	10
	2. Mechanical Engineering	2017	10
	3. Information Technology	2019	10
	4. Electronics Engineering	2022	10

Why Autonomy

- To Accomplish the Set Objectives of the College by
  - Accommodating industry relevant courses and content
  - Offering more choices to the learners by introducing variety of electives
  - Providing interdisciplinary approach
  - Reforming in evaluation methodology
  - Inculcating project, activity and skill based learning
  - Best utilization of the duration to nurture the future of the learner
  - Providing more opportunities to learner to understand and clear the course
  - To convert the job seeker engineers to job providers
  - Best utilization of institute's infrastructure and expertise



VISION

Pillai College of Engineering (PCE) will admit, educate and train in technology, a diverse population of students who are academically prepared to benefit from the Institute's infrastructure and faculty experience, to become responsible professionals. It will further attract, develop and retain, dedicated, excellent teachers, scholars, scientists and professionals from diverse backgrounds whose work gives them visibility beyond the classroom and who are committed to making a significant impact in the lives of their students and the community.

MISSION

To develop professional engineers with respect for the environment and to make them responsible citizens, both from a local and global perspective. This objective is fulfilled through quality education, practical training, research, entrepreneurship and interaction with industries and social organizations.

INSTITUTIONAL OBJECTIVES

- **To Make the Students Either one or more of the Three**
  Employable, Researcher, Entrepreneur
- **To Develop the Teaching – Learning Process**
  - Where learner will have freedom of thought to get explored to various aspects of Engineering, Science and Entrepreneurship
- **To Encourage the Faculty to Pursue Research & Develop the Skills**
  - And impart that knowledge to the students
- **To Provide the Requisite Infrastructure**
  - Including Laboratories, Library, Internet facilities to facilitate research, entrepreneurship and learning
- To Promote the Interaction of Students and Faculty with the Industry
- To explore the possibilities of collaboration with other leading Institutes in India and abroad for
  - Faculty and / or students training, exchange and joint research

PROGRAM OUTCOMES

Engineering Graduates will be able to:

1. **Engineering knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

2. **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multi-disciplinary settings.

10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multi-disciplinary environments.

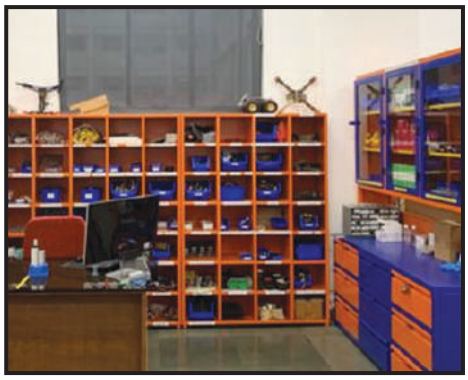
12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Institute's Best Practices

Project Based Learning

Project based learning is an efficient and creative teaching method that encourages the students to think, understand and implement various concepts. It is learning by doing. Project based learning helps the students to implement theoretical knowledge. A topic consisting of concepts from the subjects of current as well as previous semesters is given to each group of students having two to four group members. The projects were assessed on the basis of different parameters like overall organization of the project, understanding of the topic, hardware implementation, analysis of the obtained output and teamwork. On the basis of the assessment carried out best projects were appreciated and awarded with certificates.

Component Library



The component library facility developed in Pillai College of Engineering has same ideology as book library in every college. The library consist of all the electronic component to possible mechanical instruments, which any admitted student can issue for a specific time period against their college id Card number. This helps students to develop projects without worry of money to buy or find components in market and go far in different cities to buy rare or specific components or wait for order; instead they can issue it from component library now. They don't even need to pay any depository money while issuing it.

Attitude Skills and Knowledge Portal (ASK)

ASK provides mentor/faculty and mentee/student with web application for interaction and storage of vital information. For mentee the ASK portal provides them facility to keep all their academic data and co curricular data in one place which the mentor can view and review any time . Mentee academic data like Under Graduation , Post Graduation , and other examination data can be stored. Mentee can store details regarding workshop attended , their skills , academic and non academic achievements and also extra curricular data they have performed. Mentor can overview varied data of their mentee to continuously keep track of mentee progress. Mentor can also periodically store interaction details with mentee. Portal also provides Placement officer can also generate reports related to student academic and co-curricular records.

ask
ATTITUDE SKILLS KNOWLEDGE
PCE

Parent Teacher Meeting

Parent Teacher Meeting is being conducted during every semester along with the student so that the parents, teachers and students can share, communicate and understand each other, which in turn help the students

Institute's Best Practices

Compulsory Internship

Students are encouraged to actively look for and do internships during the vacation periods. PCE has made a policy to make every student to undergo a compulsory internship of minimum total of four weeks during their Bachelor Degree course. Internships allow students to get real world experience indifferent industries. Students who complete a substantial number of internships during their time at PCE will be awarded a certificate of merit fortheir efforts.

Enhanced Teaching Learning

- **Intensive Study Session**: Intensive study sessions are conducted every semester, where students are guided in preparing model answers for important questions.
- **Prelims Mock Test :** To help the students to prepare well for the University examinations, prelims are conducted in every semester to improve and perform well.
- **Remedial Classes :** Faculty members at PCE identify and support students with varying learning capabilities during the teaching learning process. Students in first year of undergraduate courses have an additional contact hour for critical/new/engineering subjects in the regular time table. The PCE faculties are conducting remedial classes for the slow learners during Saturdays and free hours.

The weaker students identified during the first internal assessment are given more attention and taught to do well enough to perform well at University Examinations by ensuring more practice even during practical sessions and groups of brighter students are also handled in such a way that they are able to score exceptionally well.

Makers Studio

The Pillai College of engineering offers students the chance to experience engineering beyond textbooks and classrooms. Maker's Studio is the space where students can work on any engineering project. Most of the advanced facilities are made available to students at single space. State-of-the-art facilities include various 3D Printers, laser cutting & engraving machine, PCB milling machine, Table top CNC, CNC turning and Milling machines and various Bosch and Dremel tools to build any project in one lab which enables students to produce rapid prototypes so they may explore their ideas. The facility also provides consultancy to Medical institutes, Industries, Colleges and Students. Students get the opportunity to get into internships and work on live projects within College Premises under guidance of College Faculty and Industry Experts.

PCE has introduced the concept of MAKERS' DAY to give exposure to all the students about all the facilities available across the departments . The exposure is expected to inspire students to make things, may be for PBL, BE project, mini-project or just satisfying their creative impulse.

PCE Facilities

Library

Our Library is Learning Resource center providing open access systematized access to our collection. The library is Fully Automated by the Library Automation Software KOHA for better and fast functionality.
The library has huge collection of 26000 plus books, Journals and electronics materials covering major fields of Automobile Engineering, Computer Engineering, Electronics Engineering, Electronics & Telecommunication Engineering, Information Technology and Mechanical Engineering.
Our Library hosts Digital Library with varied electronic resources. Library maintains separate collections of reference books, project reports and volumes of journals as well as provide Current Awareness services (CAS), Article Indexing, Selective Dissemination of Information (SDI), Scan and Delivery services, Bibliographic services and Inter Library Loan(ILL).

Library also provide E-resource on demand from the national or international service provider including IEEE, ASME, Springer, McGraw Hill Digital Library, Elsevier and J-gate.

Auditorium

Our well furnished auditorium and DTS Theatre has a 400 seating capacity. The facility offers excellent acoustics for a variety of purposes specifically visual presentations, DTS movie screening, orchestra functions, drama theatre productions and lectures. The installed audio technology offers a clear and powerful high frequency production.

Conclave

The seminar hall has digital smart board facilities. This offers many features including enabling those presenting to project an image simultaneously on two available screens. The presenter can edit the presentation a digital marker pen and the slides may be digitally saved for subsequent printouts as required.

Language Lab

PCE has a full fledged language lab available with the latest language tools that students can use to improve their English speaking and writing skills and learn a new language.

IndoorSportsandGymnasium

A healthy mind requires a healthy body. PCE understands the importance of this mantra and has provided a state-of-the-art gymnasium with treadmills, power cycles, bench-press among other equipment for it's students and staff. Fitness Trainer services are available as well as separate time slots for girls and boys. PCE has a lot of indoor sports facilities such as badminton courts, Speed Climbing and Bouldering Wall, Table Tennis Courts, Kabaddi Turf Courts, Chess, caroms and other games to give the students a much needed break from rigours of academics. The campus also houses one of the few indoor shooting ranges in the Mumbai region.

Laboratories

Each of our engineering department laboratories is equipped with the latest equipment, software and furnishings to ensure that facilities provided fulfill and exceed all requirements of the curriculum.

Our students are given free access to all College laboratories so they may explore their academic ambitions on the quest for knowledge.

MiniAuditorium

PCE Mini Auditorium is well equipped with latest technologies and has seating capacity of 100 Nos. The aesthetic appeal of the hall encourages students to come up with their innovative ideas and to present them in the most fruitful manner. The hall provides a platform for the enthusiastic students to boost up their confidence levels while interacting publicly. It also fulfills as a venue where various award ceremonies, expert speech, practical demonstrations etc. can be held.

E-LearningStudio

It is a facility where online video lecture can be recorded in an innovative way by replacing typical blackboard with light board system, where lecturer always faces towards viewers while writing on board and while explaining education materials. This light board technology incorporates power point, videos, Images, screen casting and camera casting on glass board while delivering lecture which makes it more understandable and interesting for learners. This online video lectures are uploaded on "MES elearning" channel on youtube to create online video library for all Engineering, Science Arts and Business Lectures.

OutdoorSportsInfrastructure

The PCE sports ground plays host to numerous events throughout the academic year. Facilities include synthetic astroturf locations as well as grass pitches suitable for a variety of activities including cricket, basketball, volleyball, Football, Ball Badminton, Shuttle Badminton, Hand Ball, Throw Ball, Athletics etc.
PCE also has an outdoor amphitheater that plays hosts to the many concerts during its Annual College Festival Alegria.

SeminarHall

PCE Seminar Hall is fully air-conditioned and is suitable for conferences, symposium, meetings, seminars, concerts, presentations and performances. It can comfortably accommodate 200 individuals.

Canteen

PCE canteen 'EPIC CAFÉ' serves all types of South Indian, Maharashtrian, North Indian, Chinese and Continental cuisines.

Hostels

Hostel accommodation for boys and girls is provided to approximately 500 students on Panvel Campus. Facilities include annual meal plans, canteen, provided domestic services, TV room and social areas. Well maintained and comfortably furnished, guests may choose their preference of luxury, single occupancy (AC), double occupancy and triple occupancy rooms.

HostelContact:-7678089925

Green Infrastructure

PCE is imbued with the spirit of concern and care for the environment, since Green is the next Gold. Environmental sustainability in terms of waste management, rainwater harvesting, green landscaping, natural lightings in the class rooms, solar power generation and solar lighting of the campus etc are part of the architecture

Solar Photovoltaic system

PCE has installed Solar PV system of 75 KWp on the roof top which is approved by the Ministry of New and Renewable Energy (MNRE) in our campus as a non conventional energy source in 2011 to minimise grid dependency.

Rain Water Harvesting

Rainwater harvesting is the accumulation and storage of rainwater for reuse on-site, rather than allowing it to run off. PCE has made an underground tank having 25000 litters capacity to storage the rain water and the stored water is properly utilised.

