

Approved by AICTE New Delhi & Affiliated by VTU, Belagavi Doddakallasandra, Off Kanakapura Main Road, Next to Gokulam Apartment, Bangalore - 560 062.



VISVESVARAYA TECHNOLOGICAL UNIVERSITY

VISION

To become an outstanding Technological University at the cutting edge of Science and Technology that produces world class Knowledge-delivery, Research, Extension and Leadership in Technology innovation for Industry and Society.

MISSION

M1: To plan the development of technical education, to establish value-based and need-based education and training in engineering.

M2: Technology, with a view to generate qualified and competent manpower, responsive to technological and societal needs.

PROGRAM OUTCOMES:

PO 1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and computer science and business systems to the solution of complex engineering and societal problems.

PO2: Problem analysis: Identify, formulate, review research literature, and analyze complex engineering and business 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 modelling 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 and business practices.

PO7: Environment and sustainability: Understand the impact of the professional engineering solutions in business societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.



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PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering and business practices.

PO9: Individual and team work: 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, business 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.

Leadership Insights at City Engineering College

In a world characterized by diversity and interconnectedness, access to quality education remains a potent force for societal progress. AMC - City Group of Institutions stands as a beacon of change since 1998, driven by a prominent educationalist, Dr. K.R.Paramahamsa, on a profound mission to provide education in the field of Engineering, Management, Commerce and Elementary education, from Infant Schools, UG,PG upto Ph.D level, with global standards for Empowering Minds and Transforming Futures.

A Visionary Mission for Inclusive Education . At the heart of our mission is the aspiration to offer education that aligns with global standards, ensuring that our students are equipped with the knowledge, skills, and perspectives needed to thrive in an increasingly interconnected world. Our institution endeavours to bridge the gap between global educational benchmarks and the economic constraints faced by many in our society. By maintaining rigorous academic standards, we aim to empower our students to compete and contribute on an international stage.

Central to our mission is the commitment to providing education at a cost that is accessible to individuals. We understand the financial challenges and recognize that economic disparities should not be a barrier to learning. By implementing sustainable financial models and utilizing resources efficiently, we strive to keep tuition fees at a level that enables broad participation. We believe that by making education affordable, we contribute not only to the individual's growth but also to the overall development of all communities. We consider education as a catalyst for socio-economic upliftment, breaking the cycle of poverty and opening doors to a multitude of opportunities.

Inclusivity is not just a buzzword for us. It is an integral part of our institution. By actively reaching out to marginalized communities, providing scholarships, and ensuring representation

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across various socio-economic strata, we foster an inclusive culture that enriches the educational experience for everyone.

Our mission extends beyond the confines of the classroom. We believe in the power of education to uplift entire communities. By collaborating with local organizations, implementing outreach programs and leveraging our resources for community development, we seek to be a positive force for change.

CITY ENGINEERING COLLEGE

VISION

Making Remarkable Contribution by Disseminating Knowledge on Emerging Trends in Engineering and Technology through various Programs, Innovation and Research so as to Excel in Quality both at National and International level and to provide Career Guidance & Training for Employment.

MISSION

M1: To encourage Knowledge Acquisition and Foster Innovation & Research.

M2: To Prepare Students for Immediate Employment, leading to Technological and Social- Economic growth

M3: To Provide Guidance for a Productive Career under various programmers.

QUALITY POLICY

The Institution believes in providing High Quality Education to the Students using necessary quality bench marks in the area of Faculty Recruitment. Development and students learning process through sustained efforts.

CITY ENGINEERING COLLEGE - SWOC ANALYSIS

STRENGTH:

- 1. Quality of education at an affordable cost with a good reputation in the local community.
- 2. Experienced and committed faculty with research background and practical experience.
- 3. Well-equipped library with all the required reference books in multiple copies to ensure that all students can get the books of their choice for studying.
- 4. Involvement in community service and outreach programs, which helps in the holistic development of students and builds a positive image of the college.



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Institution is strategically located with good commuting facilities with Metro stations and BMTC stops.

WEAKNESS:

- 1. To bridge the gap between the curriculum with industry standards and technological advancements.
- 2. Limited focus on entrepreneurship and startup incubation.
- 3. Limited industry exposure and partnerships with Top Tier companies.
- 4. Publication in Q-rated journal by the teachers.
- 5. Revenue generation through consultancy.

OPPORTUNITIES

- 1. Potential to form partnerships with leading tech companies for joint research, student internships, and industry projects.
- Opportunities to collaborate with other departments (e.g.,healthcare, robotics, finance) for interdisciplinary research applications.
- 3. Establishing collaborations with international universities to take up the real-world applications and projects for student exchange programs and joint research initiatives.
- 4. The untapped potential of alumni networks for recruitment and funding.
- 5. Landscaped campus to attract the students.

