



Dr. D. Y. Patil Pratishthan's
D Y PATIL COLLEGE OF ENGINEERING

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Affiliated to Savitribai Phule Pune University, (ID No.-CEGP010530)

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"A" Grade Accredited by NAAC & "37" Year of Excellence in Engineering Education"



- Civil Engineering
- Information Technology
- Electronics and Telecommunication
- Instrumentation and Control Engineering

Dr. D. Y. Patil
Founder President

Dr. Sanjay D. Patil
President

Shri. Satej D. Patil
Vice President & Chairman

PERSPECTIVE PLAN: 2018 – 2028

Document Type	Policy-Perspective Plan
Administering Entity	Chairman Dr. D. Y. Patil Pratishthan, Principal, Heads of the Departments, Academic Coordinator, IQAC Coordinator, Registrar, College Development Committee
Policy Amendment Date	<To be written by observing GB Meeting conducted in 2017 or 2018>
Approval Authority	Board of Governance
Indicative time of Review	October, 2024

Institute Perspective Plan reflects academic and administrative growth of the institute aligned with vision, mission, and core values. Following key elements are considered while formulating perspective plan. Institute has clear vision which is guiding force in formulating short term and long-term goals.

1. Vision, Mission and Objectives of the Institute:

Vision:

Empowerment through Knowledge.

Mission:

M1 – To educate the students to transform them as professionally competent and quality conscious engineers.

M2 – To Provide Conducive Environment for Teaching Learning and overall personality development.

M3 – To culminate the Institute into an International seat of excellence.

Institute Objectives:

1. To produce technically competent, quality conscious engineers.
2. To develop functionally suitable and conducive environment for students and staff for academic purpose.
3. To develop the departments into the centre of excellence.
4. To develop post graduate centres for all branches.
5. To implement Effective & efficient Teaching–Learning practices.
6. To increase percentage of campus placements.
7. To strengthen industry institute interaction.
8. To help students for personality development and career guidance.
9. To develop the students and staff to get international Acclamation.
10. To develop an e-learning campus.

2. Perspective Plans at a glance:

Sr. No.	Key Elements	Short Term Plan (Within 2 years)	Long Term Plan (More than 5 Years)
1	Academic Programmes	<ul style="list-style-type: none"> • Accreditation of the eligible programmes • Increment in intake capacity of highly demanded programmes. • More improved learning environment by using innovative pedagogy. 	<ul style="list-style-type: none"> • To start Ph.D. research centre for all the programs. • Centre of excellences in all the state of art areas. • To start new programmes as per the need of time. • To seek Academic Autonomy.
2	Faculty Development	<ul style="list-style-type: none"> • Need based training to faculty members. • To provide learning avenues to faculty members. 	<ul style="list-style-type: none"> • All faculty members with minimum with Ph.D. qualification. • Development of faculty as a trainer and consultant for industrial and other organizations.

		<ul style="list-style-type: none"> Motivate staff for still more Research and consultancy projects. 	<ul style="list-style-type: none"> Strengthen Faculty exchange program.
3	Infrastructure Development	<ul style="list-style-type: none"> Upgrading the current infrastructure to less papers and digital footprint. Tracking and expediting digital infra. 	<ul style="list-style-type: none"> Identifying the possibilities for near future expansion of the programmes.
4	Industry Academia Collaboration	<ul style="list-style-type: none"> Enhance collaboration with reputed industries. 	<ul style="list-style-type: none"> Collaboration with international organizations.
5	Student Development	<ul style="list-style-type: none"> Skilled based trainings. Focus on problem-based learning. Good cocurricular and extra-curricular activities. 	<ul style="list-style-type: none"> Facility of multi-disciplinary courses. Students exchange programme. Motivating students for more international competitions.
6	Quality Assurance	<ul style="list-style-type: none"> To maintain monitoring of academic programmes, faculty, infrastructure, etc. 	<ul style="list-style-type: none"> To follow international standards in education in long run.
7	Outreach Activities	<ul style="list-style-type: none"> Outreach programmes for virtual laboratory. 	<ul style="list-style-type: none"> Full pledged Outreach Cell to serve society and stake holders.
8	Financial Planning	<ul style="list-style-type: none"> Short term planning for recurring and near future expansion 	<ul style="list-style-type: none"> Financial Planning to seek new opportunities.