PET Neutral College Campus

PCE along with Reliance India Ltd. has installed a "Plastic Bottle Recycling Machine" on 3rd June 2019 to commemorate the World Environment Day. Now Dr. K. M. Vasudevan Pillai Campus, New Panvel will be the first "PET Neutral College Campus" in Maharashtra. This is a joint project with PCE, Reliance and Biocrux Ltd.

E-Waste Recycling

E-waste or Waste Electrical and Electronic Equipment (WEEE) are loosely discarded, surplus, obsolete, broken, electrical or electronic devices. PCE has realised the need for proper e-waste management system and started an e-waste segregation unit for greater awareness among the student community.

Organic Waste Management

PCE has an Organic Waste Management unit in the campus. The organic waste collected from the campus like college canteen has put for a one month process in the unit. The compost thus produced is used as manure in the campus garden.

Value Added Courses

PCE has numerous add on courses that provide certifications to students in diverse areas such as IoT, Python, DotNet, Solidworks, IPR and Enterpreneurship, GIS and Remote Sensing to name a few. Students are highly encouraged to take these courses that are offered by PCE faculty as well as external trainers. These courses are conducted over holidays, after college hours and on the weekends.

MOOCs and NPTEL

- ❑ Massive Open Online Courses (MOOCs) are free online courses available for anyone to enroll. MOOCs provide an affordable and flexible way to learn new skills, advance your career and deliver quality educational experiences at scale.
- ❑ Students can also get credits for internal assignments by completing certifications of various MOOCs and NPTEL courses online.
- ❑ Spoken Tutorial ❑ COURSERA ❑ VIRTUAL LAB

Certificate Programs

1. Finite Element Analysis
2. Solidworks
3. Computational Fluid Dynamics
4. Auto-CAD
5. Project Management
6. Networking and It's Fundamentals
7. Python and Development of Web Application using Flask Framework
8. Internet of Things and It's Applications
9. Block Chain
10. C Programming
11. Complete Network Fundamentals: Mastering CCNA
12. Learning with Games in Higher Education QCAD
13. Machine Learning using Python
14. R Programming
15. Basic Microsoft Training PHP &
16. French Language Course

Enhance Employability

17. SAP
18. Tableau
19. Augmented Reality and Virtual Reality
20. Introduction to Remote Sensing & GIS

Entrepreneurship

21. Drone Piloting and its applications
22. Mobile App Development

Research and Industry readiness

23. Campus Credentials
24. Introduction to Latex
25. College to Corporate Program on Handling large project
26. College to Corporate Program on English for communication
27. College to Corporate Program on Financial Literacy
28. College to Corporate Program on Soft Skills
29. College to Corporate Program on Workplace Communication
30. College to Corporate Program on Effective use of IT Professional Activities

Enhance Social, Moral and Ethical values

31. Relaxation & Meditation Workshop

For Faculty

32. Foundation Program in ICT for Education
33. Pedagogy For Online And Blended
34. MOODLE LMS
35. Library Information System

Aptitude Test

Most higher education institutes, universities, many government and private company jobs require students to take aptitude test as a pre- screening test to shortlist students. It is therefore essential that students get sufficient practice in aptitude test. PCE offers practice tests for its student within its curriculam so students gain some exposure to these tests before the actual test.

Research and Consultancy

Research funding received till date : more than 200 Lakhs

Funding Agencies: AICTE, Mumbai University, DST, BRNS, UGC, New York University

Urban Expansion Observatory

MES has developed a research centre, Urban Expansion Observatory, in conjunction with New York University Stern School of Business. The project aims to measure the quality of expansion in urban areas from 1990-2010 using high-resolution imagery, in order to measure the quality of urban expansion in the fringe areas of 200 global cities. The outputs from the digitization was analysed to obtain various urban indicators. Data analysis and consequential new research developments was presented at the United Nations Habitat III Conference in October 2016.

Drone Application Lab

The drone lab at PCE uses drone technology to conduct drone surveys around Maharashtra for various agencies. It has conducted consultancy projects for CIDCO, Tata Consulting Engineers, Byculla Zoo and Highway Construction Company. The drone lab also helps students develop their own drone technologies with the potential of commercialization. It also conducts various faculty and student development programs on drone technologies and processing drone imagery. Pillai College of Engineering has many advanced drones, like the DJI Phantom 4, Inspire, Parrot ARdrone. Students design and manufacture drones using 3D printing and laser cutting technology

Centerof Excellence in Antenna, RF and Microwave Engineering

Antenna is an important part of any communication system. There is a huge demand for research in Antenna Design in the global market. To train our students in this area, Pillai College of Engineering has established a Center of Excellence in Antenna, RF and Microwave Engineering. The facilities include fabrication facilities, Vector Network Analyser and simulation software. The facility is also useful to conduct the advanced research in the area of Antenna, RF and Microwave Engineering.

Centre of Excellence in Polymer Science & Engineering (CEPSE)

Centre of Excellence in Polymer Science & Engineering (CEPSE), PCE is established in an intention to create a platform and forum; dedicated to the activities related to innovative scientific development and ideas in the areas of polymer science and engineering to focus on finding a solution to the current challenging issues, by utilizing the best and brightest minds and resources available.

SAFAR

Under the plan scheme "Metropolitan Advisories for Cities for Sports, Tourism (Metropolitan Air Quality and Weather Services), Ministry of Earth Sciences (MoES), Govt. of India, has introduced a major national initiative, "System of Air Quality and Weather Forecasting and Research" known as "SAFAR" for greater metropolitan cities of India to provide location specific information on air quality in near real time and its forecast 1-3 days in advance for the first time in India. It has been combined with the early warning system on weather parameters.

PCE is a project partner of SAFAR. The ultimate objective of the project is to increase awareness among general public regarding the air quality in their city well in advance so that appropriate mitigation measures and systematic action can be taken up for betterment of air quality and related health issues

Technologies for Future Cities

PCE has conducted a Conference on "Technologies for Future Cities (www.futurecities.mes.ac.in) The papers presented have been uploaded on SSRN website. Center of Excellence for Future Cities at Pillai College of Engineering was inaugurated during this Conference.

UGC-DAE CSR Project

UGC- DAE Consortium for Scientific Research Indore has sanctioned a grant of Rs 6.39 Lakhs for a project entitled "Study of correlation between the structure and the water permeability of nanocomposite membranes". This project is for three years and would involve SAXS experiments on indigenously synthesized membranes at INDUS-2 Synchrotron at RRCAT, Indore.

BRNSDAE Project

This exciting project involves the application of carbon nanotube based ultrafiltration membranes for water filtration. The membranes are casted using the casting machine in presence of variable maganetic field and tested for its pure water permeability using the UF Test Skid. Students are given hands on opportunity to experience the research process. This project is funded by BRNS, DAE.

University of Mumbai Minor Research Grant

PCE has received Rs. 5,30,000 for 17 projects in 2018-19 and Rs. 3,65,000 for 11 projects in 2019-20 as a grant by University of Mumbai for carrying out Minor Research Projects.

AICTE Project

RPS : The All India Council for Technical Education has granted fund for conducting research under Research Promotion Scheme (RPS) titled 'Design and Fabrication of a Benchtop Instrument to Measure the Mechanical Properties of Polymers and Biomaterials under Biaxial Loading'.

MODROB : All India Council for Technical Education granted Rs 12 Lakhs to modernize Advanced Communication Lab and Rs 9 Lakhs for modernizing Artificial Intelligence and Machine Learning Lab. AI & ML Lab: Artificial Intelligence and Machine Learning Lab at the Computer Engineering department of Pillai College of Engineering is a funded project by AICTE under MODROB's Scheme. This lab is equipped with excellent infrastructure like AMD Thread Ripper (2nd Gen) 2970WX, Nvidia RTX 3090 24 GB GPU.

DST Project

Project entitled " Synthesis of Polymer Films having low Dielectric Constant" has been approved by DST, Government of India under the Women Scientist Scheme A (WOS-A) for research in Basic/Applied Sciences.

Centre for Cyber Security and Digital Forensics

Centre is providing the consultancy on Cyber Crime cases and Digital Forensic investigation. Core competency of this centre is to provide expertise in digital evidence extraction, cloning of digital evidence source and analysis of the evidence. Investigation of server logs, system events analysis and establishing the digital trail of evidences with documentation. Phishing mail analysis and frauds related to it. Handling online banking crimes, such as credit card, debit card cloning frauds and net banking frauds. Social networking site image morphing, fake profile related cases, cyber bullying, and cyber defamation. Centre is also having expertise in doing the Cyber Security Audit to identify potential flaws in the organization system security. Center handled many cases of IT Companies, Hospitals and Navi Mumbai police and helped them in to it. Provided training to police department and conducted awareness workshop to Indian Navy Officers

Institution's Innovation Council (IIC)

PCE has established Institution's Innovation Council (IIC) as per the guidelines of 'MHRD's Innovation Cell (MIC)' to create a vibrant local innovation ecosystem, Start-up supporting Mechanism, Establish Function Ecosystem for Scouting Ideas and Pre-incubation of Ideas and Develop better Cognitive Ability for Technology Students. PCE IIC is actively involved in organising and conducting seminars, workshops, field trips, project exhibitions, entrepreneurship bootcamps, Idea competitions etc.

Entrepreneurship Cell

Pillai Centre of Innovation and Entrepreneurship is set up to encourage and inculcate the entrepreneurial spirit among the youth. It is a platform for networking, building entrepreneur- ship skills and providing access to high quality technical and managerial expertise. It is a forum to assist in developing entrepreneurs and support innovative ideas from ideation to fruition. .Many companies formed by the students have received their certification of incorporation from Ministry of Corporate Affairs, Government of India.

The Cell has conducted Business Plan Competition in which five teams competed at the finale. Team Indian Hybrid from Pillai College of Engineering, Panvel were adjudged the winners of the competition and were awarded prize money of Rs. 1 Lakh.

PCE has incubated 10 companies who have benefitted from its incubation centre

Conferences,Seminars&Workshops

Workshops and seminars were organized in collaboration with professional societies like ASQ-LMC, ASM International India Chapter, SAMPE USA, SFA-Mumbai Chapter to explore the current areas of R&D with active participation of large number of industries like GE, HAL, NAL, ONGC, NMRL, DRDO, SIEMENS, JSW, AIMIL, IRMRA Mumbai, Mahindra Sanyo, WindWorld, Welspun and institutes like IIT Madras, DIAT Pune, IIT Bombay, VNIITNagpur .

"PCE organized a conference on "Technologies for Future Cities" during Oct.08-09, 2021 (www.futurecities.mes.ac.in) The seminar covered various aspects of the expected problems and their solutions for future cities. The guest of honor for this seminar was Dr P. Sekhar (Chairman - Global Smart Cities Panel - MEDC) and Chief Guest was Prof. S J Gupta (University of Mumbai). Mr. Maxson Lewis (Managing Director, Magenta Power) spoke on the topic Clean Energy and Clean Mobility Solutions for Future Cities and Dr. Vijay Habbu (Vice President, Reliance Industries Limited, Mumbai) spoke on Design consideration of Packaging Materials for Smart cities

One Day Seminaron "Technologies for Future Cities"


MathematicsQuiz

Department of A.S.M..H organized its annual activity, Mathematics Quiz on 18th June 2022 for First year and Second year engineering students. Its main objective was to promote students to apply the basics of Applied Mathematics in an interesting and challenging way. This would help them to excel in competitive examinations like G.A.T.E., G.M.A.T, C.A.T and other higher level entrance exams. It also enhances students ability to logically apply Mathematics in engineering domain. The Winners of the Quiz were awarded a cash prize and a certificate of appreciation

Engineer's Day was celebrated on Sept. 15, 2021. Prof. Ashok Misra (Distinguished Professor, IISc, Bengaluru) delivered a talk on "Fostering Creativity and Innovation in Science and Technology".


