Hon'ble Dr. Patangraoji Kadam Saheb
Founder, Bharati Vidyapeeth

Blessings

Bharati Vidyapeeth's College of Engineering for Women, Pune

e-newsletter

Hon'ble Dr. Patangraoji Kadam Saheb
Founder, Bharati Vidyapeeth

Participation of women in technology is an important aspect in social and economic development of the nation. It is a critical constituent in the process of improving the quality of life of women themselves. When women have economic empowerment, it is a way for others to see them as equal members of society. Through this, they achieve more self-respect and confidence by their contributions to their communities. As women play key roles in social transformation, Hon'ble Dr. Patangraoji Kadam Saheb established Bharati Vidyapeeth's College of Engineering for Women, Pune in June 2000 with the vision, "Women empowerment through Technical Education" and provided opportunity to women for higher education in the field of technology. The institute was started exclusively for women and it is running with 100% women students. Establishing and running Women Engineering College really contributes to social transformation through dynamic education which is the vision of Bharati Vidyapeeth.

Bharati Vidyapeeth's College of Engineering for Women, Pune

Pune-Satara Road, Dhankawadi, Pune 411043
Recognized by AICTE, New Delhi, DTE Mumbai, Affiliated to Savitribai Phule Pune University
Accredited by NAAC with "A" Grade
Id No.: PU/PN/Engg./150/2000, DTE College Code: EN6285
Phone: (020)24371684, (020)24361732 Fax: (020) 24372210
Email: coewpune@bharatividyapeeth.edu, Website: http://coewpune.bharatividyapeeth.edu

Undergraduate Programme

Sr. No.	Course	Intake	Course Code
1	B.E. Artificial Intelligence and Machine Learning (AI & ML)	60	628592150F
2	B.E. Computer Engineering (CE)	180	628524550F
3	B.E. Electronics and Telecommunication Engineering (E & TC)	120	628537250F
4	B.E. Information Technology (IT)	60	628524650F

Post Graduate Programme

Sr. No.	Course	Intake	Course Code
1	M.E. (Computer Engineering)	12	628524550F
2	M.E. (E & TC-VLSI & Embedded System)	9	628534150F

Research Centre

Course
Ph.D.(Doctoral Program in Electronics and Telecommunication Engineering)

Vision:

- Women Empowerment through Technical Education

Mission:

- Develop women students to rise to their full potential.
- Impart knowledge and prepare competent engineers.

Special Features:

- Best Engineering College with an All India Rank of 61 in THE WEEK-HANSA Research Survey 2024, securing All India Rank 35 among private engineering colleges and an impressive West Zone Rank 11.
- Received "Best Women College of the Year 2019" Award.
- Recipient of "College of Substance" Award.
- The oldest engineering college "exclusively for women".
- All government scholarships are applicable for eligible students.
- Placement opportunities in multinational companies with 100% assistance.
- Excellent university results and tradition of consistent university rank holders.
- MOUs with reputed industries and academia.
- On campus hostel facility with 24 × 7 security.
- DTE approved e-Scrutiny centre for admissions.

Facebook: https://www.facebook.com/Bharati-Vidyapeeth-College-of-Engineering-for-Women-Pune-1599060517007121

Instagram: https://instagram.com/bvcoew_pune?igshid=ep1a85ikhj6s

राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद

विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

An Autonomous Institution of the University Grants Commission

Certificate of Accreditation

The Executive Committee of the
National Assessment and Accreditation Council
is pleased to declare
Bharati Vidyapeeth's
College of Engineering for Women
Dhankawadi, Tal. Haveli, Dist. Pune,
affiliated to Savitribai Phule Pune University, Maharashtra as
Accredited
with CGPA of 3.15 on four point scale
at A grade
valid up to October 24, 2029

Date : October 25, 2024

Director

35505

BC(SC)/222/2nd Cycle/MHCOGN100226

Principal's Message

Prof. Dr. Pradeep V. Jadhav

Principal

Dear Students, Parents, and Stakeholders,

Warm Greetings from Bharati Vidyapeeth's College of Engineering for Women, Pune!

It gives us immense pride to present the latest edition of our e-newsletter "Blessings..." (Vol. 7, Issue 2) for the academic year 2024-25. This issue is especially significant as BVCOEW celebrates its Silver Jubilee - 25 years of excellence in technical education and women empowerment. We are proud to share that our institute has been reaccredited by NAAC with an 'A' grade, has applied for NBA accreditation, and actively participates in the NIRF ranking every year.

The newsletter highlights various academic and technical achievements of the semester, showcasing the vibrant campus life driven by our dedicated faculty and talented students. A major milestone this year includes the launch of a new UG program in Artificial Intelligence & Machine Learning with an intake of 60 students, and a PG program in Computer Engineering with 12 seats. We are also proud to be recognized as a Ph.D. Research Centre in Electronics and Telecommunication Engineering under SPPU.

Our first-year intake is now 420 students, reflecting the growing trust of the academic community in our institution. The issue also celebrates the dynamic student-led initiatives and technical events that continue to nurture innovation, leadership, and holistic development.

Special thanks to Newsletter Coordinator Prof. Dr. Deepali Godse, Chief Editors, and the entire editorial team for their sincere efforts in curating this enriching edition.

Internal Quality Assurance Cell (IQAC)

IQAC Objectives:

- To imbibe quality environment at institute in all academic and administrative processes.
- To be instrumental in review of teaching learning process, structures, methodologies and student centric methods for achieving best educational environment.

Roles and responsibilities of IQAC:

- Keeping regular updates of NAAC and other quality improvement circulars.
- Conducting regular meetings of IQAC.
- Preparing Strategic plan of the institute.
- Preparation and submission of Annual Quality Assurance Report (AQAR) yearly.
- Maintaining academic records and conducting various audits at required intervals.
- Taking review of updating and updation of hardware and software requirements and internet facilities.
- Updating feedback forms as per guidelines from regulatory bodies.
- Providing guidelines for implementing ERP.
- Organizing various technical and nontechnical events.
- Preparation of reports of various activities for quality improvement.