3. Expected Outcomes:

Some of the expected goals are mentioned below:

1. Consigning Mathematical, scientific, and Engineering excellence in relevant Engineering applications.
2. Imparting long lasting solutions to the real-life problems by analysing, designing Engineering system according to societal needs
3. Adapting global changes through professionalism, multidisciplinary approach, and ethical behaviour for workable and economically feasible Engineering solutions.
4. Developing interpersonal skills for teamwork, management and leadership qualities which will help in self-directed continuous improvement and commitment to quality of lifelong learning.
5. Excelling in competitive examinations like GATE, GRE, MPSC etc.




Principal
Dr. Mrs. P. Malathi
PRINCIPAL
D. K. PATIL COLLEGE OF ENGG
AKURDI, PUNE-411044

INSTITUTIONAL DEVELOPMENT PLAN (IDP)

(2022-2032)

D Y Patil College of Engineering, Akurdi, Pune-411044

(As part of the implementation of National Education Policy-2020)

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1. Institutional Basic Information:

Name of the Institute	D. Y. Patil College of Engineering, Akurdi, Pune-411044 Website: www.dypcoeakurdi.ac.in Email: principal@dypcoeakurdi.ac.in Contact: 020-27653058
Year of Establishment	1984
Type of Institute	Self-Financed, Tier-II affiliated to Savitribai Phule Pune University, Pune, Maharashtra
AICTE Permanent ID	1-12346111
DTE Code	EN6272
University Code	CEGP010530
AISHE Code	C-41513
Name of the Principal	Dr. Mrs. P. Malathi

2. Institutional Development Plan (for next 10 years)
2.1. Vision
Empowerment through Knowledge.
2.2. Mission
<p>M1 – To educate the students to transform them as professionally competent and quality conscious engineers.</p> <p>M2 – To Provide Conducive Environment for Teaching Learning and overall personality development.</p> <p>M3 – To culminate the Institute into an International seat of excellence.</p>
2.3 Goals and Objectives:
<ol style="list-style-type: none"> 1. To produce technically competent, quality conscious engineers. 2. To develop functionally suitable and conducive environment for students and staff for academic purpose. 3. To develop the departments into the centre of excellence. 4. To develop post graduate centres for all branches. 5. To implement Effective & efficient Teaching–Learning practices. 6. To increase percentage of campus placements. 7. To strengthen industry institute interaction. 8. To help students for personality development and career guidance. 9. To develop the students and staff to get international Acclamation. 10. To develop an e-learning campus.

2.4 Executive Summary:

(Goals achieved as per perspective plan 2018-2028)

In a higher education ecosystem, teaching-learning and research are the measure components. Being the technical institution extension activity also plays crucial role. Thus while framing the IDP; IQAC committee members have taken into account the ways and means of developing students in all the dimensions of education. To be specific cognitive ability, psychomotor ability and affective ability are taken into account. These abilities take care of professional competencies, social responsibilities, ethics, soft skills like communication skills, negotiation skills, values and so on.

In light of the implementation of NEP-2020, some initiatives are also in thought though we are affiliated to State university. The document is framed in line with the Perspective Plan 2018-2028, so that stake holders will be in better tune with the previous activities. The details of achievement in last five years are attached (Annexure 2). Following measure strategic objectives are taken into account to frame IDP. These are in line with the NEP-2020 policy.

- i) **Academic Excellence:** Enhance curriculum design to incorporate emerging trends, interdisciplinary studies, and practical applications, Implement outcome-based education methodologies and assessment practices to ensure the quality and relevance of academic programs, Establish Centers of Excellence in key domains to promote specialized research and training opportunities,
- ii) **Research Advancement:** Increase research funding through strategic collaborations, grants, and industry partnerships, Foster a research-centric culture by incentivizing faculty and student involvement in research projects and publications, Strengthen research infrastructure and facilities to support cutting-edge research initiatives
- iii) **Infrastructure Enhancement:** Develop state-of-the-art laboratories, libraries, and digital learning resources to facilitate experiential learning and research excellence, Upgrade campus infrastructure to create a conducive environment for teaching, research, and

student life, Implement sustainable practices for energy efficiency, waste management, and environmental conservation.

