



Shri Vile Parle Kelavani Mandal's

DWARKADAS J. SANGHVI COLLEGE OF ENGINEERING

(Autonomous College Affiliated to the University of Mumbai)

NAAC Accredited with "A" Grade (CGPA : 3.18)



Dwarkadas J. Sanghvi College of Engineering - Institute Development Plan

FOREWORD

The Institute Development Plan (IDP) represents an important milestone in the continuing journey of **Dwarkadas J. Sanghvi College of Engineering (DJSCE)**. Since its establishment in 1994, the Institute has steadily progressed with a clear commitment to quality education, academic excellence, professional competence and has contributed to the overall development of its learners, the most important of the stakeholders. Having been associated with the Institute from its formative years, I have had the privilege of witnessing this journey closely and of being associated with its aspirations and development over the years.

The IDP, formulated and finalised in March 2022, has been conceived as a structured articulation of the Institute's aspirations and priorities for its sustained overall development. It has emerged from a considered assessment of the Institute's existing strengths, areas requiring further attention, opportunities available to it and the challenges before it. The five Goals and twenty Objectives set out in the Plan therefore represent not merely targets, but a collective institutional commitment towards academic enrichment, research & innovation, faculty development, infrastructure & Centres of Excellence, and the holistic development of its learners.

I would like to place on record my appreciation of the Principal and all members of the Institute for their sustained efforts in translating institutional aspirations into meaningful academic and developmental initiatives. In particular, the leadership and stewardship of the Principal have played an important role in providing direction, encouraging new initiatives and maintaining the momentum for continued institutional development. The commitment of the faculty members, technical & administrative staff as well as the enthusiasm and participation of the students have together contributed significantly to the progress of the Institute. The journey of an educational institution is necessarily collective, and the progress of DJSCE reflects this shared endeavour.

The subsequent progress of the Institute since the formulation of the IDP provides encouragement that the directions articulated therein are well aligned with its developmental needs and aspirations. The strengthening of academic programmes and flexibility, research & innovation, faculty development, infrastructure and learner-centric initiatives demonstrate the value of having a clearly articulated institutional framework for sustained progress. At the same time, an IDP should not be regarded as a document, whose purpose ends with the achievement of individual targets; rather, it should continue to serve as a reference for reflection, continuous improvement and the identification of new areas of institutional endeavour.



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I am confident that the Goals and Objectives embodied in this IDP will continue to guide the Institute towards higher levels of academic excellence, research, innovation, professional competence and social responsibility. With the continued commitment of the Principal, faculty and staff, and with the active participation of its students and other stakeholders, I am confident that DJSCE will continue to build upon its strong foundations and progress towards the aspirations set out in this Plan.

I am pleased to endorse and put forward this IDP as a collective statement of the Institute's aspirations and its commitment to sustained and purposeful development.

Shri. Bharatbhai Sanghvi

Vice President and Trustee, SVKM
and Mentor D. J. Sanghvi College of Engineering
Mumbai

Date: 24-03-2022



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9th March 2022

Dwarkadas J. Sanghvi College of Engineering - Institute Development Plan

About the Institute:

Shri Vile Parle Kelavani Mandal's (SVKM) Dwarkadas J. Sanghvi College of Engineering (DJSCE), was established in the year 1994. **DJSCE is today an Empowered Autonomous Institution, granted autonomy by the University Grants Commission (UGC) for a period of 10 years, starting from the A.Y. 2019-20 till 2028-29. The empowered Autonomous status is granted to the institution by the University of Mumbai for a period of 10 years w.e.f. 2024-25 till 2033-34.** The college presently runs 8 undergraduate programmes, 3 post graduate programmes and 3 Ph.D. programmes for the A.Y. 2022-23, all affiliated to the University of Mumbai. Students of the college have always performed exceedingly well in national and globally competent multinational companies and also in the universities in India and abroad as they pursue their higher education.