Seminar on Industry Academia Interaction


Conference on "Technologies for Future Cities 2021

PCE organized a conference on "Technologies for Future Cities" during Oct.08-09, 2021 (www.futurecities.mes.ac.in). The conference was funded by AICTE and technically sponsored by IEEE Bombay Section. The conference was 2nd in the series; the first one was held in January 08 – 09, 2019. The conference consisted of invited talks and contributed papers. The main objective of the conferences was to provide a platform for discussing technological solutions to the problems of the future cities. About 150 scientists and engineers attended the conference. Dr R.K. Shevgaonkar (Prof. Emeritus, IIT Bombay) inaugurated the conference and Dr Pradipta Banerjee (IIT Bombay) delivered the keynote address. The conference concluded with a panel discussion, in which the panelists were largely from the industry.


IIT Bombay Remote centre

PCE is one of the Remote Centres(RC) of IIT Bombay. IIT Bombay is conducting workshops at hundreds of Remote centres spread across the country. The workshops were conducted in the distance mode, using A-VIEW software and Internet, as part of the National Mission on Education through ICT(MHRD, Govt. of India).

Lectures are delivered by faculty from IIT Bombay, while tutorials and lab sessions are conducted locally in the same RC. The lecture transmission and live interaction take place in a virtual classroom environment, using the AVIEWtechnology on the internet.

PCE in association with Polymer Processing Academy (PPA) organized a " One day Conference on Polymer Processing" on 23rd Feb 2019. Around 250 participants from different parts of India were attended the conference.


Conference on Polymer Processing on 23rd Feb 2019


Workshop on Polymer Processing and Characterizations

PCE organized Two day Workshop on "Polymer Processing and Characterizations" on 22nd and 23rd August 2019 for the faculties, researchers, scientists and UG and PG students who are interested in the field of polymer science and engineering.


InspireInternshipScienceCamp

Pillai College of Engineering has holded a science camp from 11th to 15th February 2020 which is fully sponsored by Department of Science and Technology under INSPIRE (Innovation in Science Pursuit for Inspire Research) program. This five-day residential camp provided good opportunity to the students to interact with scientists of national and international repute. Participants were provided registration kit, free boarding and lodging, and study materials for all five days of the camp.

MemorandumofUnderstandings

PCE has signed many Memorandum of Understanding (MoU) with leading industries and research centres for promoting and reinforcing cooperation, mutual exchange of Information and Technological know-how, joint collaborative work in R&D projects, curriculum development, internships and placements, infrastructure development, improvement of research and academic programmes and also exchange of experts and researchers.

PCE has signed Memorandum of Understanding(MOU) for Research/Placements/Internships with

1. Asian Institute of Family Managed Business: AIFMB was formed to facilitate the creation of 1st and 2nd Generation Entrepreneurs across the Asia Pacific region. AIFMB has partnered with Mahatma Education Society to mentor its students
2. MoU with VACS technologies: To provide training in SAP software for students and industry professionals. The center recruits trainers from all over India and certifies industry ready professionals.
3. Letter of Understanding with IEOT ONGC is signed for library usage and collaborative projects
4. MoU with Indian Institute of Packaging for collaborative research, internships, higher education collaborative research and consultancies
5. MoU with Biocrux Ltd is signed for environment awareness, plastic free campus, collaborative research and development, internships and placement opportunities
6. MoU with Brainiac IP solutions to have an assistance regarding IPR and patent filing
7. Access Telematics Systems,
8. SAP Education University, ,
9. Trendset Power and Technology Consultants Pvt. Ltd.
10. Indian Centre for Plastics in the Environment (ICPE),
11. ONGC, Govt.of India for Research
12. EMC Academic Alliance: Training with EMC2 and their Infrastructure Storage Management software.
13. PCE is accredited by Tata Consultancy Services for Campus Recruitment
14. PCE has signed MOU with CISCO and became the Cisco Networking Academy
15. PCE has signed MOU with Microchip Academy. It Conduct faculty training and student training programs. as part of the Microchip Academic Program
16. Mining Engineers Association of India, Mumbai Chapter (MEAI)
17. Institution's Innovation Council (IIC)
18. Pipetech Engineering Solution Pvt Ltd
19. MGM Health Sciences

Placement Cell has established following tie – ups to increase the employability of the students:

1. Partnership with SAP to offer training and certification of SAP courses to our students. These courses are organized at the college and delivered by expert SAP Consultants
2. Partnership with Campus Credentials to train students on soft skills attitude and other employability skills which will help them in their transition from Campus to Corporate.
3. Partnership with Board of Apprentice and Training (BOAT) to organize Job Fairs for students of Engineering and Diploma.
4. PLC SCADA Training by Godrej

Training and Placement Cell

Dr. P. S. Lokhande
Head
Training & Placement

The Training and Placement Cell is an integral part of the PCE Institution. The PCE management is fully invested in providing sound infrastructure and human resources to maintain the Training and Placement Cell and the resulting opportunities the cell provides to students of the College. The Placement Cell's primary objective is to provide training and placements to college students. Various organized activities take place throughout the academic year both in the college and the local area. Students are led to take the initiative to develop their attitude in the workplace, soft skills and are given the opportunity to develop technical skills alongside analytical capabilities. The Training and Placement Cell aims to expose students to the nature of the corporate world, therefore providing insight to their future professional careers.

Our Ongoing Programmes:

- ❑ Technical Seminars and Workshops
- ❑ Guest Lectures by experts from Industry, Research and Academic Institutes
- ❑ Training for Aptitude Tests
- ❑ Group Discussions
- ❑ Industrial Visits
- ❑ Career Guidance Camps
- ❑ Personality Development Classes
- ❑ Mock Tests and Interviews
- ❑ CV writing workshops.
- ❑ Training on Technical Skills like Java, Dot Net, Oracle Auto CAD and others.

PCE is a thriving recruitment hub with established national and international companies regularly seen on campus. Our Training and Placement Cell works in accordance with the changing corporate sector to provide competitive and comprehensive training for our students. Through PCE's revered connections with global recruitment industries candidates may enter the workplace in a prepared and competitive state of mind. The Training and Placement Cell has facilitated the recruitment of a large number of engineers through several joint campus ventures with companies such as L&T Infotech, TCS, GEP, Majesco, Quality Kiosk, KPIT, Birla Soft, Byjus, BKT Tyre, TATA AIG, Sanmar, Paramatrix, Hexaware, Reliance Retail, Reliance Jio, Rave, TSS Consultancy, Persistent, Wipro, Tech Mahindra and many more.

Our esteemed faculty is fully committed to provide the support and guidance to students which enable them to kick start their professional career. Dedicated and Committed Training and Placement Cell staff is our strength

Our Recruiters

International Collaborations and Study Tours

European Study Tour

A group of 45 members consisting of students from the various colleges of the Pillai Group of Institutions along with a few faculty members went on an educational tour which covered the Paris in France, Brussels in Belgium and Amsterdam in Netherlands in January 2019. The tour was led by Dr. Daphne Pillai.

In Paris the students visited the Notre Cathedral, Les Invalides, Military Academy, Champ De Mars, Arc De Triomphe, Champ Elysees, Grand Palace, Parliament House and the Orsay Museum. The highlight of Paris was the visit to The Eiffel Tower and Louvre Museum. It was an enriching and learning experience for the students as they explored foreign cultures and witnessed first hand the myraid influences of history on these world famous cities.

Italy Study Tour

A group of students both from PCE, New Panvel and PHCET, Rasayani travelled to Italy in January 2018.

The tour covered the cities of Rome, Florence, Pisa, Bologna, Turin and Milan. The tour consisted of industry visits to the Ducati factory, Gelato ice-cream factory, traditional pizza making factory and the Ferrari and Lamborghini museums.

Spain Study Tour

A team of forty two students including students from PCE & PHCET went for an Educational trip to Spain in February 2017. They attended a session at the prestigious IE University in Madrid and visited industries like Chemo and Lladro. The trip also included a cultural and sports tour of Madrid, Barcelona and Valencia.

European Study Tour

A group of 19 students both from PCE, New Panvel and PHCET, Rasayani travelled to Italy, France, Switzerland and Spain.

The European Study Tour travelled across four European countries for eleven days visiting production lines and manufacturing process of numerous prolific companies as well stopping off at European tourist destination highlights.

STUDENT COUNCIL

Student Council (SC) is brought together to act as moderator among the students of all departments. The council looks after the needs and requirements of students and adumbrate the same to faculty advisors. The SC also mediates between other on campus committees (comprised of Faculty and Students; e.g. Anti-Ragging) with grievance redressal for students. It also bridges the gap between various other department level student chapters and guides and supports them in conducting calendar events for the respective chapter in collaboration. SC is responsible during academic year from welcoming 'freshers' to the campus right up to but not limited to bidding farewell to seniors leaving campus. SC seeks advice from faculty advisors and reports to them on matters pertaining to the student activities on campus and off it but affiliated to the Institute and University of Mumbai. It also supports and heard on the matters pertaining to the academic and co-curricular implementations for the institute.

The university guidelines along with some institutional guidelines have been followed for the formation of the Student Council.

Student Associations and Activities

Students co-curricular activities scheme

Mahatma Education Society has earmarked Rs. Ten Lakhs per annum exclusively for students activities such as B. Tech/ M. Tech Projects, Inter-collegiate Project competitions at University Level, participations organized by IITs and professional bodies, price money for internship competitions, attending workshops, competitions at National or International Level-SAE Formulae, etc. The college will be providing funds for above mentioned activities on a case by case basis. A committee has been constituted to evaluate the detailed project report of various group of students and recommend the grant appropriately.

Hyperion Racing

Hyperion Racing is a team of dedicated students who design and manufacture racing cars in order to participate in Formula Student events. The students use the knowledge acquired in the classroom to innovate while staying within the event restrictions of the competition. The team comprises of students from all steams of engineering which allows diverse thoughts and ideas. It has been six years since the team started and continues to improvise and innovate. They get hands-on experience in the fields of computer aided designing and manufacturing which helps them to become suitable professionals in the field of engineering.

Vanguard Racing Team

Another team-the Vanguard racing is also enthusiastic about designing, assembling, testing and racing an off-road vehicle in reputed competitions worldwide. This year the team stood fifth at the BAJA-SAE intercollegiate design competition held at South Africa. At Vanguard Racing students learn to put theory into practice experiencing real life situations and solving them. Being a small team create challenges, and allows for more opportunities for each team member to learn and gain valuable experience.

ETSA

The main objective of the Electronics & Telecommunication Student Association (ETSA) is to bring about the technical development of students by organizing seminars, workshops and other activities, to improve non-technical abilities of students by enhancing communication skills, managerial abilities, presentation skills and teamwork and to act as a forum for students to voice their opinions and suggestions.