Members List:

Sr. No.	Name of the IQAC Member	Designation	Position
1	Prof. Dr. P.V.Jadhav	Head of the Institute	Chairperson
2	Dr. K.D.Jadhav	Joint Secretary of Bharati Vidyapeeth	Member of Management
3	Dr. S. F. Patil	Executive Director of Bharati Vidyapeeth	Member of Management
4	Prof. Dr. S.R Patil	HOD, E & TC Engineering	Teacher Representative
5	Prof. Mrs. Khot S.T	Training cell Coordinator	Teacher Representative
6	Prof. Dr. V. R. Pawar	Academic & Research Coordinator	Teacher Representative
7	Prof. Dr. S. M. Rajbhoj	Industry institute Interaction	Teacher Representative
8	Prof. Ms. K.D.Mahajan	Alumni Coordinator	Teacher Representative
9	Prof. Mr. D. D. Pukale	HOD, Computer Engineering	Teacher Representative
10	Prof. Mrs. P. D. Kale	Placement cell Coordinator	Teacher Representative
11	Prof. Dr. D. A. Godse	HOD, Information Technology	Teacher Representative
12	Prof. Dr. K. A. Malgi	ICT & IT Infrastructure Coordinator	Teacher Representative
13	Prof. Dr. A. M. Pawar	HOD, Engineering Sciences and Allied Engineering	Teacher Representative
14	Mrs. Vaishali Kadam	Office Superintendent	Admin. Representative
15	Dr. V.M. Mohite	Librarian	Admin. Representative
16	Mr.Nityanand Prabhutendolkar	Chief Technical Officer, Ergen Technovation Pvt. Ltd.	Industry Representative
17	Mr. Sanjaykumar Gupta	Parent	Parent Representative
18	Ms. Shital Patil	Alumna (IT)	Alumni Representative
19	Ms. Khushi Mittal	Student (E & TC)	Student Representative
20	Prof. Dr. S. S. Chorage	Professor (E & TC)	Coordinator of the IQAC

From the Desk of Coordinator...

Prof. Dr. D. A. Godse
Newsletter Coordinator

Dear Stakeholders,

Greetings!
As shared in our previous e-newsletter, our institute has been accredited with an "A" grade in NAAC Cycle 2, an important milestone coinciding with our Silver Jubilee Year. This achievement reflects the dedication of our students, faculty, and staff, along with the unwavering support of our management and stakeholders. Guided by our vision of "Women Empowerment through Technical Education," we are now progressing toward NBA accreditation, confident that the blessings of our revered founder, Hon. Dr. Patangraoji Kadam Saheb, will continue to inspire us.

The semester was marked by impactful activities, including an International Conference, symposia, and an IIT-sponsored workshop, fostering a culture of innovation and research. We are now preparing for our second International Conference, focusing on enhancing research involvement among students and faculty. In alignment with the National Education Policy (NEP), the revised second-year curriculum has been implemented by Savitribai Phule Pune University.

We celebrated International Women's Day through INOAUG APEX UTSAV 2025 and hosted sports competitions, a technical festival, and our grand annual gathering, BharatiYugam 2025, each with great zeal and distinguished guests.

This edition of our newsletter captures highlights from these events. I sincerely thank our respected Principal, Prof. Dr. Pradeep Jadhav; Heads of Departments; dedicated faculty and staff; and enthusiastic students for their contributions. I also extend appreciation to the editorial team for their meticulous efforts.

Finally, we are truly grateful to each of you, our stakeholders, for standing by us through our 25-year journey. We look forward to your continued partnership as we strive for sustained progress and excellence in the years ahead.

Department of Computer Engineering

Vision :

- *Pioneers in women Computer Engineering by providing competent technical knowledge and enriched social awareness.*

Mission :

- *To inculcate quality education in various domains of Computer Engineering.*
- *Encourage students, to showcase their talents and search the community needs.*
- *To improve technical competency by providing value added training.*

Programme Educational Objectives (PEOs):

PEO1:- The graduate of the program will implement strong fundamental domain knowledge to solve engineering problems with modern tools and technology.
PEO2:- The graduate of the program will work as committed professional, demonstrating strong ethical practices with understanding of social responsibilities for betterment of society.
PEO3:- To prepare a motivated graduate by inculcating multidisciplinary thinking through research attitude and lifelong learning.
PEO4:- To prepare graduates with strong communication and leadership skills to work effectively as an individual as well as in teams.

Programme Outcomes (POs):

On completion of the program students will be able to attain,

PO1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO2. Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3. 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.

PO4. 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.
PO5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
PO6. 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.
PO7. 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.
PO8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9. Individual and teamwork Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10. 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.
PO11. 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 multidisciplinary environments.
PO12. 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.

Programme Specific Outcomes (PSOs):

Upon successful completion of UG course in Computer Engineering, the Graduates will be able to attain following Program Specific Outcomes:

PSO1. Professional Skills: The ability to understand, analyse and develop computer programs in the areas related to algorithms, system software, multimedia, web design, big data analytics, and networking for efficient design of computer-based systems of varying complexities.
PSO2. Problem-Solving Skills: The ability to apply standard practices and strategies in software project development using open-ended programming environments for betterment of society.
PSO3. Successful Career: Empower women with modern computer languages, environments, platforms, communication and leadership skills to build a successful career

HOD's Message

Prof. D. D. Pukale
Head of Computer Engineering Department

First of all, I would like to congratulate faculty members and students of newsletter team for their efforts in the newsletter formation. It is my pleasure to write message for newsletter.

Computer Engineering Department was established in the year 2000 with the objective to impart quality education in Computer Engineering. The students here are the budding engineers with right knowledge, and we propel them to the path of success in the country and abroad. The program focuses on theoretical computer science as well as software and application development. Department has well qualified and vibrant faculty dedicated for the betterment of the students. The long-term goal of the department is to harness the skills of faculty and students to create a technically sound learning environment that can be beneficial to the industry, society and in the field of technical innovation. The students passed out from the department are well placed with good packages and having multiple offers from various industries or have opted for higher studies. The department encourages students to enhance their knowledge not only from academic perspective but also from industrial perspective by undertaking various online courses available on reputed platforms such as NPTEL, Coursera etc. In addition, faculty of department are conducting workshops like "AWS certification" for introducing students to new technology.