- iv) **Financial Sustainability:** Diversify revenue streams through alumni engagement, philanthropic contributions, and innovative fundraising campaigns, Optimize resource allocation through effective financial planning, budgetary control, and performance monitoring, Establish endowment funds and investment strategies to ensure long-term financial stability and growth.
- v) **Governance Efficiency:** Strengthen governance structures and processes to enhance transparency, accountability, and stakeholder participation, implement robust risk management frameworks to mitigate operational, financial, and reputational risks, Promote ethical conduct, integrity, and adherence to regulatory standards across all institutional activities.
- vi) **Stakeholder Engagement:** Foster partnerships with government agencies, industry leaders and community organizations, to enrich learning and research opportunities, Cultivate alumni networks and mentorship programs to support student success, career development, and institutional advancement, Engage with local communities through outreach initiatives, social impact projects, and knowledge- sharing activities.
- vii) **Implementation Strategies:** Establish interdisciplinary task forces to oversee the implementation of strategic initiatives and monitor progress regularly, Allocate dedicated resources, including funding, personnel, and technology, to support priority areas identified in the long-term plan, Foster a culture of innovation, collaboration, and continuous improvement through staff development programs, workshops, and recognition schemes. Conduct periodic reviews and evaluations to assess the effectiveness of strategies, identify challenges, and adapt plans accordingly.

2.5 Faculty Empowerment

Action Plan:

Human Resources Management Enablers:

Human resources management enablers focus on attracting, developing, and retaining talent critical for the IDP's success. This involves implementing fair HR policies, offering professional development opportunities, and fostering a supportive workplace culture that values diversity, inclusion, and employee well-being.

To create stress free environment for invoking new research ideas through organizing programmes such as faculty bonding, promotion of forums for exchange and sharing of research ideas and other activities to encourage recreation for teachers. Besides enhancing amount for seed money, research incentives, participation in conferences, awards, motivating for higher education, etc.

Looking into the better efficient model for faculty and staff welfare in addition to the present welfare scheme which includes accidental insurance, gratuity, pF facility, medical leaves, leave on birthday/ marriage anniversary.

2.6 Teaching, Learning Process

Action Plan:

Implementation of Outcome Based Education (OBE):

Academic Enablers:

Academic enablers within the IDP involve fostering partnerships with educational institutions, promoting interdisciplinary collaboration, and providing resources for research and curriculum development. Supporting academic programs and initiatives enhances knowledge dissemination, cultivates talent, and contributes to the institution's intellectual capital.

Development:

Development in academic enablers refers to the continuous evolution and expansion of resources, infrastructure, and capabilities within an educational institution. It involves

initiatives such as constructing new facilities, enhancing technological resources, and expanding academic programs to meet the evolving needs of students and faculty.

Improvement:

Improvement entails the ongoing refinement and enhancement of existing processes, systems, and practices within academia to optimize performance and outcomes. This includes initiatives such as curriculum updates, faculty development programs, and quality assurance measures aimed at raising academic standards and fostering a culture of continuous improvement within the institution.

2.7 Research, Development and Innovation

Action Plan:

Research, Intellectual Property, and Supportive Enablers:

These enablers facilitate a conducive environment for research activities, including intellectual property protection, access to research facilities, and mentorship programs. By nurturing a culture of innovation and providing supportive infrastructure, the IDP encourages knowledge creation, technology transfer, and commercialization efforts.

- Including all interested parties in scientific publications, innovation, and research.
- Fostering an environment that values original thought.
- Encouraging institutional research that is methodical.
- Working together with academia, business, research facilities, and the local community.
- Concentrating on High-Caliber research initiatives and the creation of intellectual property.
- Promoting faculty involvement in investigations.
- Creating methods for resource optimization and establishing aspirational goals.
- Making money out of research findings by attempting to safeguard intellectual property and commercialize them.