IEEE

IEEE and its members inspire a global community to innovate for a better tomorrow through its highly cited publications, conferences, technology standards, professional and educational activities. IEEE is the trusted "voice" for Engineering, Computing and Technology Information around the globe. PCE seeks to inculcate in its students a sound technical foundation and provides every stimulus for the natural curiosity of student to develop skills. We firmly believe that a successful engineer is one who complements his in-depth theoretical knowledge with an intuitive practical approach.

AESA-MESA

AESA-MESA referred as the (Automobile/Mechanical Engineering Student Association) is a colligative group formed by students. Its objective is to keep the students updated with the latest trends in technology, research and industry and enable them to reinforce all that has been learnt in theory. The association conducts various workshops, seminars, software training programs and industrial visits to help students gain professionally.

ISHRAE

Indian Society of Heating, Refrigerating and Air Conditioning Engineers (ISHRAE) is an organization which encourages students towards HVAC&R industry and organizes seminars, workshops and industrial visits for students. Its main objective is to protect environment, improve indoor air quality, help energy conservation and provide education to students in HVAC and related user industries.

Computer Society of India (CSI)

Computer Society of India (CSI) is a nationwide, non-profit organization that was established with only one aim: to provide the aspiring computer techies around the country a platform to express themselves and share their information with other members and gain knowledge while doing so.

The CSI branch of Pillai College of Engineering, CSI-PCE, was founded in 2010. Time after time, they have displayed their energy, their dedication and their will to learn and teach through enumerable workshops, 'Study Circle' sessions and seminars and also, their very own technical magazine- "byteStream".

Smart India Hackathon 2022

Four PCE teams participated in the grand finale of Smart India Hackathon 2022. Team Homebrew secured First place in Software edition and won cash prize of Rs. 100000/- and Team SARBOT was the runner up in Hardware edition and won cash prize Rs. 75000/-.

In Smart India Hackathon 2020, Six teams from Pillai College of Engineering were selected for this mega- endeavor for software edition. "Team Status 200" and "Team CipherCops" were winners in the grand finale.

In Smart India Hackathon 2019, eight teams were selected from Pillai College for the grand finale and two teams were winners. And two teams : "Team Status200_OK" and "Team Code_Crunch" got first prize of Rs. 100000/- in the complex category

Spark Racing Team

Spark is a team of undergraduate students who independently design and manufacture Formula E vehicle which then competes at national level competitions. The team has developed Navi Mumbai's first electric vehicle and have been participaring in Formula Bharat and Formula Imperial competitions year on year since inception. Now the team is preparing to participate in Formula Imperial 2022 competition being held at Galgotias University and Buddh International Circuit.

Avishkar

Ms. Mimi Cherian of Pillai College of Engineering, New Panvel , secured THIRD Rank at the Final Round of 16th Inter-Collegiate Avishkar Research Convention: 2021-22 organised on Virtual Platform by University of Mumbai on May 2, 2022.

PCE has bagged the overall championship in Avishkar: 2020-21 in Engineering and Technology at the University level by securing 1st and 2nd position in PG section and 1st position in Ph D. Section.

N.S.S.

The National Service Scheme (NSS) is a Central Sector Scheme of Government of India, Ministry of Youth Affairs & Sports. It provides opportunity to the student youth of Technical Institution, Graduate & Post Graduate at colleges and University level of India to take part in various government led community service activities & programmes. The sole aim of the NSS is to provide hands on experience to young students in delivering community service.

Alumni Meet

Alumni are the brand-ambassadors of PCE. PCE maintains a strong and a positive relationship with its alumni and can benefit the institute socially, academically and professionally.

PCE ALUMNI ASSOCIATION

Society of Women Engineers

The mission of the Society of Women Engineers is to empower women to achieve full potential in careers as engineers and leaders, expand the image of the engineering profession as a positive force in improving the quality of life, and demonstrate the value of diversity and inclusion.

swe Society of Women Engineers

Outstanding Student of The Year Award

Every year the college awards “Outstanding Student of the Year for the Undergraduate Students” based on the academic performance and extra-curricular activities.

Felicitation Department Toppers

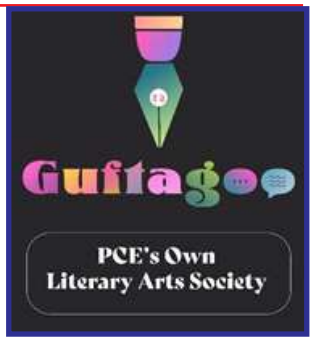
We have felicitated first three toppers from branch wise of all year students during the farewell function

The Training and Placement Committee

The Training and Placement Committee of PCE students provides complete support to the visiting companies at every stage of the placement process. Arrangements for Pre-Placement Talks, Written Tests, Interviews and Group Discussions are made as per the requirement of the companies. We conduct awareness programs for the students in the form of seminars and conferences in association with institutions and corporate.

Guftagoo - Cultural group

PCE students actively participated in the Mumbai University's Youth Festival and contested in the final round of Indian Classical Vocal Solo, Western Instrument Solo, Indian Classical dance, Story telling, On the spot painting, Cartooning. Nishita Jagdale, a Second-Year IT student, secured THIRD Rank in the Final Round(State Level) of western music.



In the Final Round Jagdale Nishita Satyawan, a Second-Year IT student, secured THIRD Rank in Western Instrument Solo.

Yoga & Meditation

TAPAS is a collective group formed by the students of Pillai College of Engineering, New Panvel, with the aim to educate students about the importance and benefits of yoga and meditation in our day to day lives. The club has initiated various activities which includes workshops and weekly meditation sessions for the students to help them academically and mentally

PCE has conducted a four day Yoga Camp in association with Patanjali Yoga Samiti, Raigad District from 14th to 17th October Regular Yoga Classes also is being conducted in the college premise
We have 2 certified meditation trainers and one certified yoga trainer in PCE.

Nature Club

PCE Nature Club has conducted an Idea contest on 7th May 2022. 180 students participated in the idea Contest and the winners were awarded with Rs.5000, Rs.3000, Rs. 2000 for 1st prize, 2nd prize and 3rd prize respectively.

PCE Nature club has conducted a Poster making competition for all first-year students on 21st May,2022 with the themes 1. Biodiversity and nature 2. Save the planet 3. Plastic awareness.

PCE Nature club organized a 'Plant for Planet' event on 24th June 2022. All the first year students were given soil to sow seeds and make saplings which they have to bring back to college for college tree plantation drive and distribution to NGOs for planting

Tree Plantation Drive

Students from Green Army and Nature Club are doing tree plantation drives every year in the nearby areas. The Zonal Officer, Liaison Officer, Sub- Liaison Officer and Active Cell constituted in the college for this purpose co-ordinates with District Level Nodal Officer, Officers of the concerned collectors and Forest Office for executing this task.

Swatcha Bharat Summer Internship

PCE Students have actively participated in Swachh Bharat Summer Internship programme launched by the Ministry of Human Resource Development, in association with the Ministry of Drinking Water and Sanitation and qualified for University Level.

Degree Certificate Distribution Ceremony

The Convocation ceremony of the class of 2021 was held on 26 th February 2022. Dr Muneer Sayyad, Assistant Vice President Reliance Jio was our Chief Guest for the DCDC.

The outstanding students for the academic years 2019-20 and 2020-21 was also felicitated in the event.

Alegria- The Festival of Joy

The Pillai Group of institutions exciting intercollegiate event Alegria – The Festival of Joy has become one of the most spectacular festivals of its kind in India. This celebration takes place every February as an audience of more than 50,000 people gather to behold incredibly talented young performers and star celebrities appear on stage. This year it was celebrated from 24th to 27th March 2022

The true heart of Alegria – The Festival of Joy is the exceptionally talented students who participate, organize and oversee more than a hundred different events that take place over the course of the festival with great professionalism and care. The festival was created with the hope of showcasing the power of the youth and has so far succeeded in doing so.

The theme for 2022 is 'Vintwood'. This time Alegria is adorned with the pearls of retro and vintage aspects. The theme is inspired by the immortal trends and the beauty that was cherished in the olden times


alegría

Community Service Day
&
UBER RANG

Social Service is at the core of our vision & mission at Mahatma Education Society. We continually strive to inculcate a spirit of community service among the staff and students of all our institutions. We believe in building strong communities and our institutions have a history of giving back to the community that we are part of. This is why Community Service Day is a very important day for every one associated with Mahatma Education Society. It is a day on which each one of MES's 48 institutions assemble at the Dr. K.M. Vasudevan Pillai Campus in New Panvel and dedicate time and love for the service of the lesser privileged people in society. More than 700 residents from various NGOs that house orphans, the elderly, tribal children, street children and destitutes are invited to our Campus and treated to a day of fun, food and frolic.

Mahatma Education Society's annual talent show UBER-RANG is an inter-institution talent competition organised annually and is open to all the students of Mahatma Education Society. It fulfils the twin purposes of funding the activities associated with Community Service Day and nurturing the talent within the student community. More than 200 students participate to win the Uber Rang competition annually with thousands of parents and friends on hand to witness them showcasing their wonderful talents.

Join the UBER RANG festivities in January!

Sports@PCE

PCE promotes sports at par with academics. Over the years PCE has won many laurels at University, state, national and International levels in the arena of sports. It used to be in the headlines many times for its students performance in the field of sports.

Mr. Mandar Mhatre won gold medal in West Zone Inter-University Basketball Men Championship 2021-22 held at Gwalior, Madhya Pradesh and qualified for All India Inter-University Basketball Men Tournament

Ms. Prapti kinare won Gold Medal in artistic group event and Silver Medal in artistic pair event

PCE Handball team has won Bronze Medal in Mumbai University Men's Handball championship 2019-20

The International Basketball player Neha Sahu of PCEwho has represented India at Asian Youth Women Basketball championship in the year 2017-18 and captained the Mumbai University team at All India University championship in the year 2018-19.

Miss Ayonika Paul, ME student of PCE - New Panvel selected to represent India in the Olympics at Rio(Brazil). Earlier she has won the Silver medal at Common wealth games-New Delhi. Another achievement of Ayonika is an Asian Bronze medal in the year 2015. She was also awarded as the Best achiever award in sports by Pillai Group of Institutions in 2016.

EFL Tournament

The prestigious soccer festival league of PCE - New Panvel which attract hundreds of soccer fans and players to test their football skill took place in the academic year with much fanfare. A total of 16 teams participated in this in house league tournament of prize money.

ECL Tournament

The Engineering Cricket League (ECL) has been the most popular sports event held annually among the engineering students in PCE. The sport is loved by each and every one and played with full force, love and passion. It is hands down one of the most amazing events that takes place in the Pillai's campus.

Intra-college Football and Throwball Competition for FE

Intra-College Sports Competition at cluster level was held in PCE, New Panvel in which 160 FE students from different divisions took part in discipline of Football and Throwball with great enthusiasm. The program is organised and managed by Sports Secretary and his team. Certificates and cash Prizes are also distributed among the runner ups and winners.

Department of Computer Engineering

Computer Engineering provides the opportunity to work in the continuously changing technology sector. With the development of faster hardware components, new communication systems and software, there is a demand for Engineers to study the design of digital hardware and software systems. Graduates of this program are grounded in scientific, mathematical, and technical knowledge through a syllabus that is updated with current relevant technology; they develop the ability to analyze, synthesize, and design both core parts of modern computing systems and integrated application systems centered around computers. The course encompasses a wide range of topics including computer architecture, operating systems, computer networks, security, robotics and artificial intelligence.