ANNUAL TECHNINCAL FESTIVAL: “BharatiYugam 2024-25”

Bharati Vidyapeeth’s College of Engineering for Women, Pune organized its Annual Technical Festival, “BharatiYugam 2025 – Transforming Dreams into Reality,” on 8th April 2025.

Bharati Vidyapeeth’s College of Engineering for Women, Pune, proudly celebrated its annual technical festival BharatiYugam 2025, marking a significant milestone in its Silver Jubilee Year. Centered around the inspiring theme "Transform Dreams into Reality", the event served as a dynamic platform for students and tech enthusiasts to turn visionary ideas into impactful innovations.

The inaugural ceremony was graced by distinguished dignitaries, including Chief Guest Hon’ble Dr. Asmita Tai Jagtap, Executive Director, Bharati Vidyapeeth Medical Foundation. The ceremony was further honored by the presence of Guests of Honor: Hon’ble Dr. Rajendrakumar Sharma (Director, Spel Technologies Pvt. Ltd.), Hon’ble Dr. Yogesh Pawar (Founder and Managing Partner, School of Inspirational Leadership), and Hon’ble Komal Machindar (Head, Delivery Excellence, LTIMindtree). The institutional leadership was represented by Principal Prof. Dr. P.V. Jadhav, Vice Principals Prof. Dr. S.S. Chorage and Prof. Dr. A.M. Pawar, whose presence added depth to the occasion.

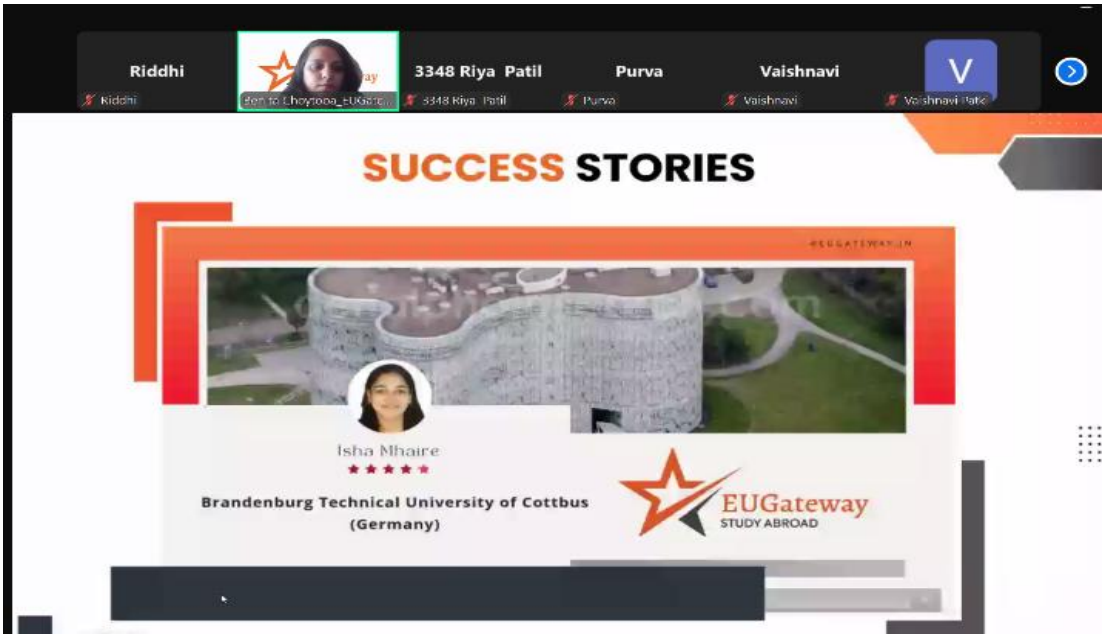
The festival was convened by Prof. D. D. Pukale, with Prof. K. L. Patil and Prof. V. D. Kulkarni as Coordinators. Ms. Aishwarya Bhansali effectively led as the Student Coordinator, contributing to the event’s seamless execution.

BharatiYugam 2025 offered a vibrant blend of technical and non-technical events**,** ranging from Project Exhibition, Paper Presentation, Startup Idea Competition, Robo Race, Coding Competition**,** to Poster Presentation and Technical Quiz**.** On the creative front, Rangoli, Sketch Competition, Tote Bag Painting**,** and a special Photo Exhibition for faculty and staff infused cultural vibrancy into the atmosphere. With an overwhelming response of 342 student registrations from various colleges, the fest witnessed wide participation, highlighting its growing reputation. The synergy of meticulous planning, enthusiastic participation**,** and the unwavering support of faculty and staff under the visionary leadership of Principal Prof. Dr. Pradeep Jadhav truly embodied the spirit of “Teamwork makes the dream work”. BharatiYugam 2025 concluded on a high note, leaving behind a legacy of innovation, collaboration, and excellence—an inspiration for future endeavours.

Institute Level Activities

National Conference on "Interdisciplinary Advancements in Emerging Technologies" (IAET-2025) in presence of Hon'ble Dr. Rajendrakumar Sharma (Director, Spel Technologies Pvt. Ltd.), on Tuesday, 8th April 2025

One-Day Symposium on "Oracle APEX Certification" with Guests of Honour Ms. Richard Dalvi, Mr. Santosh Kumar, Mr. Bharat Bhatia and Mr. Anuj Bhardwaj on 8th March 2025, featuring Women's Day celebration



Seminar on "Importance of Profile Building and Career Mapping", by Benita Albert organized under Career Guidance Cell

Awareness Session on "KAPILA" by Prof. Dr. Sharada Kore, Institute KAPILA Nodal Officer, for faculty and KAPILA club students organized by IPR Cell

Seminar on "Higher Studies in India and Abroad", by Mr. Ranjit Kalangutkar, guiding students on academic opportunities and pathways post-graduation organized under Career Guidance Cell