The favourable location of the institute in Mumbai along with the state-of-the-art facilities and distinguished faculty has been a nurturing ground for students of high academic capabilities. 17,825 sq. meters (1,90,192 sq. feet) of spacious classrooms, well-equipped laboratories and workshops, new age computer facilities and a well-stocked library provide a stimulating educational environment within the College. The College has attracted qualified and experienced faculty members and continuing with the commitment of providing students with better infrastructural facilities; the College has always been adding new equipments and furniture. These continued efforts of the parent trust, the faculty and our students have propelled the college into the top echelons of Quality Engineering Colleges with an 'A' grade certificate from the Directorate of Technical Education, Maharashtra State. DJSCE is also consistently rated amongst the top 10 Private Engineering Colleges of the country by India Today and amongst the top 100 Engineering Colleges of our country by various other ranking institutions/agencies.

Ministry of Education, Govt. of India has established its "Innovation Cell" at the All-India Council for Technical Education with a purpose to systematically foster the culture of Innovation in all Higher Education Institutions (HEIs), across the country. MoEs Innovation Cell (MIC) focusses on creating and strengthening the culture of Innovation and entrepreneurship ecosystem across all HEIs, so as to enable them to promote and support student innovations and sustainable start-ups at the academic institutions. MoEs Innovation Cell has launched and implemented various policy programs to engage, encourage and channelize the creative energy and entrepreneurial potential of Indian youths to build innovations and enterprises. DJSCE has been a part of this initiative, since 2018 by establishing the Local IIC committee in the institution.

Students of the college, continue to bag top positions in the merit list - retaining the status of the college amongst Maharashtra's premier colleges. The college used to be consistently rated amongst the top two colleges (often achieving first position) in the academic results at the 1st year



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examinations (Sem. I & II: Common Scheme & Syllabus for all) of the University of Mumbai, before the autonomous status was achieved.

The College has always been able to attract various reputed recruiters for campus placement. In the academic year 2021-22, more than 105 recruiters visited our campus for placement. Some of our eminent recruiters are: TCS Ltd., Amdocs Ltd., L & T, Oracle, Morgan Stanley, J.P. Morgan Chase, AlphaGrep, Cimpress, Dolat Capital, Accolite Digital, GEP, ATOS Origin Ltd., E&Y, PWC, Fractal Analytics, ZS Associates, Tata Electronics, Infosys, L&T Infotech, ISS Governance, RBL Bank, Reliance JIO, HUL, Siemens Ltd., Mahindra & Mahindra Farm Equipments, BOSCH, Nerolac Paints, Technimont ICB Pvt. Ltd., Tata Projects, Think 360, JPMC Finance, etc.

Additionally, various active students' chapters of IEEE, CSI, ISME, IETE, BMSE, ACM, SAE India, RAS, ISHARE, S4DS, ACM SIGAI, NSDC and ISACA make DJSCE a very vibrant place for learning. In addition, different student clubs like, DJS Unicode, DJS Synapse, DJS Nature Trek Club, DJS Codestars, DJS DJinit.ai, DJS LIT, DJS Beats, DJS Aura, DJS Panache, DJS E-cell, DJS IIC, DJS Express, DJS GDSC, DJS Compute, DJS R & D Club, DJS Dhadak, DJS MUNSOC, DJS NOVA, DJS BUILDSPACE, DJS INFOMATRIX, DJS TEDx, DJS Polygon and the NSS unit of the college add value to student activities, ensuring good exposure. Various professional events like conferences, faculty training & development programmes, workshops, seminars and other value-added programs are organized continuously to enrich the teaching-learning environment at the College. The Innovation center of the college and the in-house technical journal support faculty and students in coming up with quality research publications and novel projects. The E-cell of the college promotes entrepreneurial skills and initiatives among students through various events.

Vision of the Institute

To be a world class Institution for education, training and research in engineering by inculcating values and skills for sustainable development of the society.

Mission of the Institute

- To provide competent faculty and an interactive learning environment along with world class infrastructure for nurturing professionalism & entrepreneurship in Engineers.
- To foster technical competence, research aptitude and environmental awareness amongst aspiring technocrats to develop sustainable engineering solutions.
- To provide a forum for active interaction between academia & industry, leading to continuous improvement in engineering education.