The department is equipped with state-of-the-art infrastructure with a highly dedicated faculty. Computer graduates are required for prestigious software and hardware industries. Many related business enterprises will hire graduates immediately after they have completed their engineering course.

- **VISION:**
- To evolve to become an institution at the centre of academic excellence which can adapt to the rapid advancements in the field of Computer Engineering.

- **MISSION:**
- To produce highly qualified, motivated graduates who can meet new technical challenges, contribute effectively as a team member and be innovator in computer hardware, software, design and application.
- To pursue creative research and new technologies in computer engineering and across disciplines in order to serve the needs of industry, government, society and the scientific community.
- To teach strong ethical values and social responsibility.

- **PROGRAM EDUCATIONAL OBJECTIVES:**

Our graduates will...

- Have knowledge, skills and attitude that will allow them to contribute significantly to the research and the discovery of new knowledge and methods in computing.
- Function ethically, responsibly, and will remain informed and involved as full participants in our profession and our society. Our graduates will successfully function in multi -disciplinary teams.
- Apply the basic principles and practices of engineering in the computing domain to the benefit of society and to pursue life long learning and professional developments.
- Use the theoretical and technical computer science knowledge to specify requirements, develop a design, and implement and verify a solution for computing systems of different levels of complexity.
- Communicate effectively and demonstrate leadership as well as a commitment to teamwork while working with others of diverse cultural and interdisciplinary backgrounds.

- **Program Specific Outcomes:**
- Student should be able to analyze, design and develop computer programs using appropriate hardware, software and mathematical models in the areas related to algorithms, system software, multimedia, mobile and web technology, data storage and computing, and networking for efficient and secure systems.
- Student should be able to use professional engineering practices, logic and strategies for creating innovative career paths to be an entrepreneur, and an urge to pursue for higher studies.
- Student should be able to Formulate and solve real life engineering problems for the public health and safety with social and environmental awareness along with ethical responsibility.

Department of Computer Engineering

The Department is offering B. Tech in Computer Engineering, M. Tech in Computer Engineering and Ph. D. in Computer Engineering courses.

Under Graduate Computer Engineering program re-Accredited by National Board of Accreditation (NBA) for 3 years from 2022-23 to 2024-25 i.e. upto 30th June, 2025.

Link for B. Tech Autonomous Curriculum
: https://www.pce.ac.in/academics/bachelors/computer-engineering/curriculum/

Link for M. Tech Autonomous Curriculum :
https://www.pce.ac.in/academics/masters/computer-engineering/curriculum/

Link for Ph. D. Curriculum :
https://www.pce.ac.in/academics/ph-d/phd-curriculum/

Research Areas

The Faculty of the Department of Computer Engineering are experts in numerous disciplines and are involved in the following research areas:

- Artificial Intelligence & ML
- Cyber security and Digital forensics
- Data Science
- Block Chain
- Big data Analytics
- High performance computing
- Natural language Processing
- IOT

Ph. D in Computer Engineering

Establishment Year : 2017 – 18
Intake capacity : 10

Research Guides
Dr. Sharvari Govilkar
Dr. Satishkumar Varma
Dr. Prashant Nitnaware
Dr. Sushopti Dashrath Gawade
Dr. Madhu Mahesh Nashipudimath

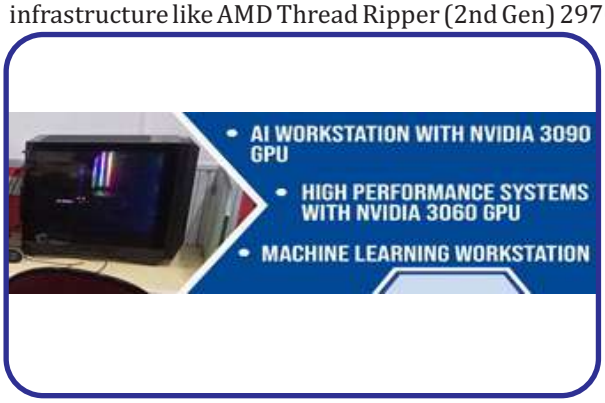
Undergraduate Labs

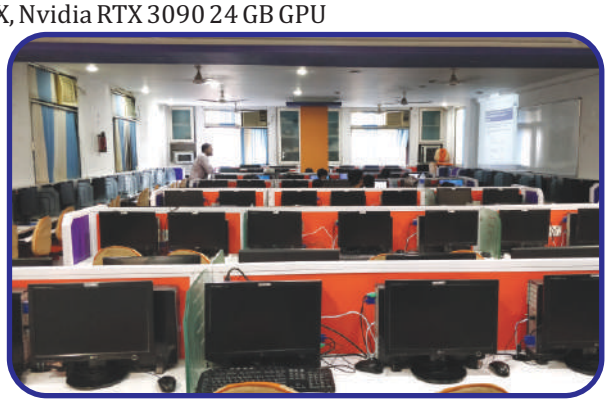
- Open Source Lab
- Network Lab
- Computer Architecture Lab
- Advanced Database Lab
- Computer Programming and Data Structure Lab
- Web Engineering Lab
- Database and Data Mining Lab
- System Software Lab
- Big Data Lab
- Artificial Intelligence Lab

Post Graduate Lab

Artificial Intelligence and Machine Learning Lab

Artificial Intelligence and Machine Learning Lab at the Computer Engineering department of Pillai College of Engineering is a funded project by AICTE under MODROB's Scheme. This lab is equipped with excellent infrastructure like AMD Thread Ripper (2nd Gen) 2970WX, Nvidia RTX 3090 24 GB GPU





Department of Information Technology

This course introduces students to the steps necessary for problem analysis in the field of Information Technology and teaches students how to identify and define the appropriate requirements needed to discover solutions. The course is focused on how to design, implement, and evaluate a computer-based system, process, component, or program to meet the needs of industry. Students learn to analyze the local and global impact of Computer Engineering on individuals, organizations and society leading students to recognize the need for continuous professional development. The Department will impart an understanding of professional, ethical, legal, security, social issues and responsibilities in the field of Information Technology.

- **VISION:**

- To become a reputable world-class institution that is responsive to national, regional and global development through engaging with an esteemed, dynamic faculty and student body to create innovative ideas and new application methods.

- **MISSION:**

- To expand the frontiers of knowledge through the use excellent conditions for teaching-learning and research.
- To contribute to the transformation of society through creativity and innovation.
- To serve as a dynamic custodian of society's moral values and thus sustain its integrity.

- **PROGRAM EDUCATIONAL OBJECTIVES:**

- Graduates should be able to demonstrate peer- recognized expertise together with the ability to articulate that expertise and use it for contemporary problem solving in the analysis, design, and evaluation of computer and software systems, including system integration and implementation.
- Graduates should be able to demonstrate engagement in the engineering profession, locally and globally, by contributing to the ethical, competent, and creative practice of engineering or other professional careers.
- Graduates should be able to demonstrate sustained learning and adapting to a constantly changing field through graduate work, professional development, and self study.
- Graduates should be able to demonstrate leadership and initiative to ethically advance professional and organizational goals, facilitate the achievements of others, and obtain substantive results.
- Graduates should be able to demonstrate a commitment to teamwork while working with others of diverse cultural and interdisciplinary backgrounds

Program Specific Outcomes:

PSOs are statements that describe what the graduates of a specific engineering program should be able

- To analyze and appropriately design for developing and deploying the tested system and application softwares to deliver quality products for business success and societal peace.
- To apply the knowledge of techniques and technologies, ethics, engineering and management principles and soft skills to pursue higher education and become successful entrepreneur to provide world-wide solutions to real world problems in diverse environments.
- To provide safe and healthy tomorrow by researching, evaluating, forecasting and communicating the current and new technologies for an individual or organization for performing tasks related to E-governance, E-Learning, and Training.

Department of Information Technology

The Department is offering B. Tech in Information Technology, M. Tech in Information Technology and Ph. D. in Information Technology courses.
Under Graduate Information Technology program Accredited by National Board of Accreditation (NBA) for 3 years from 2022-23 to 2024-25 i.e. upto 30th June, 2025
Link for B. Tech Autonomous Curriculum :
https://www.pce.ac.in/academics/bachelors/information-technology/curriculum/
Link for M. Tech Autonomous Curriculum :
https://www.pce.ac.in/academics/masters/information-technology/curriculum/
Link for Ph. D. Curriculum :
https://www.pce.ac.in/academics/ph-d/phd-curriculum/

Research Areas

The Faculty of the Department of Information Technology are experts in numerous disciplines and are involved in following research areas:

- Computer Networks
- Databases
- Big Data Analytics
- Cyber Security
- Natural Language Processing
- Geographic Information Systems

Ph. D in Information Technology

Establishment Year : 2019 – 20
Intake Capacity : 10

Research Guides
Dr. Sharvari Govilkar
Dr. Satishkumar Varma
Dr. Prashant Nitnaware
Dr. Sushopti Dashrath Gawade
Dr. Madhu Mahesh Nashipudimath

Undergraduate Labs

- Cloud and BigData
- Advanced Network
- Network
- Internet and Web Technology
- DSP and Image Processing
- System Software
- Artificial Intelligence /SoftwareTesting
- Software Engineering

GraduateLabs

- Urban Expansion Observatory

The Urban Expansion Observatory is a multidisciplinary Center of Excellence in the GIS and Remote Sensing Field. It conducts numerous projects regarding the applications of GIS within the Urban Planning space. For more information please refer to http://uxo.mes.ac.in

Department of Electronics & Computer Science
(Electronics Engineering renamed in 2020)

The Electronics & Computer Science (ECS) program integrates two core branches of engineering; Electronics Engineering and Computer Science. The ECS graduates get an exposure to build smart systems that involve sensors, processors, actuators, communication networks, IoT, Data Science and Data Analytics. The curriculum of ECS has been framed in such a manner that it caters the industry requirement as well as the latest technological trends.

Advanced courses like Artificial Intelligence and Machine Learning, Data Sciences, Computer Networks, IoT, Mobile Communication, VLSI etc. have been added to cater to Industry 4.0 technologies. This program also prepares students to pursue higher education in either Electronics Engineering or Computer Science stream.

Advance curriculum and intensive hands-on course work through Mini projects and project based learning prepares students for success in a wide range of industries, from software to bioengineering, automotive, aeronautical, process control, healthcare and agriculture. We, at PCE, provide an in-depth and quality education and encourage our students to apply what they learn through projects, internships, and research.

- **VISION :**
  - To produce professionally competent and socially responsible engineers capable of working globally.

- **MISSION :**
  - To provide in-depth quality education in Electronics & Computer Science Engineering and prepare the students for lifelong learning
  - To develop professional engineers who can critically and creatively apply the knowledge of engineering principles to solve real world problems
  - To inculcate entrepreneurship skills and impart ethical and social values

- **PROGRAMME EDUCATIONAL OBJECTIVES (PEOs):-**
  - Graduates will have the ability to apply engineering knowledge and skills to provide solutions to real world technical problems
  - Graduates will be successful as engineering professionals, innovators or entrepreneurs with a multidisciplinary approach contributing towards research and technological developments
  - Graduates will have the ability to pursue higher education in Electronics Engineering, Computer Science and allied streams.
  - Graduates will function in their profession with social awareness and responsibility while maintaining ethical standards.