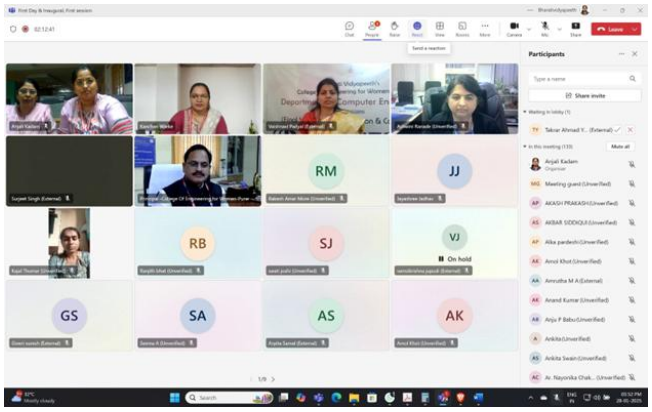
Two days' workshop on "Simulation and Modelling Using Python" for first-year students by Mr. Santosh Yadav, CADD Career organized by Institution Innovation Council Cell

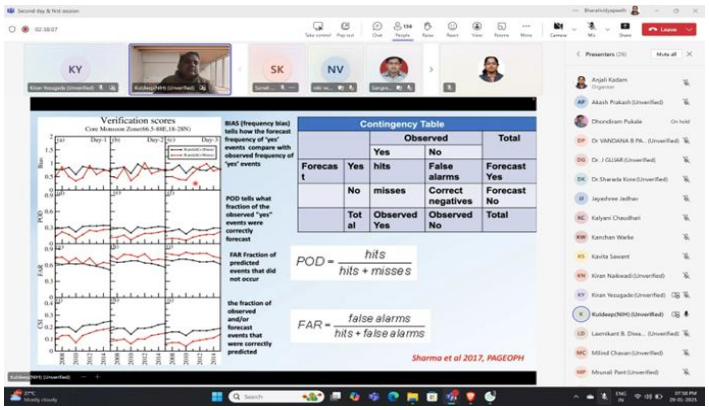
Participation in "The SheInspire Hackathon 2025" organized by Zensar, a global IT Services Company, aimed at bringing together female developers, designers, and tech enthusiasts to collaborate on solving real-world problems through innovative solutions under Placement Cell

Two Days Workshop on Start-up and Self-Defence by Mr. Amol Nitave, CEO & Founder, EvolvingX on 7th and 8th March 2025 under Training Cell

Major Technical Activities

1. *ATAL Workshop on "Navigating Climate Variability and Impacts for Effective Water Management, Disaster Preparedness, Resilience_ and Mitigation "*





Dr. Ashwini Ranade, Dr. Sunil Gurrapu, Dr. Surjeet Singh and Principal Prof. Dr. Pradeep V. Jadhav gracing the occasion with their esteemed presence at the Inaugural Ceremony of the ATAL workshop on "Navigating Climate Variability and Impacts for Effective Water Management, Disaster Preparedness, Resilience and Mitigation."

The Department of Computer Engineering at Bharati Vidyapeeth's College of Engineering for Women, Pune, in collaboration with the AICTE Training and Learning (ATAL) Academy, Pune, organized a six-day Faculty Development Program (FDP) on "Navigating Climate Variability and Impacts for Effective Water Management, Disaster Preparedness, Resilience and Mitigation" from 28th January to 3rd February 2025. The FDP was coordinated by Principal Prof. Dr. Pradeep V. Jadhav and Dr. Sonali Kadam.

The workshop was inaugurated on 28th January 2025 in the esteemed presence of leading scientists from the National Institute of Hydrology (NIH), Roorkee. Among the dignitaries were Dr. Ashwini Ranade (Scientist 'D', Climate Hydrology Division), Dr. Sunil Gurrapu (Climate Impact Analyst), and Dr. Surjeet Singh (Scientist 'G' and Head, Cryosphere and Climate Change Studies).

Prof. Dr. Pradeep V. Jadhav opened the event with a warm welcome address, setting a vibrant and scholarly tone for the week. The dignitaries emphasized the importance of climate resilience, predictive modeling, and the integration of hydrological sciences with sustainable development initiatives.

The FDP featured 14 thematic sessions led by eminent scientists and researchers, covering diverse topics such as monsoon dynamics, cryosphere studies, flood risk assessment, atmospheric aerosols, drone technology in disaster response, and sustainable living. More than 310 participants, including faculty, industry professionals, and research scholars from across the nation, actively engaged in the sessions.

2. AWS Courses:

Department of Computer Engineering of Bharati Vidyapeeth's College of Engineering for Women, in association with AWS (Amazon Web Services) Academy, organized online workshops on various topics. Dr. Sonali Kadam, Prof. A. P. Kadam, with AWS training partnership conducted these workshops. The details are as follows –

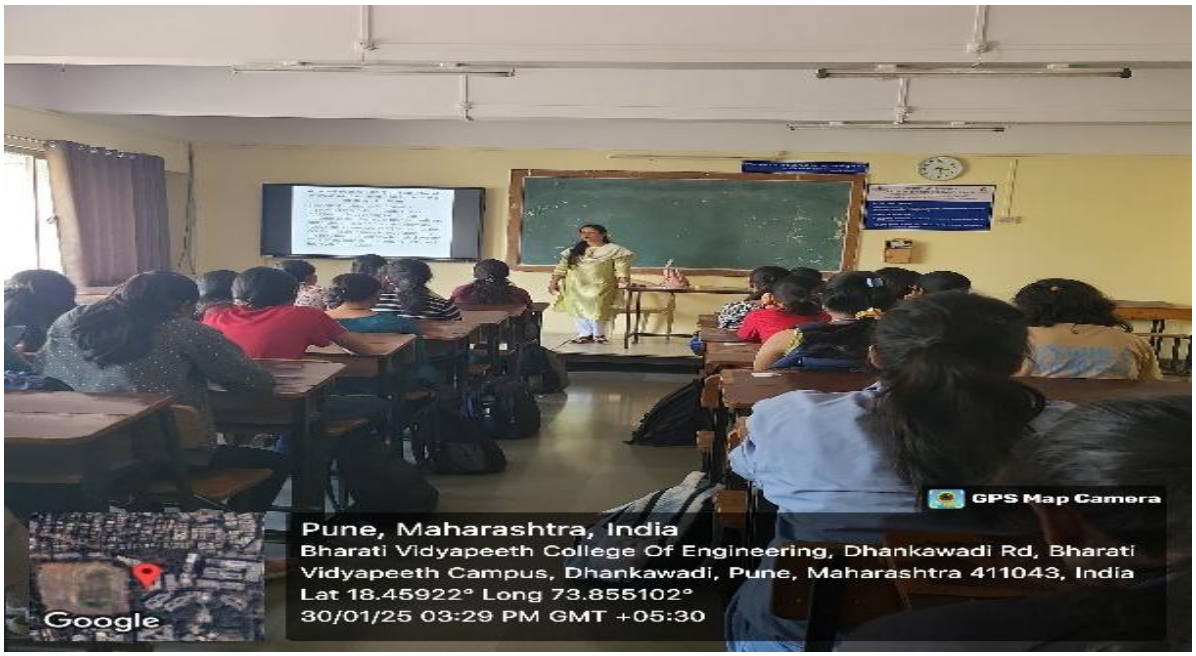
Sr. No.	Name of Course	Duration	Total No. of Students Involved	Class
1	AWS Developer	6 Months	314	TE BE
2	AWS Operations			
3	AWS Data Engineering			
4	AWS Architecture			