2.8 Industry-Academic Partnership

Action Plan:

Industry Institute Enablers:

The aim will be to create mutual value through collaboration between DYPCOE and industry for nurturing research knowledge to emerging technologies that create impact in industrial and societal development. This will be achieved through the following action plan:

Encourage incorporation of courses for enhancing industrial directed skills. Conduct exposure visit of students to industries, encourage people employed in industry to join for Ph.D. with industrial driven research problem, Develop platform for provide solution to industrial problems through contractual based research, Enhancing MoU's with industries for testing process and product in industrial setup, Encourage faculty members to identify and develop the industrial and societal potential of their research.

2.9 Institution's Placement Plan for Students

Action Plan:

Placement Enablers:

Most of the activities are already in practice and as a result we have average placement ratio is more than 85%. However, for more efficient and effective placements following action plan will be implemented in more fruitful manner.

Expanding the placement activity by sending employability cards prior to placement drive. Sending placement brochures to well-placed alumni. Impart Life skills training to the students to improve employability. Enhancing the horizon of Conducting Career guidance and competitive exam training/counseling (GPSC/UPSC/IAF/NET/SET etc.) for the students by inviting experts/Alumni. Sign MoU with organization for life skills training to the students. Promoting Industry-Academia linkage to develop skill-based programs in the curriculum, to organize National/International conferences/workshops etc. Sign MoU/collaboration with organizations for students' internship/ dissertation. Set up a robust Alumni Network for placements. Provide resources and support for job search including job portal, career fairs. Encourage research projects from R&D units of industries. Create an ecosystem that supports entrepreneurial endeavors and encourages students to pursue start-up ventures.

2.10 Achieving the Target for Accreditation:

Action Plan:

Initiating activities related to NEP 2020, Increase PhD student strength on campus, Increase in PhD Guides on campus, Increase in research publications in Scopus/WoS, Workshops on project proposal preparations, Submission of research project by faculty members, Conducting awareness programs on IPR, Increasing Renewable and Green initiatives, Conducting extension/outreach activities outside campus, Increase in number of certificate courses /value added courses/ diploma programmes/Online courses (MOOCS/SWAYAM/e-Pathshala/NPTEL etc, Implementation of 100% e-governance, Improving research funding through government and non-government sources such as industry, corporate houses, international bodies for research project, Endowment Research Chairs, Improvement in Alumni engagements and contributions, Improvement in Percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP), Improve number of Patents, Expansion of Research & teaching infrastructure, Improvement of Research output, Increasing consultancy projects, Improvements in Citations & h- Index in Scopus/ Web of Science/PubMed

2.11 Incubation and Start-up

Action Plan:

Incubation and start-up Cell is already established in institution. To enhance the activities under this cell following activities are in mind.

Conduct activities for faculty and students through Institution Innovation Council for various discipline, Train faculty members to become Innovation Ambassador for conduct of activities and mentoring students from innovation to entrepreneurship, Establish MoUs with other incubators and industries as support system for Research Park, Conduct Challenges and Hackathon every year for identifying innovative solution and ideas for nurturing through incubation centres, Establish innovation repository through YUKTI platform, Establish a Seed Fund to assist pre-incubation and incubation of innovators idea leading to startups through external funding, Expand Research Park as support system for translating knowledge-based research into innovative industrial processes and products

2.12 Alumni Engagement / Activities plan

Action Plan:

Alumni cell is registered under charity commission. Alumni are important stakeholders who make substantial contributions to HEIs' growth, management, and governance. HEIs must build trust and encourage life time participation in order to promote effective networking and connectedness, which includes support for endowments, new projects, funding, knowledge exchange, and mentorship. Collaboration and partnership-building with local, national, and global agencies can further support a range of enablers, including innovative academic initiatives, intellectual property development, and emotional support programs. Further to enhance this activity, a Networking event will be organized to encourage connectivity between various batches of the Alumni and maintain connections, Collaborations with Alumni on Research Projects for community development, Short term courses and entrepreneurship development sessions by Alumni to promote Industry-Academia Collaborations, etc.

2.13 Basic Infrastructure Development plan

Action Plan:

For more improved learning environment basic infrastructure is imperative. Following enablers are taken into account for best infrastructural development.