- **Program Specific Outcomes (PSOs):-**

Engineering graduates will be able to

- Gain knowledge and skills to analyse and design Electronics circuits as well as Computer Programs
- Develop hardware and software systems in the areas like Artificial Intelligence & Machine learning, Big Data, Information Security, Automation, Embedded Systems, Signal Processing and Communication Systems.
- Apply modern Electronics and Computer engineering techniques and tools to find solutions for real life interdisciplinary problems.

Department of Electronics & Computer Science
(Electronics Engineering renamed in 2020)

The Department is offering B. Tech in Electronics & Computer Science, M. Tech in Electronics Engineering courses.

Link for B. Tech Autonomous Curriculum :
https://www.pce.ac.in/academics/bachelors/electronics-computer-science/curriculum/

Link for M. Tech Autonomous Curriculum :
https://www.pce.ac.in/academics/masters/electronics-engineering/curriculum/

Research Areas

The faculty of Department of Electronics & Computer Science Engineering are experts in numerous disciplines and are involved in following research areas:

- Artificial Intelligence and Machine Learning
- Big data
- Automation and Robotics
- Embedded Systems
- VLSI (Very Large Scale Integration)
- IoT (Internet of Things)
- Communication
- Image processing & Machine Vision

Research Guides

Dr.(Smt.) Bhagwat Monika
Dr. Khade Rajendrakumar Haribhau
Dr. Vaidya Avinash Ramnath

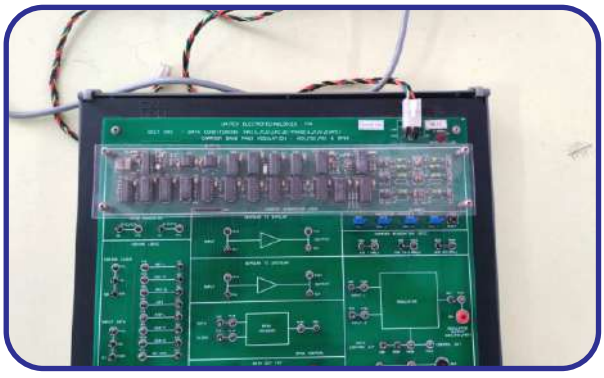
UndergraduateLabs

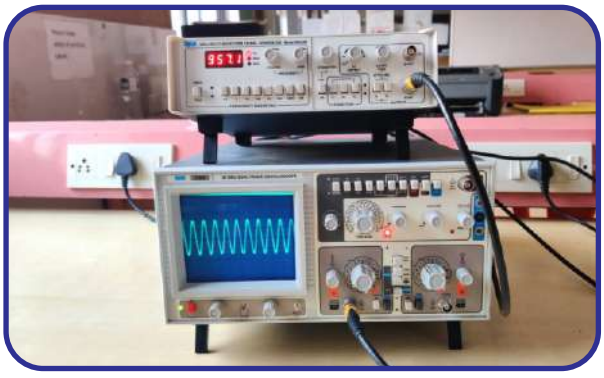
PowerElectronic	ProjectLab
PCB Design Lab	Image&VideoProcessingLab
BEEELab	MicroprocessorLab
DigitalElectronicsLab	VLSILab
AnalogElectronicsLab	RoboticsLab
ComputerNetworkingLab	AdvancedElectronicsLab

GraduateLabs

ResearchLab

The Research Lab in the Department of Electronics Engineering conducts research in numerous fields such as Antenna Design, Signal and Image Processing and in Applications of Drone Technology.





Department of Mechanical Engineering

Mechanical Engineering is a branch of engineering which studies understanding of forces and motion, and their applications in solving problems facing society. The field includes aspects of thermodynamics, fluid and solid mechanics, mechanisms, materials, energy conversion and transfer, and involves the application of physics, mathematics, chemistry, and increasingly, biology and computer science. Importantly, the field also emphasizes the process of formulation, design, optimization, manufacturing, and control of new systems and devices.

Technical developments in the last decade have established the importance of interdisciplinary engineering and science, and as a result, new technical disciplines within mechanical engineering have emerged. These new areas build on an understanding of the fundamental behaviour of physical systems making the focus of modern innovation the interfaces between traditional disciplines including micro- and nano-mechanical systems, simulation and synthesis, integrated complex distributed systems, and biological engineering.

- **VISION:**
  - To develop a world class programme with excellence in teaching, learning and research that would lead to growth, innovation and recognition.

- **MISSION:**
  - The mission of the Department of Mechanical Engineering is to benefit society at large by providing technical education to motivated and dynamic students. Engineers of the future will be able to apply basic and contemporary science, engineering and research skills to identify problems in the industry and academia and be able to develop practical solutions to them.

- **PROGRAM EDUCATIONAL OBJECTIVES:**

  - To prepare students for successful careers in the industries of Indian and global companies.
  - To provide students with a sound foundation in the fundamentals of mathematics, science and engineering.
  - To develop the ability among students to synthesize data, apply appropriate interpretation and be able to apply concepts to mechanical system design.
  - To provide opportunity for students to work as part of teams on multi-disciplinary projects.
  - To enable students for lifelong learning and introduce them to professional ethics and sustainable development.
  - To develop among students an attitude towards self employment through entrepreneurship.

PROGRAM SPECIFIC OUTCOMES

- Students should be able to design and develop mechanical systems (design, thermal and manufacturing) using core as well as interdisciplinary skills.
- Students should be able to generate and develop ideas that can result in self employment (eg.Start-ups) and also result in creation of more jobs for the society.
- Students should be able to apply technical and managerial skills to work as good team leader as well as players in diverse interdisciplinary projects
- Students should be able to model and develop solutions for problems relevant to industry;

Department of Mechanical Engineering

The Department is offering B. Tech in Mechanical Engineering, M. Tech in Mechanical Engineering and Ph. D. in Mechanical Engineering courses.

Under Graduate Mechanical Engineering program re-accredited by National Board of Accreditation(NBA) for 3 years from 2022-23 to 2024-25 i.e. upto 30th June, 2025

Link for B. Tech Autonomous Curriculum :

https://www.pce.ac.in/academics/bachelors/mechanical-engineering/curriculum/

Link for M. Tech Autonomous Curriculum :

https://www.pce.ac.in/academics/masters/mechanical-engineering-cad-cam-and-robotics/curriculum/

https://www.pce.ac.in/academics/masters/mechanical-engineering-thermal-engineering/curriculum/

Link for Ph. D. Curriculum :

https://www.pce.ac.in/academics/ph-d/phd-curriculum/

Research Areas

The Faculty of the Department of Mechanical Engineering are experts in numerous disciplines and are involved in following research areas:

- ❑ Thermal and Fluid Engineering
- ❑ Design Engineering
- ❑ Manufacturing Engineering
- ❑ Polymer Science
- ❑ Materials
- ❑ Renewable Energy

Ph.D in Mechanical Engineering

Establishment Year : 2017 – 18

Intake Capacity : 10

Research Guides

Dr. Sandeep Joshi

Dr. Priam Pillai

Dr. Dhanraj Tambuskar

Dr. Divya Padmanabhan

Dr. (Smt.) Agrawal Richa Sandesh

Dr. Rashed Ali Ramhan Ali

Dr. Talikotti Basavaraj Siddappa

Dr. Thokal Gajanan Nanasaheb

Undergraduate Labs

Heatand Mass Transfer	CNC
Fluid Mechanics	CADFEA
Metrology and Quality Control	Theory of Machines
Refrigeration and AirConditioning	Machine Shop
Mechatronics	Basic Workshop
Strength of Materials	

GraduateLabs

Smart Materials Lab

The Smart Materials Lab devises fundamental and applied research in the field of new materials development. The lab focuses on development of ferrofluids, silicone based composite structures, 3D printing materials among many other topics.

Department of Electronics and Telecommunication Engineering

The field of Electronics and Telecommunication Engineering requires the handling of complex apparatus and electronic mechanisms to produce state-of-the-art telecommunication systems capable of processing information at incredible speeds. Specialist engineers of this field design the electronic equipment devised to revolutionise the industries of entertainment, IT, communication and defence.

As developments in communication technology continue to shape and increasingly improve our daily lives, Electronics and Telecommunication Engineers gain a crucial catalytic role in evolving modern society. As globalization continues, modern engineers face the exciting challenge of providing the robust technological infrastructure for the telecommunication industry. The curriculum of Electronics and Telecommunication Engineering equips students with a rigorous understanding of basic science and engineering concepts so that learners acquire knowledge of computer architecture, microcontrollers, embedded systems, integrated circuits, electromagnetic field theory, signal and image processing and communication technologies,

- **VISION:**
- Strive towards producing world class engineers who will continuously innovate, upgrade telecommunication technology and provide advanced, hazard-free solutions to the mankind.
- Inspire, educate and empower students to ensure green and sustainable society.
- **MISSION:**
- Benchmarking against technologically sound global telecommunication institutions with a view towards continuous improvement.
- Continually exposing students to scenarios that demand structuring of complex problems and proposing solutions.
- Educate students and promote values that can prevent further degradation of our planet. Becoming responsible citizens genuinely concerned with and capable of contributing to a just and peaceful world.

- **PROGRAM EDUCATIONAL OBJECTIVES:**

- Provide graduates with a strong foundation in mathematics, science and engineering fundamentals to enable them to analyze and solve challenging problems in Electronics and Telecommunication Engineering.
- Impart analytic and thinking skills to develop innovative ideas in the field of Telecommunication Engineering.
- To keep students up to date with the latest advancement in the field of Electronics and Telecommunication
- Inculcate qualities of leadership skills, multi-disciplinary team work and an ability to adapt to evolving professional environment in the field of Engineering and Technology.
- To create awareness among the students towards ethical, social and environmental issues in the professional career.

PROGRAM SPECIFIC OUTCOMES

- Able to understand the concept of Basic Electronics, Network and Circuit Analysis, Analog and Digital circuits, Signals and System, Electro magnetics and apply them in various areas like Microwave Engineering, Wireless Communication, Digital image processing, Advance Communication systems etc.
- Able to use techniques, skills, software, equipments and modern engineering tools necessary for Electronics and Telecommunication Engineers to identify, formulate and solve problems in industries and research work.
- Able to work in multi disciplinary environment to provide socially acceptable technical solutions for complex communication engineering problems.

Department of Electronics and Telecommunication Engineering

The Department is offering B. Tech in Electronics and Telecommunication Engineering course. Under Graduate Electronics and Telecommunication Engineering program Accredited by National Board of Accreditation (NBA) for 3 years from 2022-23 to 2024-25 i.e. upto 30th June, 2025
Link for B. Tech Autonomous Curriculum :
https://www.pce.ac.in/academics/bachelors/electronics-and-telecommunication-engineering/curriculum/

Research Areas

The Faculty of the Department of Electronics and Telecommunication Engineering are experts in numerous disciplines and are involved in following research areas:

- Internet of Things
- Cloud Computing
- Computer Communication Networking
- 5G Communication
- Industry 4.0
- Electronic Product Design
- Antenna Design
- Robotics and Automation
- Artificial Intelligence and Machine Learning
- Data Science
- Blockchain
- Database Management

Undergraduate Labs

Communication Lab	Digital Signal Processing
Advanced Communication Lab	Digital Communication lab
Micro processor Lab	Research Lab
Industry 4.0 lab	Project Lab

Department of Automobile Engineering

Automobile Engineering, also known as Automotive Engineering, is the study of designing, operating and manufacturing automobiles and their respective subsystems such as buses, cars and trucks.