2. Oracle Courses:

Department of Computer Engineering of Bharati Vidyapeeth's College of Engineering for Women, in association with Oracle APEX Academy, organized online workshops on various topics. Dr. Sonali Kadam, Prof. A. P. Kadam, with Oracle APEX training partnership conducted these workshops.

*A proud moment for our institution as **31 students** from **TE and BE classes** across **Computer, IT, and E&TC departments**, along with **3 faculty members**, have successfully achieved the prestigious **Oracle APEX Cloud Developer Certified Professional** certification. This milestone reflects their dedication and enhances the academic excellence of our college.*

Technical Activities



Seminar on **"Career opportunities in Biomedical Engineering field"** conducted by Mrs. Vaishnavi Banke Medi facts INC, Pune on 31-01-2025 for SE Students.

One Day Workshop on **"Introduction to Java Programming Language"** conducted by Mr. Rajesh Kanade Trainer CADD CAREER, Founder of Gray Neurons LLP, Pune on 17-03-2025 for SE Students.

Industrial visit of BE Computer to Maharashtra Knowledge Corporation Limited (MKCL), Shivajinagar, Pune on 20/02/2025

Industrial visit of SE Computer to Software Technology Parks of India (STPI), Hinjewadi, Pune on 12/02/2025

Industrial visit of TE Computer to Techmahindra’s Makers Lab, Hinjawadi-Pune on 21/03/2025

My Journey with Women in APEX – From Dreams to Purpose

I come from a small town—a simple girl with big dreams in her eyes. I've always loved tribal art, exploring new places, caring for animals, and losing myself in music—it's the soul of my life. From a very young age, I wanted to make my parents proud, even though I didn't know the path or how I would get there. But one thing was always certain: I never stopped dreaming.

How It All Began

In 2012, I was overjoyed to be selected at Oracle as a Web Developer. It felt like the beginning of something special. A few years later, in 2016, I got the opportunity to work on Oracle APEX—back when it was still in its early stages (version 5.1). And that's when my APEX journey began…and it still continues today.

The Break That Changed Everything

While I loved my work and poured my energy into it, life had its own plans. Like many women, I faced the classic dilemma: career clock vs. biological clock.

I deeply relate to Indra Nooyi's words:

> *"The career clock and the biological clock are in total conflict with each other."*

When my elder child turned four, I struggled to balance motherhood, work, and home. No tips, no mentors—just a mother's guilt and a growing feeling of helplessness. So I made a difficult decision: I stepped away from my career to devote five beautiful years to my family. But deep down, I missed my work every single day.

Reigniting the Flame

Every morning at the school bus stop, a friend encouraged me to return to work. She never gave up on me. "Only empowered women empower other women." And she truly lived those words.

In 2023, I saw a LinkedIn post from INOAUG (India Oracle APEX User Group) about new APEX features. I registered immediately. With my husband's support, I attended INOAUG APEX Utsav 2023—nervous, hesitant, jobless, and full of self-doubt. But then something amazing happened… I spoke for just two minutes with Chaitanya Koratamaddi, Director of Product Management at Oracle. It changed my life. His words gave me the spark I was missing. I walked out of that event with renewed confidence—like a fresher again, except this time with experience.

The Comeback

I started studying. I started applying. I didn't stop. Within just two months, I got an offer and re-joined the workforce—with full energy and a new version of myself.

> *"When one door closes, another opens."*

Believe in yourself. Keep going. Support will come. People will guide and appreciate you—just don't stop moving.

Giving Back to the Community

Later in 2023, I received a call from Richard Dalvi, President of INOAUG, asking if I'd be interested in volunteering. I said ***YES*** *without a second thought. Since then, I've had the privilege to volunteer with APEX experts and community leaders. INOAUG gave me a new purpose. Big thanks to Natrajan sir, Bala, Digvijay, Kenvi and Bharat for your support—you believed in me.*

Back at Oracle, Stronger Than Ever

In 2025, I returned to the same place I left in 2018—but now with more strength, clarity, and purpose. My journey is still unfolding—with new responsibilities, continuous learning, and an endless hunger to grow.

My Message to You

Yes, I am learning.
Yes, I am growing.
Yes, I will do it.
Yes, I am blessed.

If one door closes—wait, refocus, and try another. Because if I could come back, so can you.

And finally,

"Only empowered women empower other women. So be one."

Thanks!

Malika Mishra,

Principal Consultant, Oracle.

Quantum Computing: Redefining the Boundaries of Computation

In the ever-evolving landscape of technology, one innovation stands out: quantum computing. Promising to redefine the boundaries of computation and problem-solving, quantum computing harnesses the profound principles of quantum mechanics, offering capabilities far beyond the reach of classical computers.