Physical Enablers:

Physical enablers encompass providing the infrastructure and facilities necessary for effective operations and service delivery. Investing in modern equipment, maintaining safe and accessible facilities, and leveraging digital technologies optimize productivity and support the IDP's objectives by ensuring a conducive environment for teaching, research, and administrative activities.

To improve the Physical Enablers:

Since physical enablers are frequently thought to require substantial funding from HEIs, alternative and innovative ways to finance the enablers may need to be investigated.

Campus Planning-

- a) **Integrated Activity:** Arrange the campus so that aspects of academics, research, culture, and operations coexist peacefully.
- b) **Environmental Responsibilities:** Promote environmental stewardship by lowering environmental impacts, cutting waste, and improving energy efficiency.
- c) **Facility Integration:** Make that all facilities and equipment are integrated, particularly those related to vocational education, training, and skill development.
- d) **Safety and Risk Management:** Put the wellbeing of the campus community first and set up procedures for managing risks throughout construction and use.
- e) **Development of the whole person:** Establish spaces for sports, exercise, art, and health, as well as mental health services like counselling and wellness centers.
- f) **Resource Management:** As a foundational idea for the creation and administration of resources, emphasize knowledge management.

Green Campus:

A green campus refers to a university or college campus that prioritizes environmental sustainability in its operations, infrastructure, and activities. This includes initiatives such as energy efficiency, waste reduction, water conservation, green building practices, sustainable transportation options, and promoting environmental education and awareness among students, faculty, and staff. Green campuses aim to minimize their ecological footprint while fostering a culture of environmental stewardship and responsibility within the campus community.

- a) **Ecological Preservations:** Ecological preservation involves the protection and conservation of natural habitats, species, and ecosystems to maintain biodiversity and ecological balance. It focuses on preventing human activities that degrade or destroy these environments, such as deforestation, pollution, and habitat destruction. It aims to ensure the long-term health and resilience of ecosystems for future generations.
- b) **Environmental Awareness:** Fostering sensitivity towards the environment involves cultivating an understanding and appreciation for the natural world and the importance of

preserving it. Awareness campaigns play a crucial role in promoting this sensitivity by educating individuals about environmental issues, encouraging sustainable behaviors and empowering them to take action to protect the environment for present and future generations.

Digital Enablers:

Digitalization has revolutionized institutions worldwide, enhancing internal processes through Information and Communication Technologies (ICT) and its enablers. Its impact spans learning activities, governance, and research, offering advantages such as increased efficiency, productivity, and learner experience. As the world progresses towards digital media, ICT's role in education is increasingly vital, with ICT enablers transforming teaching quality and delivery methods. Institutions, guided by initiatives like NEP 2020, are moving towards becoming Digital Universities, leveraging open, interoperable digital enablers to address diverse educational needs effectively.

2.14 Skill Development of Non-teaching Staff

Action Plan:

To enhance the skills of the non-teaching staff, the following action plan will be implemented. Develop and implement training programs to address the identified skill gaps (communication skills, computer literacy, administrative tasks, customer service, first-aid), Encouraging non-teaching staff to participate in workshops related to their roles and responsibilities, Acknowledge and reward non-teaching staff members who demonstrate improvement and exhibit enhanced skills, Implement a mentoring program where experienced staff members can mentor and guide junior staff to foster skill development and knowledge sharing, Providing access to online learning platform or e-learning modules can enable non-teaching staff to acquire new skills at their own pace, Foster a culture of continuous learning and skill development by providing access to online learning platforms

2.15 Conclusion:

The essence of institutional development for Higher Education Institutions (HEIs) is embodied in a strategic framework designed to advance excellence, inclusivity, and innovation across all facets of the educational landscape, in alignment with the National Education Policy (NEP) and applicable regulatory requirements. This comprehensive and practical approach seeks to guide HEIs in the creation of an Institution where every member of the educational community will succeed in their endeavor.

(Note : In GB Meeting dated 28/12/2023, all the members unanimously suggested to draft IDP, considering the guidelines of NEP-2020. So that the draft framed by IQAC may e finalized in coming GB meeting scheduled in April 2024).