Institute Development Plan – 2022–2027

The Institute Development Plan (IDP) has been formulated after detailed deliberations and consultations within the Institute, culminating in its preparation in March 2022. The Plan is based on a systematic assessment of the Institute's Strengths, Weaknesses, Opportunities and Challenges



(SWOC) and seeks to provide a focused five-year roadmap for its academic, research, faculty, infrastructure and learner development.

The IDP identifies five long-term institutional Goals, supported by twenty specific Objectives. The Plan is intended not merely as a statement of aspirations, but as a living institutional framework for planning, implementation, monitoring, review and continuous improvement, with appropriate corrective action, wherever required.

SWOC (Strengths, Weaknesses, Opportunities and Challenges) Analysis:

Institutional Strengths

1. Founded and run by a highly progressive management, having an established legacy in education, since the Pre-Independence days of India and having 'State of the Art' infrastructure, housed at a prime location in Mumbai.
2. Highly motivated and well qualified faculty members, ever participative in the innovative teaching learning methodology for a focused outcome.
3. Strong focus on project / activity-based learning.
4. Vibrant and conducive learner centric environment, catering to quality learners with diverse background and skill sets.
5. Excellent placements in a wide range of companies.
6. Highly active student-chapters of professional societies and various clubs, organizing numerous activities throughout the year.
7. ERP ready academic administration and assessment.
8. Soft skills and professional-ethics training for learners.
9. Alumni being part of several highly ranked foreign and Indian universities.
10. Active involvement of the institute in organizing programs, benefiting socio-economically disadvantaged groups.

Institutional Weaknesses

1. Limited R & D output and MOUs with the professional world.
2. Lack of space leading to unavailability of accommodation for staff and learners in the campus.
3. Inadequate interdisciplinary/multidisciplinary projects and opportunities.
4. Unavailability of additional laboratories in the specialized areas/centers of excellence.
5. Moderate response to the Incubation center.
6. Inadequate resources and funding from govt. and private agencies for R & D.

Institutional Opportunities

1. Continued collaboration with industry for conducting value added programs and internship training for learners.
2. Development of centers of excellence for training and development, so as to impart professional skills to students and faculty members.
3. Advancing learners' interest in imbibing strong practical learning skills through participation in various projects/technical activities and programs.



4. Harnessing and utilizing e-learning opportunities for enhanced learning and overall development of the learners.
5. Promoting R & D activities and initiatives, through conduction of conferences at national and international levels, symposiums, workshops and seminars.
6. Collaboration with National/International universities for faculty-exchange programs and shared learning.
7. Flexibility in offering innovative programs and courses to make learners industry ready.

Institutional Challenges

1. Motivating faculty members to ensure continuous upgradation and upskilling as part of Outcome Based Education.
2. Limited time and opportunities to encourage consultancy work amongst faculty members.
3. Exploring green initiatives, given the limited space available in the campus.
4. Enabling an environment that nurtures learners as model citizens, so as to ensure that they contribute towards societal upliftment.
5. Being a self-financed private institute, getting financial grants for projects from govt. and non-govt. funding agencies.

Goals:

1. To emerge as the most sought-after technology centric learning institute.
2. To promote research, consultancy and innovation with active participation of the faculty members and learners.
3. To enrich competence of faculty members through collaborative approach and progressive outlook.
4. To strengthen the ICT enabled high-quality infrastructure and facilities by creating specialized laboratories and centers of excellence.
5. To enhance holistic development of learners by ensuring that their knowledge and skills are made highly competitive, leading them to being globally and socially responsible citizens.

Institute Goals and Objectives:

Goal 1

To emerge as the most sought-after technology centric learning institute.

The Institute has established a strong foundation in engineering education through its academic programmes, qualified faculty, learner-centric teaching-learning practices, project and activity-based learning and technology-oriented academic environment. At the same time, the SWOC analysis identified the need to further strengthen academic flexibility, interdisciplinary and multidisciplinary opportunities, programmes in emerging areas, and institutional recognition through accreditation and ranking. The Goal therefore seeks to provide a focused direction for academic expansion and quality enhancement, encompassing programme development, emerging



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technologies, accreditation & ranking, and greater flexibility in learning opportunities. The following Objectives have been identified to facilitate the attainment of this Goal:

Objective 1: Become a certificate/diploma/degree granting institution.