Exploring Quantum Mechanics in Computing

- *Quantum computing operates on the principles of quantum mechanics, a field that describes the behavior of particles at the atomic and subatomic levels.*
- *Unlike classical bits, which represent either 0 or 1, quantum bits (qubits) can exist in multiple states simultaneously due to a phenomenon known as* ***superposition****.*
- ***Entanglement****, another crucial concept, enables quantum computers to perform operations on entangled qubits with unmatched efficiency and speed, heralding a new era of computation.*
- *Quantum computers process information using qubits, allowing exponential increases in processing power as more qubits are added. In contrast, classical processors scale linearly with additional bits. While classical computers excel at everyday tasks with low error rates, quantum computers are ideally suited for complex tasks such as simulations, data analysis, and designing energy-efficient batteries—despite potentially higher error rates.*

Recent Advances in Quantum Computing

- *Major technology players including* ***IBM, Google, Microsoft****, and* ***D-Wave Systems****, as well as financial services firms like* ***JPMorgan Chase****, are investing heavily in the development of scalable quantum processors.*
- *Google's achievement of* ***quantum supremacy*** *in 2019 with its* ***Sycamore processor*** *marked a significant milestone in the field.*
- *IBM's* ***Condor****, a 1,121-qubit quantum processor announced in 2023, exemplifies ongoing efforts to scale up quantum hardware.*
- *Microsoft's* ***Azure Quantum*** *platform empowers companies to explore and harness quantum computing for a wide range of applications.*

Challenges and Future Directions

- *Significant hurdles remain in unlocking the full potential of quantum computing. Developing robust **error correction** techniques and enhancing **qubit coherence times** are critical for building dependable and scalable quantum systems.*
- *Attaining **quantum advantage** requires overcoming scalability issues while minimizing error rates.*
- *Despite these challenges, the future of quantum computing remains promising, with potential applications in **cryptography, drug discovery, climate modeling**, and **artificial intelligence**.*

Quantum computing represents a paradigm shift in the world of computation, offering unprecedented processing power and opening new frontiers for solving complex problems. From its theoretical foundations to emerging real-world applications, quantum computing has the potential to reshape the technological landscape and expand the horizons of human understanding.

Through unified research efforts and collaborative initiatives, quantum computing stands poised to redefine the future of technology and influence the trajectory of computation in the years to come.

Mr. Tarachand Ola
Director (Amdocs)

Digital Twins in Smart Cities

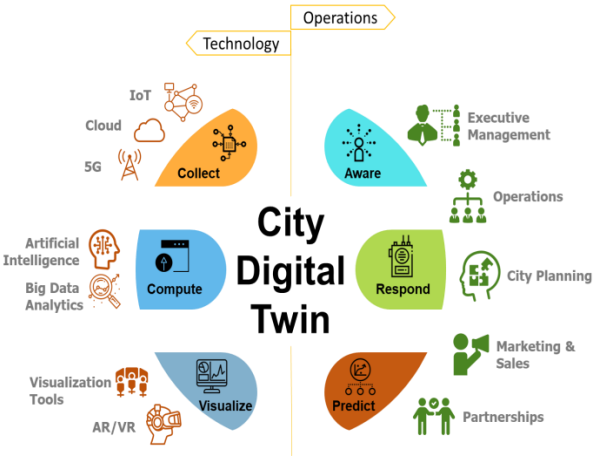
As cities grow increasingly complex, the need for intelligent infrastructure management becomes more critical than ever. Digital Twin technology—virtual replicas of physical systems updated in real-time—is transforming how urban areas are monitored, planned, and optimized. These dynamic models integrate data from IoT sensors, cameras, and GIS systems, enabling authorities to simulate, test, and improve city operations without disrupting the real environment.

For example, Singapore's "Virtual Singapore" initiative offers a fully functional 3D digital twin of the entire city, used for crowd simulation, traffic modeling, and environmental analysis. In India, cities like Pune and Amaravati have started implementing digital twins to improve traffic control, monitor construction, and simulate public utilities.

Beyond urban planning, digital twins play a crucial role in environmental monitoring. The city of Helsinki, Finland, uses a building-level digital twin to analyze energy consumption, optimize heating systems, and plan for carbon neutrality. Similarly, disaster-prone regions are adopting this technology to simulate emergency evacuation plans and flood responses, helping minimize risks before crises occur.

By combining real-time data, AI, and simulation models, digital twins enable predictive maintenance, energy optimization, and streamlined civic management. From reducing traffic congestion to planning green infrastructure, this technology supports proactive governance.

With the continued advancement of edge computing, 5G, and AI, the future of digital twins in smart cities is promising. For computer engineers, it opens up opportunities in cloud architecture, data visualization, and urban analytics—bridging the gap between technology and public service.



Ms. Vrushali Purushottam Gajare
(Alumna, Batch 2021-22)
Machine Learning Engineer, McKesson

Achievements

Faculty Achievements

Prof. (Dr.) Pradeep V. Jadhav
Principal

1. Award for Student Engagement and Digital Innovation
   Principal Prof. Dr. Pradeep Jadhav was honoured at the 9th Academic Leadership Summit and Awards in New Delhi on 21 February 2025 for his outstanding work in student engagement and digital innovation, recognising his success in advancing digital learning, student participation, and academic excellence through technology-driven, student-centred teaching.

2. Advocacy for Academia–Industry Collaboration
   At the SheInspires Hackathon 2025 held at Zensar, Kharadi, on 21 March 2025, Principal Prof. Dr. Pradeep V. Jadhav called for stronger links between academia and industry to equip students with real-world problem-solving skills, emphasising equal opportunities, guidance, and support for women engineers.

3. International Outreach through Korea Edu Tour Roadshow
   Guided by Principal Prof. Dr. Pradeep V. Jadhav, the college participated in the Korea Edu Tour Roadshow at Hyatt Regency, Pune, engaging in discussions on academic partnerships, student exchanges, and global networking to strengthen international collaboration between India and South Korea.

4. Principal of the Year Award at HEIT Summit 2025
   On 15 May 2025, Principal Prof. Dr. Pradeep Jadhav received the Principal of the Year Award for Institutional Excellence at the 8th HEIT Summit and Awards in Pune, honouring his visionary leadership and commitment to academic quality, innovation, and institutional growth.

