

REVIEW REPORT
- of the
IQAC EXTERNAL PEER TEAM
(For the A.Y. 2021-22)



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)

Evaluation Report on the
Performance of the
Institution for the Academic
Year 2021-22

**IQAC-EXTERNAL PEER TEAM REPORT ON
PERFORMANCE OF THE COLLEGE FOR THE
ACADEMIC YEAR 2021-22**

A meeting to review the performance of the Internal Quality Assurance Cell (IQAC) of Dwarkadas J. Sanghvi college of Engineering was held on 23rd December 2022 at 11.00 a.m. in the college premises. The external peer team comprised of following distinguished academicians:

Members of External Peer Team:

1. Dr. B. N. Choudhari Principal, Sardar Patel Institute of Technology, Andheri (W), Mumbai (Autonomous)
2. Dr. B. K. Mishra Principal, Thakur College of Engineering & Technology, Kandivali, Mumbai (Autonomous)
3. Dr. Ajay Kambekar Former Dean and Chairman, Post-graduate programs, Sardar Patel College of Engineering, Andheri (W), Mumbai (Autonomous)

The Director of IQAC, Dr. K.N. Vijaya Kumar along with the Principal, Dr. Hari Vasudevan welcomed the external members for the meeting. The committee members, after the brief initial introduction, verified the documents and evaluated the key parameters with respect to the overall performance of the college for the year. During this day-long review process, committee inspected the facilities and took time to interact with departmental Heads and various committee members & respective chairman and discussed with the following staff members and student in order to perform the evaluation and assessment.

Members interacted with:


- Dr. Hari Vasudevan, Chairman, Principal.
- Dr. M. J. Godse, Vice Principal and Member
- Dr. K. N. Vijaya Kumar, Director, IQAC & Head, Mech Engg.
- Dr. R. S. Khavekar, TPO
- Dr. Amit Deshmukh, Jt. Director, IQAC and Head, EXTC Engg.


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Dr. B. K. Mishra


Dr. Ajay Kambekar

- Dr. P.S. Joshi, Deputy Director, IQAC and Head, Elex Engg.
- Dr. Meera Narvekar, Head, Computer Engg.
- Dr. Vinaya Sawant, Head, IT dept.
- Prof. Rupali Karande, I/C Head, Chem Engg.
- Dr. Atul Dhale, Member
- Dr. Trupti Paradkar, Member
- Dr. Mrunal Rane, Member
- Prof. Sudhir Bagul, Assistant Professor, Dept. of Computer Engineering and Jt. Convener EEC.
- Dr. Vinayak Khatawate, Associate Professor, Mech. Engg.
- Dr. Sunil Karamchandani, Associate Professor, EXTC Engg.
- Prof. Prashant Patankar, Member
- Mr. Maulik Rajput, Alumni of Department of Mech. Engg.
- Mr. Ramesh Sutar, Sr. Librarian
- Mrs. Shreya Hadkar, Registrar


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Dr. B. K. Mishra


Dr. Ajay Kambekar

Brief Introduction to the Institution

Dwarkadas J. Sanghvi College of Engineering (DJSCE), affiliated to the University of Mumbai was established by Shri Vile Parle Kelavani Mandal (SVKM) in the year 1994. The college was granted autonomy by the University Grants Commission (UGC) for a period of 10 years for the period, starting A.Y. 2019-20 to 2028-29. The college runs 12 undergraduate programmes, 3 post graduate programmes and 3 Ph.D. courses for the A.Y. 2021-22 and all of the eligible undergraduate programs are accredited by the National Board of Accreditation (NBA). National Assessment and Accreditation Council (NAAC) accredited the college with a CGPA of 3.18 ("A" Grade) for a period of 5 years, with effect from 18th of October 2019.

The college is ranked 197th by NIRF as per the NIRF 2022 rankings. The college is also ranked amongst the top 100 emerging colleges of India by various ranking agencies.

The Internal Quality Assurance Cell (IQAC) of the college has been making continuous efforts to maintain quality education in the institution. Overall, the teaching-learning process is well implemented and the continuous efforts put in by the college is appreciable.