CHALLENGES

- The fast-evolving nature of technologies requires continuous updates to curriculum and research focus, which can be resource-intensive.
- 2. Getting quality in intake of students at the first-year level.
- 3. Retention of qualified faculty is a big challenge.
- 4. Competing with other institutions globally for students, faculty, and research funding can be a significant challenge, especially for departments with fewer resources or lower profiles.
- Securing sufficient funding and grants for research and development activities.



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6. Navigating the fluctuations in the job market and ensuring consistent placement rates.

STRATEGIC PLAN OF CEC

City Engineering College has a robust Strategic Plan which was established in consultation with Stake Holders for its long-term success, growth, and sustained impact. The comprehensive plan is customised the needs of CEC.

About CEC:

CEC, established in 1998 under the aegis of Jayanagar Education Society, was founded with the mission of providing affordable education for everyone. CEC is affiliated to Visvesvaraya Technological University, Belagavi, Karnataka, and recognized by the All India Council of Technical Education, New Delhi, and the Government of Karnataka. CEC offers seven full-time undergraduate courses (AI and ML, CSE, CSE(IOT and Cybersecurity including Block Chain Technology), ECE, ISE, ME, CV), UG(BBA, BCA). M.Tech(CSE) and CSE Research Centre affiliated to VTU programs. CEC focuses on academic excellence, with a dynamic teaching and learning process that caters to the evolving needs of society. Boasting a dedicated faculty and staff, CEC nurtures over 1500 students.

CEC is situated in a serene environment which is spread across 12 acres in the heart of Bangalore city. The campus is strategically located with easy access to various modes of transport.

The campus has excellent laboratories, excellent infrastructure, Internet, Wi-Fi facilities and a well-stocked central library with national and international journals and eBooks, e-learning facilities, cafeteria, smart classrooms, seminar hall, and an auditorium which creates a conducive environment for TLP. Sports facilities such as football, Shuttle Badminton, Throw ball and Volley ball playground.

CEC prioritizes safety and security, implementing CCTV surveillance across the campus. The institute is committed to provide quality education aligned with its Vision and Mission statements. Academic and administrative activities are overseen by experienced and competent faculty members under the guidance of department heads, principal and the Director of the

campus. Placement services are managed by a Placement Officer in the Career Counselling and Placement Cell.

CEC continuously reinforces its industry connections by cementing its Memorandums of Understanding (MoUs) with various companies. CEC has an established Institute Innovation Council (IIC) to promote innovation. The Alumni association of CEC (CECAA) operates in accordance with its bylaws, fostering a sense of community and collaboration among former students. CEC is committed to shaping future leaders and contributing to the progress of society.

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Short Term Goals

- 1. NBA Accreditation in 2025.
- 2. Expose students to cutting-edge technological advancements and innovations in their fields of study and related areas.
- 3. Encourage student involvement in national and international events within their respective disciplines.
- 4. Strengthen the capabilities of research centre's and laboratories.
- 5. Conduct regular professional development programs for faculty to continuously enhance their skills.
- 6. Offer online access to teaching and tutorial materials for all subjects, enabling flexible, self-paced learning for students.
- 7. Organize short-term courses for technicians to expand their knowledge and deepen their understanding of the latest trends in engineering.

Long Term Goals

- 1. To achieve Autonomous status.
- 2. Transform the institute into a multidisciplinary hub, promoting collaboration among students from different departments to drive impactful research projects.
- 3. To establish Centre of Excellence.
- 4. Foster an entrepreneurial mindset in students, encouraging them to pursue innovative ventures within their respective fields and to establish EDC.
- 5. Expand faculty expertise by supporting exploration into cross-disciplinary research areas.
- 6. Strengthen Industry-Institute collaboration, positioning the institute as a key contributor and problem-solver for industry challenges.
- 7. Achieve the status of an autonomous institution.
- 8. Set up a business incubation centre to enhance the competitiveness and sustainability of Micro, Small, and Medium Enterprises (MSMEs) while promoting a culture of entrepreneurship among students.

CEC Perspective Plan outlines strategic goals and initiatives aimed at fostering academic excellence, research innovation, industry collaboration, and holistic student development. The deployment of this plan involves specific actions and measurable outcomes to ensure the institution's growth and sustainability. A framework with Goals and Deployment are as shown.