Department of Engineering Sciences and Allied Engineering

Prof. (Dr.) Avinash M. Pawar

Vice Principal (Admin), Head of Department of Engineering Sciences and Allied Engineering

Design Patent Granted on **"**Innovative Battery Cooling Device with Low Diverting Discs" (Design No. 454100-001, Registered on 03-04-2025)

Prof. (Dr.) Milind A. Patwardhan

1. Successfully completed Ph.D. on title "A Research on Comparative Study of High-Temperature Superconducting Magnetic Energy Storage System (SMES) Devices for Smart Grid Applications", under the guidance of Dr. Vivek Yadav, from Sunrise University Alwar.
2. A design patent published on "AI based device for HR operations" on 7th February 2025 (Application No. 442488-001).

Prof. (Dr.) Smita S. Jadhav

A design patent published on "AI based predictive analytics of complex data sets in diagnosis of critical lung cancer in clinical traits" on 2nd May 2025 (Application No. 202541033428).

Prof. (Dr.) Maharudra K. Kapase

Successfully completed Ph.D. on title "A Critical Study of Major Themes in Kazuo Ishiguru's Select Novels", under the guidance of Dr. S. T. Haibatpure, from Swami Ramanand Teerth Marathwada Univerrsity.

Department of Engineering Sciences and Allied Engineering

Students' Achievements (A. Y. 2024-25)

Sr. No.	Name of the Students Received Scholarship	Name of the Scholarship Received	Award (Item/Amount in Rs.)
1.	SHRADDHA NIRMAL	IEEE WIE	Laptop
2.	SHRADDHA RAMKISHAN NIRMAL	IEEE WIE	Laptop
3.	AKSHATA SANTOSH LALA	Katalyst	50,000/-
4.	BHAKTI VIJAY WARGHUDE	Katalyst	50,000/-
5.	BHAKTI VIJAY WARGHUDE	Katalyst	50,000/-
6.	DIKSHA BAPUSAHEB CHAVAN	Katalyst	50,000/-
7.	DNYANESHWARI SUNIL KHENAT	Katalyst	50,000/-
8.	DNYANESHWARI SUNIL KHENAT	Katalyst	50,000/-
9.	JANVHI RAJU HUGAR	Katalyst	50,000/-
10.	KHUSHI KAILAS DODE	Katalyst	50,000/-
11.	NIKITA JAKAPPA PUJARI	Katalyst	50,000/-
12.	PRATIKSHA BALASAHEB KINKAR	Katalyst	50,000/-
13.	SAKSHI VIJAY KHENGARE	Katalyst	50,000/-
14.	SAKSHI VIJAY KHENGARE	Katalyst	50,000/-
15.	SONALI SUNILKUMAR KAPURE	Katalyst	50,000/-
16.	SRUSHTI ARUN KADAM	Katalyst	50,000/-
17.	VAISHNAVI SHANKAR VITKAR	Katalyst	50,000/-
18.	PRIYANKA DHANANJAY ANBHULE	Katalyst	50,000/-
19.	SAMRUDDHI SANJAY POTEKAR	Katalyst	50,000/-
20.	PRIYANKA DHANANJAY ANBHULE	Lila Poonawalla	50,000/-
21.	AKSHATA SANTOSH LALA	Lila Poonawalla	60,000/-
22.	ARPITA KAUTIK PATIL	Lila Poonawalla	70,000/-

23.	CHETANA VINOD SHENAI	Lila Poonawalla	50,000/-
24.	GAURI CHILWANT	Lila Poonawalla	62,000/-
25.	GAYATRI KANTILAL KHADE	Lila Poonawalla	70,000/-
26.	KOKARE APEKSHA PINUKDEV	Lila Poonawalla	70,000/-
27.	NIVEDITA JHA	Lila Poonawalla	70,000/-
28.	PRATIKSHA BALASAHEB KINKAR	Lila Poonawalla	70,000/-
29.	PURVA VISHNU UPADHYAY	Lila Poonawalla	50,000/-
30.	RUCHA SHANKAR DESAI	Lila Poonawalla	50,000/-
31.	SANIKA BANDU KARDULE	Lila Poonawalla	70,000/-
32.	SANIKA BANDU KARDULE	Lila Poonawalla	70,000/-
33.	SAYYED ADIBA BASHIR	Lila Poonawalla	70,000/-
34.	SHAGUN BHARAT BAWANKAR	Lila Poonawalla	70,000/-
35.	SHARWARI YOGESH CHAVAN	Lila Poonawalla	70,000/-
36.	SIDDHI LAXMAN AGALE	Lila Poonawalla	70,000/-
37.	VASUNDHARA AVADHUT PATIL	Lila Poonawalla	70,000/-
38.	VEDIKA HEMANT PHATAK	Lila Poonawalla	35,000/-
39.	SAMRUDDHI SANJAY POTEKAR	Lila Poonawalla	70,000/-

Department of Computer Engineering

Dr. Sonali Kadam

Head of Department of Computer Engineering

Received grant of Rs. 2,00,000/- from AICTE ATAL for conducting Faculty Development Program on “Navigating Climate Variability and Impacts for Effective Water Management, Disaster Preparedness, Resilience and Mitigation " in January 2025.

Prof. Shital A. Karande

Successfully Completed NPTEL Online Certification course on “Complete guide for campus interviews: Step by step preparation for Internships and Full-time jobs”, in February 2025.

Prof. Vinaya D. Kulkarni

Successfully Completed NPTEL Online Certification course on “NBA Accreditation and Teaching and Learning in Engineering”, in January 2025.

Prof. Anjali Kadam

Successfully Completed ORACLE University Certification on “Oracle APEX Cloud Developer Certified Professional”, in April 2025.