An Automobile Engineer's main task is designing, testing and developing vehicles and their components from the first concept stages to final production. As the vehicle or product will continue to require constant improvement even after being launched on the market, responding to customer feedback and improving the vehicle is a vital task and duty of an Automobile Engineer.

Those who have elected to study Automobile Engineering may progress into a variety of fields and disciplines such as aerodynamics, alternative fuels, chassis, electronics, emissions, ergonomics, manufacturing, materials, motorsport, power train, rapid prototyping, vehicle and pedestrian safety or supply chain management. It is the responsibility of an Automobile Engineer to create and maintain high standards of automobiles through the use of traditional methods and state-of-the-art technology.

- **VISION:**
  - To develop an established institution of Automobile Engineering which will become a centre of quality standardization, research and academics through innovation, high quality teaching, projects and world class technology.

- **MISSION:**
  - To provide quality education and knowledge that is well-grounded in the fundamental principles of engineering, Which fosters innovation, and prepares students for leadership positions and successful careers in industry, academia or entrepreneurial ventures.

- **PROGRAM EDUCATIONAL OBJECTIVES:**
  - Students should develop sound fundamental knowledge in mathematics, science and automobile engineering.
  - Students would acquire an ability to function productively as an individual as well as in a team and are well versed in using modern technology and equipment to solve real world problems.
  - Students would be provided with opportunities to develop an instinct for innovation and skills as researchers through industry collaboration, practical training, laboratory experience, projects and the various courses offered to them.
  - Students would inculcate a professional and ethical attitude, good leadership qualities and commitment to social responsibilities in their thought process.
  - Students will be encouraged to understand the importance of lifelong learning, working on contemporary global issues and to become a successful entrepreneur .

- **PROGRAM SPECIFIC OUTCOMES(PSOs)**
  - Students should be able to generate and develop ideas that can result in self employment (eg. Start-ups) and create more jobs.
  - Students should be updated with the latest trends in automobile engg, beyond curriculum by way of doing internships and research projects.

Department of Automobile Engineering

Under Graduate Automobile Engineering program Accredited by National Board of Accreditation (NBA) for 3 years from 2022-23 to 2024-25 i.e. upto 30th June, 2025

Link for B. Tech Autonomous Curriculum :

https://www.pce.ac.in/academics/bachelors/automobile-engineering/curriculum/

The following seven specialisations are offered by B. Tech. Automobile Engineering in the Autonomy curriculum.

1. Electric Vehicles 2. Additive Manufacturing, 3.MotorSports Engineering 4. Autonomous Vehicles 5. Supply Chain Management 6. Transportation and 7. Automotive Designing.

Research Areas

The Faculty of the Department of Automobile Engineering are experts in numerous disciplines and are involved in following research areas:

- Thermal Engineering
- Advanced Manufacturing
- Stress Analysis
- Biomaterial
- Welding Technology

Undergraduate Labs

Production Processes
Automobile Engg
Engg Mechanics
Material Technology
Autotronics

Mechanical Engg Measurements
Hydraulic Machinery
Thermal Engg (Internal Combustion Engines)
CAD/FEA Lab
Vehicle Maintenance

Department of Applied Science, Mathematics and Humanities

First Year Labs

Physics Lab	Language Lab
Chemistry Lab	Workshop
Environmental Lab	Computer Center

M. Tech Defence Technology

Defence Research & Development Organisation (DRDO) has collaborated with AICTE for conducting the Regular M.Tech Course in Defence Technologies having 6 specialized streams in collaboration with All India Council for Technical Education (AICTE). The M.Tech. courses would infuse interest in students and motivate them to pursue their career in research and development for defence and security to join defence, PSUs and private defence industries.

The M.Tech. in defence technology courses has been designed to produce Post Graduates who will have the necessary theoretical & experimental knowledge, skill and aptitude in various defence technologies areas and pursue them to carry out R&D in defence. The students will be provided valuable exposure & knowledge for various state of the art defence systems and contemporary technologies through class lectures & main thesis work. During the program, the students would be given valuable exposure by carrying out their main thesis work in DRDO labs, Defence PSUs & Private Defence Industries. This collaborative effort of DRDO, AICTE and Industries will provide required knowledge to the students and create job opportunities for them. The academic-industry trained workforce will immensely contribute in realizing GOI vision of Atmanirbhar Bharat.

Program Structure

It is a 4 semester program with total 80 credits. It is having 6 specializations, as regard to the specializations, semester -1 will have common curriculum and semester 2 curriculum will be varied as per the specialization. Semester 3 & 4 includes dissertation and industrial training. The M.Tech. in Defence Technology will be having a few specializations.

For eligibility criteria, syllabi and other guidelines please see the following link:
https://www.pce.ac.in/academics/masters/defence-technology/curriculum/

ADMISSION

A FIRST YEAR ENGINEERING

❑ Eligibility Criteria

The admission to First Year Engineering is based on the Eligibility criteria decided by State Common Entrance Test Cell, Government of Maharashtra or Director of Technical Education, Government of Maharashtra from time to time. For details the candidates are advised to visit the website http://cetcell.mahacet.org /www.dtemaharashtra.gov.in or refer to the admission rules published by State CET cell from time to time

Eligibility criteria for Maharashtra State Candidature Candidate :

(i) The Candidate should be an Indian National;
(ii) Passed HSC or its equivalent examination with Physics and Mathematics as compulsory subjects along with one of the Chemistry or Biotechnology or Biology or Technical Vocational subject or Computer Science or Information Technology or Informatics Practices or Agriculture or Engineering Graphics or Business Studies , and obtained at least 45%marks (at least 40%marks, in case of Backward class categories, Economically Weaker Section and Persons with Disability candidates belonging to Maharashtra State only) in the above subjects taken together and The Candidate should have appeared in all the subjects in MHT-CET2022 and should obtain non zero score in MHT-CET 2022.
OR
(ii) Passed Diploma in Engineering and Technology and obtained at least 45% marks (at least 40% marks, in case of Backward class categories, Economically Weaker Section and Persons with Disability candidates belonging to Maharashtra State only

Eligibility criteria for All India Candidature Candidates, Union Territory of Jammu and Kashmir and Union Territory of Ladakh Migrant Candidature Candidates

(i) The Candidate should be an Indian National;
(ii) Passed HSC or its equivalent examination with Physics and Mathematics as compulsory subjects along with one of the Chemistry or Biotechnology or Biology or Technical Vocational subject or Computer Science or Information Technology or Informatics Practices or Agriculture or Engineering Graphics or Business Studies and obtained at least 45%marks (at least 40%marks, in case of Backward class categories, Economically Weaker Section and Persons with Disability candidates belonging to Maharashtra State only) in the above subjects taken together and should obtain non zero positive score in JEE Main (B.E/B.Tech) or the candidate should have appeared in all the subjects in MHT-CET 2022 and should obtain non zero score in MHT-CET 2022. However, preference shall be given to the candidate obtaining non zero positive score in JEE Main(B.E/B.Tech) over the candidates who obtained non zero score in MHT-CET 2022.
OR
(ii) Passed Diploma in Engineering and Technology and obtained at least 45% marks (at least 40% marks, in case of Backward class categories, economically Weaker Section and Persons with Disability candidates belonging to Maharashtra State only);

Eligibility criteria for NRI / OCI / PIO, Children of Indian workers in the Gulf countries, Foreign National

The candidate should have passed the HSC or its equivalent examination with Physics and Mathematics as compulsory subjects along with one of the Chemistry or Biotechnology or Biology or Technical or Vocational subjects, and obtained at least 50% marks in the above subjects taken together and fulfilling eligibility criteria as per category of admission.

For eligibility please refer to details of admission rules of State CET Cell by visiting website : http://cetcell.mahacet.org/

Transfer of Candidates (Course and/or Institution) after One/ Two/ Three Year

There shall be no transfer of students at any stage to Autonomous Institutions.(Subject to condition/rules laid down by CET Cell, Directorate of Technical Education, Government of Maharashtra, , University of Mumbai, AICTE etc from time to time.)

B. DIRECT SECOND YEAR ENGINEERING

❑ Eligibility Criteria

For Maharashtra State Candidature Candidate

(i) The Candidate should be an Indian National;

(ii) Passed Diploma Course in Engineering and Technology with at least 45% marks (40% marks in case of candidates of backward class categories, Economically Weaker Section and Persons with Disability belonging to Maharashtra State only) in appropriate branch of Engineering and Technology from an All India Council for Technical Education or Central or State Government approved Institution or its equivalent;

Or

' (ii) Passed B.Sc. Degree from a University Grants Commission (UGC) or Association of Indian Universities recognized University with at least 45% marks (40% in case of candidates of Backward class categories, Economically Weaker Section and Persons with Disability belonging to Maharashtra State only) and passed HSC with Mathematics as a subject.

Provided that students belonging to this category shall clear the subjects of Engineering Graphics/ Engineering Drawing and Engineering Mechanics of the first year Engineering Program along with second year subjects.

Or

(ii) Passed D.Voc. Stream in the same or allied sector.

(iii) In the above cases, a suitable bridge Courses, if required such as in Mathematics may be conducted.

(iv) Any other criterion declared from time to time by the appropriate authority as defined under the Act.

For eligibility please refer to details of admission rules of State CET Cell by visiting website : http://cetcell.mahacet.org/

Transfer of Candidates (Course and/or Institution) after One/ Two/ Three Year

There shall be no transfer of students at any stage to Autonomous Institutions. (Subject to condition/rules laid down by CET Cell, Directorate of Technical Education, Government of Maharashtra, , University of Mumbai, AICTE etc from time to time.)

C MASTER OF TECHNOLOGY

Eligibility Criteria For Maharashtra Candidature Candidate And All India Candidature Candidate :

Eligibility Criteria For Maharashtra Candidature Candidate and All India Candidature Candidate,-

(i) The Candidate should be an Indian National;
(ii) Passed Bachelor Degree in the relevant field of Engineering and Technology or Pharmacy from All India Council for Technical Education or Central or State Government approved institutions or equivalent, with at least 50% marks (at least 45% marks in case of candidates of Backward Class categories, Economically weaker section and Persons with Disability category belonging to Maharashtra State);
(iii) Passed Bachelor Degree in the relevant course of Engineering and Technology or Pharmacy as specified in the eligibility criteria for admission to a Post Graduate Degree course of the concerned University for which admission is being sought;
(iv) Obtained Qualified score in Graduates Aptitude Test in Engineering (GATE) conducted by the Indian Institute of Technology and valid for the current academic year ;

Or

'(iv) Obtained non-Qualified marks in Graduates Aptitude Test in Engineering (GATE) conducted by the Indian Institute of Technology for the current academic year;

Or

'(iv) For sponsored candidates, minimum of two years of full time work experience is required in a registered firm/ company/ industry/ educational and/ or research institute/ any Government Department or Government Autonomous Organization in the relevant field in which admission is being sought;
(v) GATE Qualified Candidates shall have preference over the non qualified Candidates.

