

Karmaveer Bhaurao Patil College of Engineering, Satara



www.kbpcoes.edu.in

STRATEGIC PLAN

➤ Preamble

With the rapidly changing needs of society and the nation, the main focus of technical education has been shifted to innovations, research and development. Major changes in the curriculum and strategies of teaching are required to meet the fast developing industrial sectors. There is stiff competition at all levels due to globalization and the output in the form of graduates is required to match the global expectations. The institute is trying to cope up with these changes and trying its level best to take strategic steps in this regard.

➤ Institute at a glance

Karmaveer Bhaurao Patil College of Engineering was established by the Rayat Shikshan Sanstha's, Satara in the year 1983. Institute is designated to serve as a center for academic excellence in imparting engineering education with the aim of quality technical education to create globally competent technocrats to serve the society. The institution is approved by AICTE, New Delhi and is affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere. It has its own campus, spread at the prime location of Satara city. The institute is presently offering four year under graduate programmes in four engineering disciplines and two year post graduate Programmes in two engineering disciplines. This institute is striving to impart top class technical education to the students, most of which are life skills from semi-urban and rural areas, to groom them into skilled technocrats, replete with ethical values and discipline by conducting students centric activities. The institute also inculcates a strong awareness towards social responsibility and strives to create an intellectually stimulating environment that fosters creativity, innovation, research and professional activities.

The service conditions of the institute are aimed to encourage the employees to take sincere interest and pride in the institute and its progress and put their best talents in the discharge of their responsibilities.

Courses Offered:

This institute offers four under graduate and two post graduate level AICTE approved programmes.

Sr. No.	UG Programme	Intake
1	B.Tech.(Civil Engineering)	60
2	B.Tech.(Mechanical Engineering)	60
3	B.Tech.(Electronics & Telecommunication Engineering)	60
4	B.Tech (Computer science and Engineering)	120
Sr. No.	PG Programme	Intake
1	M.Tech.(Electronics Engineering)	18
2	M.Tech.(Mechanical and production Engineering)	9

Vision of the Institution

“To be a premier institute enhancing the young minds into globally competent manpower.”

Mission of the Institution

- M1:** To provide academic excellence for overall development & global employability of students.
- M2:** To strengthen industry institute interaction for mutual benefits & entrepreneurship.
- M3:** To promote innovation and research for catering the needs of society at large.
- M4:** To inculcate social as well as ethical values amongst employees and students

Quality Policy

- QP1:** Develop a quality system for conscious and consistent actions to improve the academic and administrative performance of the Institution.
- QP2:** Ensure timely, efficient and progressive performance of academic, administrative and financial activities.
- QP3:** Ensure relevance and quality of academic and research programs.
- QP4:** Optimization and integration of modern methods of teaching and learning.

Core Values

- CV1:** Loyalty and Integrity
- CV2:** Honesty and Sincerity
- CV3:** Strive to Educate Joyfully
- CV4:** Cooperation, Respect Ethics
- CV5:** Fairness and Equality

SWOT ANALYSIS

STRENGTHS

- Esteemed and visionary management to take the institution to high level of quality.
- Good relation among Management, Principal and Staff
- Transparent Governance and Administration.
- Highly qualified, committed, experienced faculty
- Faculty with higher qualifications and focused towards teaching –learning and research activities
- PG programmes and Research programmes in Electronics Engineering and Mechanical Engineering departments.
- Good infrastructure with ICT enabled classrooms, seminar halls, auditorium, modern laboratories with latest equipments, etc.
- Campus placements available.
- Rich central library, E-library and departmental libraries.

WEAKNESSES

- Location disadvantage for better Institution-Industry interaction
- Industrial consultancy & applied research.
- Formal Networking with other institutions.
- Lack of Automation and implementation of ERP
- Strengthening of professional bodies
- Weak involvement of industry
- Vacancy of key posts in office administration since long.

KBPCOES

OPPORTUNITIES

- Starting new cutting edge post graduate programs and development of industry sponsored laboratories
- Enhance research activities through sponsored R&D projects.
- Establishing the center of excellence in emerging areas.
- Networking with premier institutes & Industry for advanced, applied research and enhance academic interaction through MOUs.
- HR development for new PG & Research programs

CHALLENGES

- Attrition of faculty due to retirements
- Competition from other emerging institutes.
- Possibility of declining quality of students because of extremely large number of institutes are being setup
- Attraction of Pune based institutes and environment in to aspirant students.
- Reduced job / entrepreneur opportunities due to industry rescission, industry automation, national and international policies.