Students' Achievements

Sr. No.	Name of The Student	Class	Achievement
1	Tanvi Deore	BE	Received 2nd Prize in 'Dipex 2025' Project exhibition for the project **"**CySpark: A Comprehensive Cyber Defense Toolkit**"** that was organized by ABVP and COEP Pune at State level on 7th March 2025.
2	Riya Kadole		
3	Mitali Chavan		
4	Saba Sayyad		
5	Sanika Chaudhari	BE	Secured 3rd Runner-Up position and received a prize amount of ₹10,000 in CODEBITS 3.0 for the project titled "NextGen Communication: LSTM-Powered Speech to Sign Language Translation", organized by Gharda Institute of Technology at the national level on 6th March 2025.
6	Shruti Bhumkar		
7	Manasi Deshmukh		
8	Samruddhi Deshmukh		
9	Sae Jamdade	BE	Finalist in 'Dipex 2025' Project exhibition for the project "Indian Flood Analysis and Mapping System – IFAMS"
10	Apurva Gadilkar		
11	Chahal Ohri		
12	Namrata Rathi		
13	Ankita Swain	BE	Runner up of SheInspire Hackathon 2025, organized by Zensar.
14	Ishika Thakur	SE	

Our Esteemed Recruiters

Placements from January 2025 to May 2025

SR. NO.	NAME OF THE STUDENTS PLACED	COMPANY
1	DITI HEMANT JARIWALA	BNY Mellon
2	PRACHI DATTATRAY KAD	BNY Mellon
3	TRUPTI SANTOSH KAMURTI	BNY Mellon
4	ANUSHKA ASHOK CHOUGULE	FIS
5	SAI TANAJI NAGANE	FIS
6	GAYATRI MACCHINDRA KAVADE	STANDARD CHARTERED GBS (Global Business Services)
7	MITALI RAJESH CHAVAN	STANDARD CHARTERED GBS (Global Business Services)
8	PURVA SANTOSH SARANGE	STANDARD CHARTERED GBS (Global Business Services)
9	VAISHNAVI MAHENDRA THORAT	STANDARD CHARTERED GBS (Global Business Services)
10	FIRDOS MOHD HAROON MANIYAR	BNY Mellon
11	GAYATRI MARUTI TEMGIRE	NICE
12	SANIKA KAILAS BORUDE	NEILSON IQ
13	TANVI SUDAM DEORE	NEILSON IQ
14	JAGRUTI DNYANESHWAR PATIL	AMDOCS
15	PAVITRA SACHIN DESAI	AMDOCS
16	PRITI ANANDRAO SHINDE	AMDOCS
17	RASHI SAHAY	AMDOCS
18	SAKSHI SUVALAL MANDLECHA	AMDOCS
19	SHRAVANI SOMNATH KONDE	AMDOCS
20	SHRUTI MANOJ BHUMKAR	AMDOCS
21	TRUPTI SUNIL POKHARKAR	AMDOCS
22	ANUSHRUTI HEMANT ADHIKARI	ATLAS COPCO
23	NEHA PRATAP JADHAV	ATLAS COPCO
24	SAE JITENDRA JAMDADE	ATLAS COPCO
25	VAISHNAVI VISHNU KEDAR	ATLAS COPCO
26	SANIKA SAGAR CHAUDHARI	CAPGEMINI

27	SAYALI MAHESH GURME	CAPGEMINI
28	ARYA SAGAR NIGADE	TATA TECHNOLOGIES
29	MANASI TANAJI DESHMUKH	TATA TECHNOLOGIES
30	MANASI YOGESH KHAIRE	TATA TECHNOLOGIES
31	SAMRUDDHI DESHMUKH	TATA TECHNOLOGIES
32	GADILKAR APURAVA SACHIN	WNS
33	PRAJAKTA BOSE	ICON IT TECHNOLOGIES
34	VAIBHAVI ANANT KALE	ACCENTURE
35	SANIKA RAJENDRA JAGTAP	COGNIZANT
36	RAMYA RAGHAV VADDEMPUDI	COGNIZANT
37	NEHA DASHARATH WARGHANE	COGNIZANT
38	DNYANESHWARI SUNIL MOHOTKAR	INFOSYS
39	RAJASHREE VISHNU SHINDE	INFOSYS
40	MALISHKA VIJAY SALKE	VOIS
41	NAMRATA RAJENDRA TONGALE	VOIS
42	ANKITA ARUNIMA SWAIN	CAPGEMINI
43	DHANSHRI RAVINDRA THORAT	CAPGEMINI
44	HARSHADA PRASHANT DESHMUKH	CAPGEMINI
45	KHUSHI RAVINDRA PADHAR	CAPGEMINI
46	NAMRATA DINESHKUMAR RATHI	CAPGEMINI
47	NEHA VENKATESH POTU	CAPGEMINI
48	SABA ASLAM SAYYAD	CAPGEMINI
49	SANSKRUTI SANJAY PATIL	CAPGEMINI
50	SHREYA CHANGDEO WAGHOLE	CAPGEMINI
51	SIDDHI ASHOK ALGUDE	RUDDER ANALYTICS
52	PAYAL SANJAY GAWANDE	COGNIZANT
53	VAISHNAVI ZUNJAR	COGNIZANT
54	BHARGAVI PRAMOD JOSHI	LTI MINDTREE

Editorial Board

Prof. Dr. Pradeep V. Jadhav
Principal, BVCOEW

Prof. Dr. D. A. Godse
Newsletter Coordinator

Prof. D. D. Pukale
HOD,Computer Engg.Dept

Prof. K. S. Warke
Chief Editor

Dr. S. A. Pawar
Editor

Dr. S. S. Jadhav
F.E. Staff

Prof. D. P. Chopade
F.E. Staff

Sae Jamdade
(B.E. Comp.)

Aishwarya Nalawade
(T.E. Comp.)

Mihika Jain
(S.E. Comp.)

Mitali Chavan
(B.E. Comp.)

Shweta Gogawale
(T.E. Comp.)

Anamika Sharma
(S.E. Comp)

Bharati Vidyapeeth's
College of Engineering for Women, Pune

Pune-Satara Road, Dhankawadi, Pune 411043
Recognized by AICTE, New Delhi, DTE Mumbai,
Affiliated to Savitribai Phule Pune University.
Id No.: PU/PN/Engg./150/2000, DTE CollegeCode: EN6285
Phone: (020)24371684, (020)24361732 Fax: (020) 24372210
Email: coewpune@bharatividyapeeth.edu,
Website: http://coewpune.bharatividyapeeth.edu