For eligibility please refer to details of admission rules of State CET Cell by visiting website : http://cetcell.mahacet.org

D. Ph.D. . (Science & Technology) Program

University of Mumbai has accorded approval to enrol 10 students each for Ph.D. (Science & Technology) Degree courses in the subject of Mechanical Engineering, Computer Engineering and Information Technology. Aspiring candidates are advised to visit University of Mumbai website www.mu.ac.in for rules, regulations and eligibility criteria for admission to Ph.D. program

ADMISSION PROCEDURE

1) All the eligible candidates are required to register on http://cetcell.mahacet.org website for all types of admission. This includes all candidates who want to apply for institute level and Malayalam minority quota admissions.

College Code : 3207

Bachelor of Technology Courses

Computer Engineering
Information Technology
Electronics & Telecommunication Engineering
Electronics and Computer Science
Automobile Engineering
Mechanical Engineering

Master of Technology Courses

Information Technology
Computer Engineering
Electronics Engineering
Mechanical Engineering (Thermal Engineering)
Mechanical Engineering (CAD/CAM & Robotics)
Defence Technology

For details of Centralised Admission Process (CAPI to II) (for procedure for securing seats, for betterment in options) please refer to details of Centralized Admission Process (CAP) of State CET Cell by visiting website http://cetcell.mahacet.org or www.pce.ac.in

UNIVERSITY STATUTORY REQUIREMENTS

1) Attendance:

As per the University Regulations a Student has to attend 75% of the total Numbers of Classes conducted in Theory, Practicals & Tutorials separately, to become eligible to appear for the semester examinations.(also student are advised to follow the rules of respective bodies from time to time to avail the facilities of University)

2) Internal Assessment (IA)

Internal Assessment marks are awarded to a student based on his/her performance in two Internal Assessment scheduled during the semester. The Internal Assessment marks are added to the marks scored by the student in the University Examinations in each of the individual Subjects. To Pass in a subject, a student has to score a minimum of 40% in Examinations, separately for each passing heads.

3) Term Work/Practicals/Viva

Each of the Practical Subjects generally carries 25/50 marks. These marks are awarded based on the regularity of the Student to the Practical/Tutorials/Classes and also on his /her performance in the Test conducted in the Practical/Tutorial subject, at the end of the semester.

4) Criteria For Eligibility To Higher Classes:

An Academic year consists of Odd & Even Semesters of that academic year. A Student is eligible for the promotion to the next academic year if he/she satisfies the condition laid down by University of Mumbai for promotion.

RULES OF DISCIPLINE

In order to have the sanctity and decorum in the Campus and Hostels, the following Rules of Discipline are required to be followed by the Students:

1) The students should behave courteously with the members of the Staff / Public.
2) They should maintain silence in the Library, Class Rooms & work quietly in drawing Halls, Laboratories & Work Shops etc.
3) Students coming late to the Classes are not permitted to enter the Class Rooms.
4) They should not operate the Machines, Meters & Tools in the Laboratories and Work Shops without the permission of the Staff Members & In-charge of the laboratory. They will be responsible for the damages and will have to pay for their replacements.
5) They should not absent themselves from the Classes without getting the prior permission of the class co-ordinator.
6) Students not satisfying the minimum attendance & sessional requirements of the University will not be able to take the Examination as per University Rules.
7) Student should take all the Assignments & Tests without Fail towards fulfillment of the University Regulations made in this respect.
8) Playing with colours or any other material inside the College campus is strictly prohibited. Students found indulging in such activity are liable for strict disciplinary action.
9) As per Mumbai University's Circular Ref. No. UG/552 of 2004 dated 31 December 2004, use of mobile phones in the College premises is prohibited. Strict action will be taken against students found violating this rule by confiscating their mobile phone as well as imposing a fine.
10) Students are required to wear 'I' Card in the College Campus, if they fail to wear, a fine as per rules will be imposed.
11) Smoking and use of tobacco and other tobacco leaf products are strictly banned in the campus
12) Students are not allowed to arrange or participate any party in a group either of our college students or students of other colleges without the permission of the Principal. The participation in any

The following committees have been constituted as per the directives issued from statutory bodies

1. Anti Ragging Committee

Ragging in PCE is totally banned and strictly prohibited as per the provisions of following Acts and regulations.

1. "Maharashtra Prohibition of Ragging Act, 1999." From Govt. of Maharashtra.
2. All India Council for Technical Education (Prevention and Prohibition of Ragging in technical Institution, Universities including Deemed Universities imparting Technical Education.) Regulations 2009.
3. "UGC Regulations on Curbing the Menace of Ragging in Higher Educational Institutions, 2009" If any student find involved in, guilty of or abetting the ragging strict disciplinary action shall initiated and shall be penalized as per the provisions of above acts and regulations.
   All the Students and their Parents are required to register online anti-ragging affidavit regarding not to indulge in ragging or to abet ragging by any means so as to prevent ragging in the institution, as per University of Mumbai circular dated 7th August 2013, the students seeking admission to the Hostel are also required to submit another affidavit for the same to the Institution/hostel authorities.

"Any act of physical or mental abuse (including bullying and exclusion) targeted at another student (fresher otherwise) on the ground of colour, race, religion, caste, ethnicity, gender(including transgender), sexual orientation, appearance, nationality, regional origins, linguistic identity, place of birth, place of residence, or economic background" is not tolerated in the campus.

As per AICTE, New Delhi Notification bearing F.No. 37-3/Legal/AICTE/2009 dated 01/07/2009 the Anti Ragging Committee and Anti Ragging Squad have been constituted for prevention of ragging in our institute.

2. **Internal Complaints Committee (Women Cell)**

An Internal Complaints Committee (Women Cell) has been constituted at institute level as per the directives issued from AICTE, UGC and University of Mumbai and Government of Maharashtra from time to time.

3. **Grievance Redressal Committee**

A Grievance Redressal Committee at institute level has been constituted to hear and dispose off speedily the complaints received from the aggrieved students and their parents regarding admission, administrative, academic and other related subjects as mentioned in the AICTE regulation dt. 7th November 2019 regarding "Establishment of Mechanism for Grievance Redressal Regulations 2012", AICTE letter dated 9th July 2012 and The Gazette of India dated7th November 2019. As per AICTE directions an online grievance redressal mechanism has also been established.

4. **Committee for Prevention of Atrocities to SC/ST**

A Committee for Prevention of Atrocities to SC/ST has been constituted to prevent Atrocities to SC/ST students and staff members in the institute in pursuant to following regulations:

a) The Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Act, 1989

b) All India Council for Technical Education directives in their Approval Process Handbook 2016-17.

5. **Equal Opportunity Centre/cell**

Equal Opportunity Centre/Cell has been constituted as per the UGC guidelines to oversee the effective implementation of policies and programmes for disadvantaged groups, to provide guidance and counseling with respect to academic, financial, social and other matters and to enhance the diversity within the campus for eliminate the social inequalities that created the barriers of denial of access to materials, cultural and educational resources to the disadvantaged groups of the society like SCs, STs, Women, OBC(Non-Creamy-Layer, Minorities and Physically Challenged persons.

Registrar's Profile

Shri. P. V. Niranjan has passed M.Sc. Physics & Mathematics from Moldova State University, Moldova (former U.S.S.R.) and MBA in HR. He is having 28 years of experience out of which 6 years in supervisory category in different industries and 22 years in Higher Education institutions which includes administration and 3 years teaching of Applied Physics in an Engineering institution.

CONTACT FOR ADMISSION:

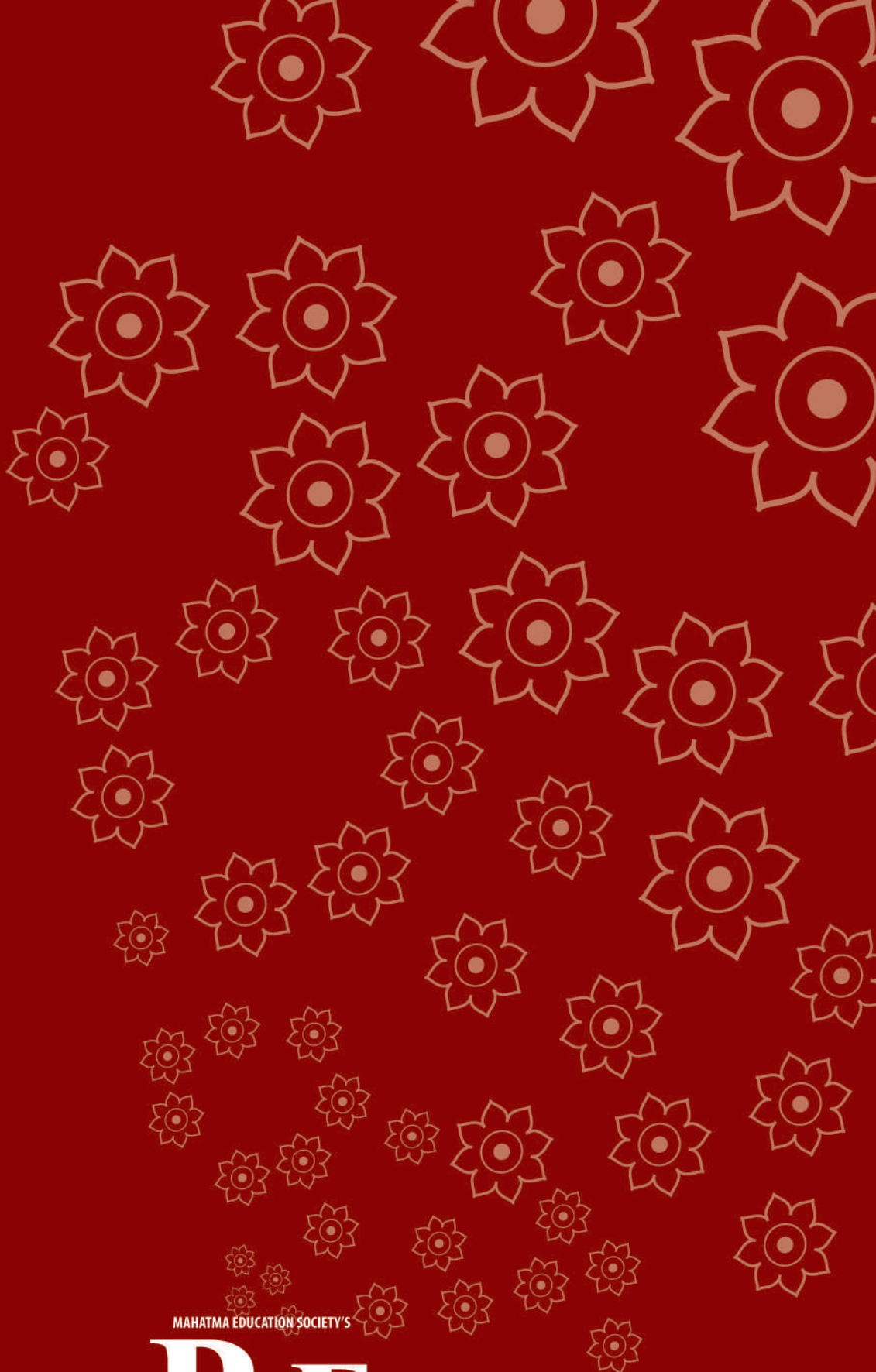
Mobile No : 9769710532/8928963440

Direct No : 022-27483500

email ID : pceadmissions@mes.ac.in

PCE Portal for registration :

https://admissions.pce.ac.in/



MAHATMA EDUCATION SOCIETY'S

PCE

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