Institutional Strategic Goals

Good Governance

Curricular Aspects and Teaching-Learning

Infrastructure development and Learning resources

Research, Innovations and extension services

Faculty and Staff empowerment strategies

Financial management and resource mobilization

Alumni engagement and interactions

Effective role of Internal Quality Assurance System

1. Good Governance

Objectives:

- To facilitate a well administered institution and lead to its recognition to build up confidence in the stakeholders.
- To develop a coherent strategy and a sustainable growth development path.

Recommendation	Action plans
To make KBPCOE activities a more productive mix of education, research, consultancy and services	<ul style="list-style-type: none"> • Be in top rank in academics and research, • Designing of SOPs for academic and administrative processes in the institute. • Enhancing consultancy and services in areas of software development, online/offline examinations, civil engineering work etc. • Identify opportunities in consultancy and services
To make the organization more professional and more focused on quality	<ul style="list-style-type: none"> • Effective IQAC with internal & external members to audit processes • Establish Systems, checks and balances-take immediate Remedial measures
To form selective strategic alliances with academic, research and industrial organizations	<ul style="list-style-type: none"> • Extend and Build relationships with research and industrial organizations through MOUs • Research organizations –DRDO, ARAI, Pune, Indian Road Congress, Indian Concrete Institute, Structural Engineering Research Centre • Industrial Organizations- HCC, JK Construction, L & T, Shapoorji Pallonji, Tata Motors, Kirloskar, Mahindra & Mahindra, Infosys, Capgemini

<p>To strengthen the existing systems and procedures for conflict resolution and redressal of grievances</p>	<ul style="list-style-type: none">• Enhance the requisite processes and mechanisms for handling grievances covering all sections students, Faculty, staff and women.
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2. Curricular Aspects and Teaching-

Learning Objectives:

- To formulate and implement quality teaching methodologies to ensure student-centered teaching-learning processes.
- To emerge as a recognized center of excellence in the fields of engineering by research.

Recommendation	Action plans
Bench mark with Premier Institutes like COEP, IIT	<ul style="list-style-type: none"> • Constitute academic teams and visit premier institutions • Customize & Implement best practices
Effective Curriculum planning and implementation	<ul style="list-style-type: none"> • Develop lesson plan as per academic calendar • Develop learning content • Benchmark with industry requirements • Use of LMS to support students • Identifying curricular gaps and conducting gap bridging activities for students
Upgrading faculty & staff competence	<ul style="list-style-type: none"> • Conduct training need analysis • Conduct /depute faculty and staff For competence development • Support paper publications and presentations • Provide opportunities for networking • Train all faculty to use online teaching learning tools and innovative methodologies effectively
Knowledge Delivery & Outcome based education	<ul style="list-style-type: none"> • Define outcomes of each teaching learning initiative • Continuous Assessment and evaluation to measure outcomes • Establish Research Culture • Access to online learning • Mentor on academic, career, entrepreneurial & higher educational opportunities

Evaluation & Assessment	<ul style="list-style-type: none">• Create proper feedback system• Continuous progress assessment• Question bank development & mid-sem and end-sem examinations.
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3. Infrastructure development and Learning Resources

Objectives:

- To develop state-of-the art facilities
- To ensure effective utilization and maintenance of Infrastructure
- To benchmark institutional infrastructure and performance periodically

Recommendation	Action plans
Green Campus	<ul style="list-style-type: none"> • Plantation, Rain water harvesting and green cover • Energy harvesting & management • Hygiene, solid waste management (zero plastic usage)
Academic infrastructure	<ul style="list-style-type: none"> • Aesthetic Classrooms, Seminar halls • Smart Classrooms • Multimedia and support equipment in classrooms • E-Learning facilities • State of the art Laboratory & equipment • Online learning tools • Evaluation & assessment tools • Learning Management System • ICT for 360deg.Feedback.
Library	<ul style="list-style-type: none"> • Library infrastructure up gradation • Increase access for e-Resources • Resources automation & Access(24X7) • Digitization of Library resources • Establishing cloud based e-library & online access
Sports, Hostel and Canteen	<ul style="list-style-type: none"> • Providing good sports(indoor/outdoor) facilities • Upgradation of hostels and related facilities • Upgradation of canteen facilities
Laboratory-R&D Equipment	<ul style="list-style-type: none"> • Development of R&D Laboratory • Developing industry sponsored labs

4. Research, Innovations and Extension Services

Objectives:

- To achieve goals related to raising the quantum of research output and improving its quality.
- To plan and develop focused Centers of Excellence in the Institute.
- To encourage students and Faculty to publish research papers in top journals and presentation at conferences.