Objective 2: Introduce innovative programs in the areas of emerging technologies.

Objective 3: Acquire National and International accreditations and ranking.

Objective 4: Enhance curriculum flexibility through periodic curriculum revision, aligned with Outcome-Based Education (OBE) and NEP 2020, including interdisciplinary and multidisciplinary courses and minor specialisations.

Goal 2

To promote research, consultancy and innovation with active participation of the faculty members and learners.

The Institute has an existing base of research activity, postgraduate and doctoral programmes, qualified faculty and research infrastructure, but the SWOC analysis identified relatively limited research output, external linkages, industry interaction and availability of research funding as areas requiring further development. The increasing importance of applied research, innovation and industry engagement also provides an opportunity to strengthen the research ecosystem. This Goal therefore focuses on developing research capability among learners and faculty members, strengthening research infrastructure and funding, promoting industry-linked consultancy, and creating a more active environment for innovation and entrepreneurship. The Objectives for achieving this Goal are as follows:

Objective 1: Inculcate the ability to conduct research at undergraduate level and further enhance the quality of research at postgraduate level (M. Tech. & Ph. D.).

Objective 2: Develop research laboratories through research projects, research funding and industry-supported/collaborative initiatives.

Objective 3: Strengthen industry linkages through MoUs and sustained industry–faculty engagement for consultancy and applied projects.

Objective 4: Foster innovation, product development and entrepreneurship in budding engineers by technical mentoring and developing an incubation center.

Goal 3

To enrich competence of faculty members through collaborative approach and progressive outlook.

Faculty competence and continuous professional development are central to maintaining the quality and relevance of engineering education. The Institute has a qualified and motivated faculty base and an environment supportive of innovative teaching-learning practices; however, the SWOC analysis recognised the continuing need for faculty upgradation, exposure to emerging technologies, professional development and stronger interaction with industry and reputed



academic institutions. This Goal therefore provides a framework for systematic faculty development through recruitment and engagement of expertise, professional development programmes, recognition and support for faculty initiatives, and collaborative linkages with industry and academic institutions. The following Objectives have been identified to facilitate the attainment of this Goal:

Objective 1: Recruit faculty members with higher qualifications from India/abroad and engage eminent faculty members from reputed institutes and industries.

Objective 2: Ensure continuous professional development of faculty members through various quality improvement programs, FDPs, ODL- Open Distance and Online Learning courses.

Objective 3: Motivate competent faculty members by recognizing their contribution.

Objective 4: Establish linkages with industries and institutes of high repute for upgrading skills and knowledge of faculty members.

Goal 4

To strengthen the ICT enabled high-quality infrastructure and facilities by creating specialized laboratories and centers of excellence.

The Institute has established infrastructure, ICT-enabled academic facilities, laboratories and library resources supporting its engineering programmes. However, the SWOC analysis also identified constraints relating to available space, specialised laboratories and Centres of Excellence, together with the need for additional resources to support emerging areas of technology and research. This Goal therefore seeks to provide a planned direction for strengthening academic and research infrastructure, specialised laboratories and Centres of Excellence, knowledge resources, learner & staff facilities, and the supporting physical and digital environment required for quality education and institutional development. The Objectives for achieving this Goal are as follows:

Objective 1: Establish Centers of Excellence in emerging areas of technology for fostering knowledge creation.

Objective 2: Foster and enhance an atmosphere for instilling & improving high-quality knowledge resources, by providing state-of-the-art library services.

Objective 3: Establish a Yoga & Health-care center, co-existing with the modern gymnasium facility for the holistic development of faculty/staff members and learners. Objective 4: Provide faculty cubicles & discussion / meeting rooms.

Goal 5

To enhance holistic development of learners by ensuring that their knowledge and skills are made highly competitive, leading to them being globally and socially responsible citizens.