1. Academic Excellence

- > Goal: Enhance the quality of teaching and learning.
- > Deployment:
 - Curriculum Enrichment: Regularly update the curriculum to include emerging technologies like Artificial Intelligence, Machine Learning, and Internet of Things (IoT) with interdisciplinary exposure
 - Faculty Development Programs: Organize workshops and training sessions to upskill faculty in advanced pedagogical methods.



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• Scenarios: Bridging the gap in the syllabus with value added course

2. Research and Development

- > Goal: Foster a research-oriented culture.
- > Deployment:
 - Research Funding: Allocate funds and resources to support faculty and student research projects.
 - **Industry Collaboration:** Partner with industries to work on real-world problems, leading to research publications and patents.
 - Scenarios: Establishing a Centre of Excellence in Robotics and Automation, which collaborates with leading tech firms on innovative projects.

3. Infrastructure and Facilities

- > Goal: Provide state-of-the-art infrastructure to support learning and research.
- > Deployment:
 - Laboratory Upgradation: Regularly upgrade laboratories with the latest equipment and software tools.
 - Smart Classrooms: Implement smart classrooms with digital boards, projectors, and high-speed internet to facilitate interactive and collo learning.
 - Scenarios:: Setting up a dedicated Makerspace (Tinkering and skill labs) with 3D printers and machines to support hands-on projects especially in robotics and drones.

4. Industry-Academia Interaction

- > Goal: Strengthen ties with industry to enhance employability.
- > Deployment:
 - Internship Programs: Establish mandatory internship programs where students work on industry-relevant projects.
 - Guest Lectures: Invite industry experts to conduct lectures and workshops on current industry trends.
 - Scenarios: Collaborating with a leading automotive company to offer a summer internship program for Engineering students.

6. Student Development

> Goal: Foster holistic development among students.



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> Deployment:

- Soft Skills Training: Integrate soft skills and communication workshops into the curriculum to improve students' employability.
- Entrepreneurship Support: Provide support through incubation centers for students interested in starting their own ventures.
- Scenarios:: Organizing an annual Techno-Cultural Fest that includes hackathons, coding competitions, Ideathons and leadership workshops.

6. Sustainability and Social Responsibility

Goal: Promote sustainable practices and social responsibility.

> Deployment:

- Green Campus Initiatives: Implement energy-efficient systems and waste management practices across the campus.
- Community Engagement: Encourage students to participate in community service and outreach programs.
- Scenarios:: Launching a "Go Green" campaign, where students design and implement renewable energy solutions within the campus.

7. Quality Assurance and Accreditation

> Goal: Achieve and maintain high standards of quality education.

> Deployment:

- Accreditation Preparation: Continuously monitor and improve processes to meet accreditation requirements from bodies like NAAC and NBA.
- Internal Audits: Conduct regular academic and administrative audits to ensure compliance with standards.
- Scenarios: Achieving NBA accreditation for all eligible engineering programs within the next academic year. Achieve and Autonomous status

8. Global Exposure

> Goal: Provide global learning opportunities to students and faculty.

> Deployment:

• Exchange Programs: Establish student and faculty exchange programs with reputed international universities.

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- Global Partnerships: Collaborate with global institutions for joint research projects and conferences.
- Scenarios: Signing an MoU with a European university to facilitate student exchanges and joint degree programs.

9. Placement and training

Goal:

- Enhance Employability
- Industry Collaboration
- Skill Development
- Career Guidance and Counseling
- Higher Placement Rates:
- Continuous Feedback and Improvement

> Deployment:

- Dedicated Placement Cell:
- Training Workshops
- Mock Interviews and Aptitude Tests
- Resume and Portfolio Building
- Alumni Network Engagement:
- Placement Drives:
- Soft Skills and Personality Development:
- Placement Analytics
- Sceanios: Use data analytics to track the placement progress and identify trends, strengths, and areas of improvement. By setting these goals and deploying the above strategies, CEC can create a robust Placement and Training ecosystem for students.



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Statutory and Non Statutory Committees at CEC

Statutory Committees	Non-Statutory Committees
SC/ST Committee	Examination Committee
OBC Committee	Recruitment Committee
Minority Committee	Purchase Committee
Grievance Redressal Committee	Infrastructure Committee
College Internal Compliance Committee	Event Organising Committee
Anti-ragging committee	Sports Committee
Anti- Sexual Harassment Committee	Library Committee
Women Empowerment Committee	Person with a Disability Committee (PWD)

By deploying above strategies, CEC can align its operations with its long-term vision, ensuring continuous improvement and excellence in all aspects of education and research.

Chairman - President
[Signature of Chairman]

City Engineering College