Recommendation	Action plans
R&D Infrastructure & Teams	<ul style="list-style-type: none">• Increasing both human and physical resources required for research.• Enhancing R&D laboratories in all departments• Dedicated R&D facilitation & documentation centre• Competent technical staff for R&D labs
Establishing Centre of Excellence	<ul style="list-style-type: none">• Establishing the Centre of excellence.
MOU with premier institutes/ R&D labs	<ul style="list-style-type: none">• MoUs with higher learning institutions in India & abroad.• Collaborations with DRDO, ARAI, Pune, Indian Road Congress, Indian Concrete Institute, Structural Engineering Research Centre• Multi & interdisciplinary research and product development

5. Faculty and Staff Empowerment Strategies

Objectives:

- To become the most favored destination for potential faculty members.
- To recognize and recruit Faculty with different types of experiences such as academics, industry and research.
- To recruit Faculty from other states.
- To follow effective performance appraisal systems.

Recommendation	Actionplans
Talent Hiring & Retention policy	<ul style="list-style-type: none"> • Merit based hiring policy formulation & implementation • Career advancement Schemes • induction/ orientation of newly appointed faculties • Critical talent identification & retention measures
Rewards & Recognitions	<ul style="list-style-type: none"> • Rewards–recognitions & incentives based on Key Result Areas • Welfare policy refinement & implementation
Conducive work environment	<ul style="list-style-type: none"> • Best work facilities and infrastructure • Role & responsibilities clarity and empowerment
Career growth & Development	<ul style="list-style-type: none"> • Sponsorship/Deputation, for higher education & Exchange programmes • Sponsorship to participate in national/international conferences • Encourage to do research and publications in reputed journals • Encouraging faculty for patent/copyright and product development

6. Financial Management and Resource Mobilization

Objectives:

To develop and implement effective financial system to directly support the fundamental functions of education, research, and service and to enhance the effectiveness of using the financial resources.

Recommendation	Actionplans
Financial Management And Resource Mobilization	<ul style="list-style-type: none">• Identification of different streams and opportunities for internal revenue generation• Encourage initiatives to mobilize resources by participation/contribution of society in their development through extension activities
Budgeting	<ul style="list-style-type: none">• Department wise Budget planning of all heads of accounts as per FRA/NBA/AICTE guidelines• Forecast & estimation of revenue and expenditure• Generate reserve fund for emergency• Budget formulation & approval
Financial Governance	<ul style="list-style-type: none">• Planned expenditure management• Procurement and Financial policies implementation• Modification of various existing administrative and financial processes for making it simple, smooth and transparent.• Audit(internal/External) checks-balances

7. Alumni engagements and interactions

Objectives:

- To build mutually beneficial relations with our alumni so that a range of modes of engagement can be explored.
- Creating more opportunities/activities for alumni to spend time on campus and engage with current students and faculty.
- To increase and promote alumni contributions

Recommendation	Action plans
Alumni Association	<ul style="list-style-type: none">• Strengthen Department wise Alumni association and engagement• Enhance alumni association office on campus, engage students active participation• Data base updation and interactive alumni website• Increase activities through alumni association
Relationships and Leveraging	<ul style="list-style-type: none">• Regular interactions through alumni meets• Recognize successful alumni• Leverage for guest lecturers/internships/placement• Academic advisors/Board of governors
Endowments	<ul style="list-style-type: none">• Increase and promote contributions/endowment• Sponsorships/Scholarships through alumni association

8. Effective role of Internal Quality Assurance System

Objectives:

To achieve Excellence in Technical Education, Research and Consulting through an Outcome Based Curriculum focusing on Continuous Improvement and Innovation by Benchmarking against the Global Best Practices.

Recommendation	Actionplans
Establishing Quality System	<ul style="list-style-type: none">• Setting up benchmarks & system flow• Publishing Quality policy• Educating & Training of all employees• Maintain quality standards in all aspects
Accreditation and Certifications	<ul style="list-style-type: none">• Internalize the process based on NAAC and NBA accreditation• Academic and Administrative Audit and certifications
Audit Internal Controls	<ul style="list-style-type: none">• Establish audit process & audit teams• Train internal auditor teams• Audit and remedial measures
Continual improvement, Rewards and Recognitions	<ul style="list-style-type: none">• Effective function of Quality assurance cell• Identifying achievements & best practices• Quality circle competitions & rewards