The Institute has a strong learner-centric environment, with emphasis on project and activity-based learning by establishing various student chapters and clubs, while also ensuring professional



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development and social outreach. The SWOC analysis, however, also recognised the need to provide greater interdisciplinary exposure, practical learning opportunities, flexible academic choices and continued development of learners beyond conventional academic outcomes. This Goal therefore brings together academic, professional, experiential and social dimensions of learner development, including innovative teaching and assessment, industry exposure, projects & internships, flexible learning opportunities, co-curricular & extracurricular activities, and engagement with social and community concerns. The following Objectives have been identified to facilitate the attainment of this Goal:

Objective 1: Create a nurturing and competitive environment for learners that would support their overall development, so as to ensure that they grow both academically and professionally.

Objective 2: Enhance the interest of learners in understanding and imbibing team spirit through activity and project-based learning.

Objective 3: Offer flexible programs with various subjects to make learners more skilful and competent.

Objective 4: Enhance awareness of learners about different social issues through collaboration with institutes working for social and community welfare.





No. IDP/ 2054 /2021

09th December 2021

NOTICE

Respected Sir/Madam,

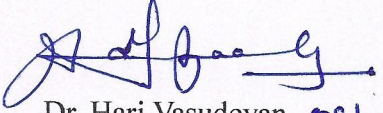
A meeting of the member of existing **Institutional Development Plan (IDP) Committee** is scheduled to be held on 16/12/2021. All committee members are requested to make it convenient to attend the meeting as per the schedule below:

- **Date:** 16th December 2021
- **Time:** 11:00 AM
- **Venue:** Conference Room, 1st floor.

This meeting is called to formally discuss and deliberate upon various aspects of the proposed 5-year Institutional Development Plan (2022–2027). The primary objective of this meeting is to finalise the core developmental strategies and officially propose the IDP framework for final resolution and approval.

List of Committee Members:

- Dr. Hari Vasudevan (Principal) – Chairperson
- Dr. Prasad S. Joshi (HoD – Electronics) – Member Secretary
- Dr. Atul Dhale (Professor – MECH) – Member
- Dr. Aruna Gawade (Assistant Professor – COMPS) – Member
- Dr. R. D. Daruwala (Professor (Electronics Engineering), Dean (Student Activities and Alumni Affairs, VJTI, Mumbai) – Senior Academic Expert
- Dr. Faruk Kazi (Professor (Electrical Engineering), Dean (R&D and Consultancy), VJTI, Mumbai) – Senior Academic Expert
- Dr. Vikas M. Phalle (Associate Professor (Mechanical Engineering), Faculty In-charge (M.Tech Defence Technology), VJTI, Mumbai) – Senior Academic Expert
- Dr. Amit Goradia (Founding Director (Accelus Robotics Private Limited, Mumbai)) – Senior Industry Expert


Dr. Hari Vasudevan 09/12/21
(Principal)



Institute Development Plan Committee Meeting held on Thursday, 16th December 2021

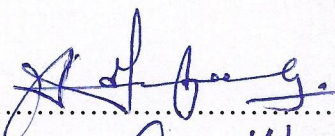
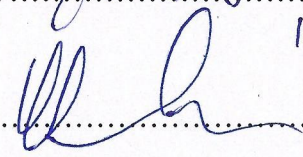
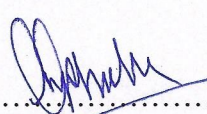
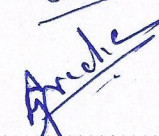
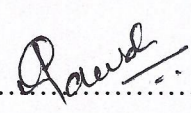
Attendees

Date: 16th December 2021

Venue: Conference Room, 1st floor, Dwarkadas J. Sanghvi College of Engineering

Chairperson: Principal, D. J. Sanghvi College of Engineering

Members present:

- Dr. Hari Vasudevan
(Principal) – Chairperson 
16/12/2021
- Dr. R. D. Daruwala 
- Dr. Faruk Kazi 
- Dr. Vikas M. Phalle 
- Dr. Amit Goradia 
- Dr. Atul Dhale 
- Dr. Aruna Gawade 
- Dr. Prasad S. Joshi 