Dr. B. N. Choudhari



Dr. B. K. Mishra



Dr. Ajay Kambekar

Profile of the Institution

- **Name of the College** : Dwarkadas J. Sanghvi College of Engineering, No. U-15, J.V.P.D. Scheme, Bhaktivedanta Swami Rd, Opp. Cooper Hospital, Vile Parle, Mumbai, Maharashtra 400056
- **Name of the Principal** : Dr. Hari Vasudevan
- **Telephone/Fax /Email** : Phone No: 022 42335000
Mobile No: 9821464696
- **Email** : principal@djsce.ac.in, info@djsce.ac.in
- **Year of Establishment** : 1994
- **Whether private or government or University maintained** : Private and Self Financing
- **Autonomous Status** : The college was conferred the Autonomous Status in the year 2019 for a period of 10 years from A.Y. 2019-2020 to 2028-2029.
- **Name of the Affiliating University** : University of Mumbai, Fort, Mumbai.

UG Programmes run by the college during the A.Y. 2021-22 are as follows:

Sr. No	Name of the Programme	Sanctioned Intake
1	B.Tech. Computer Engineering	180
2	B.Tech. Electronics and Telecommunication Engineering	120
3	B.Tech. Information Technology	120
4	B.Tech. Mechanical Engineering	120
5	B.Tech. Computer Science and Engineering (Data Science) (started in 2020-21)	120


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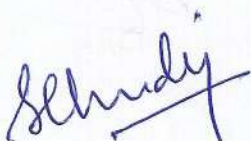
6	B.Tech. Artificial Intelligence and Machine Learning (started in 2021-22)	60
7	B.Tech. Artificial Intelligence (AI) and Data Science (started in 2021-22)	60
8	B.Tech. Computer Science and Engineering (IOT and Cyber Security with Block Chain Technology) (started in 2021-22)	60
9	B.Tech. Biomedical Engineering (4 th year)	30
10	B.Tech. Production Engineering (4 th year)	30
11	B.Tech. Chemical Engineering (3 rd and 4 th year)	60
12	B.Tech. Electronics Engineering (3 rd and 4 th year)	60

PG Programmes:

Sr. No	Name of the Programme	Sanctioned Intake
1	M.Tech. Electronics and Telecommunication Engineering	09
2	M.Tech. Computer Engineering	18
3	M.Tech. Mechanical Engineering (Manufacturing Systems Engineering)	18

PhD Programmes:

Sr. No	Name of the Programme	Sanctioned Intake
1	Ph.D. in Electronics and Telecommunication Engineering	10
2	Ph.D. in Computer Engineering	10
3	Ph.D. in Mechanical Engineering	10



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The details of admitted students in the institute during AY 2021-22 are as follows:

Programme Name	Programme Code	Sanctioned Intake	Number of total Students admitted	Supernumerary seats	
				TFWS	PMSSS/ J & K
Computer Engineering	CMPN	180	189*	8	1
Electronics and Telecommunication Engineering	EC	120	119*	5	1
Information Technology	IT	120	128*	5	3
Mechanical Engineering	ME	120	92*	6	1
Computer Science and Engineering (Data Science)	CSE-DS	120	126*	5	1
Artificial Intelligence and Machine Learning	AI&ML	60	62*	2	0
Artificial Intelligence (AI) and Data Science	AI&DS	60	63*	2	1
Computer Science and Engineering (IOT and Cyber Security with Blockchain Technology)	CSE(IOT)	60	64*	3	1
Electronics and Telecommunication Engineering (PG)	MEC	9	0		
Computer Engineering (PG)	MCS	18	0		
Mechanical (PG) Engineering	MSE	18	0		

* Includes supernumerary seats.


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The identified key activities of the IQAC are as follows:

1. CURRICULAR ENRICHMENT

Currently all UG programs have effectively implemented the Choice Based Credit System (CBCS). In the autonomous structure, each program has its own Board of Studies, consisting of eminent academicians, industry experts as well as alumni members. Board of Studies (BoS) helps to design curriculum framework and identify the gaps between curriculum and state-of-the-art technologies. This enables to prepare curriculum catering to demands in industry and academia.

The BoS meetings are held twice a year. Ahead of meetings, departments conduct rigorous discussion and brainstorming sessions towards upgrading the curriculum based on their expertise and first-hand experience. The same is presented to Board of studies for their valuable comments and feedback as well as approval. Based on the consent of board of studies, the syllabus may undergo a revision by a margin of 20% to 30%. This practice of scheme design and syllabus preparation is progressive in nature. Following is the list of BoS meetings conducted during the academic year 2021-22:

Program Name	Year introduced	Year of implementation of CBCS / Elective Course System	Year of revision	BoS Meeting for AY 2021 – 22
Chemical Engineering	1994	CBCS: 2016-17	2019*	5 th : 09/12/2021
		elective inception (1994-95)		6 th : 06/07/2022
Electronics Engineering	1994	CBCS: 2016-17	2019*	5 th : 23/11/2021
		elective inception (1994-95)		6 th : 26/07/2022
Production Engineering	1994	CBCS: 2016-17	2019*	5 th : 02/12/2021
		elective inception (1994-95)		6 th : 12/07/2022
Biomedical Engineering	1994	CBCS: 2016-17	2019*	5 th : 24/11/2021
		elective inception (1994-95)		6 th : 13/07/2022
Computer Engineering	2001	CBCS: 2016-17	2019*	5 th : 27/11/2021
		elective inception (2000-01)		6 th : 26/03/2022
Electronics and Telecommunication Engineering	1999	CBCS: 2016-17	2019*	5 th : 18/11/2021
		elective inception (1999-2000)		6 th : 08/04/2022
Information	1999	CBCS: 2016-17	2019*	5 th : 04/12/2021


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Technology		elective inception (1999-2000)		6 th : 02/07/2022
Mechanical Engineering	2011	CBCS: 2016-17	2019*	5 th : 20/11/2021
		elective inception (2011-12)		6 th : 25/06/2022

Program Name	Year introduced	Year of implementation of CBCS / Elective Course System	Year of revision	BoS Meeting for AY 2021 – 22
Electronics and Telecommunication Engineering (PG)	2011	CBCS: 2016-17	2019*	5 th : 20/11/2021
		elective inception (2011-12)		6 th : 25/06/2022
Computer Engineering (PG)	2012	CBCS: 2016-17	2019*	5 th : 27/11/2021
		elective inception (2012-13)		6 th : 26/03/2022
Mechanical (PG) Engineering	2011	CBCS: 2016-17	2019*	5 th : 20/11/2021
		elective inception (2011-12)		6 th : 25/06/2022
Computer Science and Engineering (Data Science)	2020	CBCS: 2020-21	NA	1 st : 26/11/2021
		elective to be implemented from 2022-23		2 nd : 16/04/2022
Artificial Intelligence and Machine Learning	2021	CBCS: 2021-22	NA	1 st : 29/06/2022
		elective to be implemented from 2023-24		
Artificial Intelligence and Data Science	2021	CBCS: 2021-22	NA	1 st : 22/07/2022
		elective to be implemented from 2023-24		
Computer Science and Engineering (IOT and Cyber Security with Block Chain Technology)	2021	CBCS: 2021-22	NA	1 st : 15/07/2022
		elective to be implemented from 2023-24		

* New Syllabus scheme introduced in 2019 will be revised in 2020, 2021 and 2022 for SE, TE and BE respectively in consultation with relevant BoS.


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Further, the institute has planned to introduce the specialization by introducing Honors and minors starting from 3rd year for all undergraduate programs. These courses will commence from 2022-23 for the students, who are admitted during the A.Y. 2021-22. The institute aims to design and implement these specialization courses, so as to cater the technological advancements in industry.

1.1 Teaching Learning and Evaluation

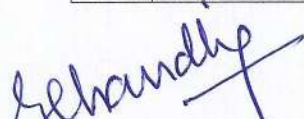
In order to smoothly carry out the Teaching learning process, IQAC ensures that following activities are carried out:

- **Preparation of Academic Calendar**

As an Autonomous Institution, institute prepares its academic calendar and publishes the same on the college website ahead of commencement of semester, well in advance. This exhaustive calendar comprises of all activities, such as schedule for tests, various curricular, co-curricular, sports & cultural activities and examinations etc. Further, in line with the academic calendar of the institute, each department also prepares its own departmental academic calendar, which includes departmental activities, viz. expert lectures, workshops, seminars, project review meetings, project presentations, and display of term test results etc.

Preparation of academic calendar provides a strategic direction, a set of broadly defined benchmarks and a series of guideposts for the journey along the semester. In order to adhere to the timelines specified in academic calendar, each subject teacher prepares a teaching plan for theory and laboratory. Beyond curriculum, co-curricular activities, such as quiz, expert sessions and seminars are also planned to ensure that the current trends are tapped into. Adherence to the academic calendar and planned activities is monitored by the Head of the Department and corrective actions are taken, if required. The following are the observations of the committee:

Sr. No.	Criterion	RATINGS
1	Quality of vision and mission statements.	Very good
2	Implementation of choice- based credit system (CBCS).	Very good
3	Adequacy of courses having focus on employability/ entrepreneurship/ skill development.	Good
4	Evidence of procedures for framing POs, PSOs and their adequacy.	Good
5	Evidence of attainment of POs, PSOs against set targets.	Very good


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6	Evidence for framing of COs and their attainment against set targets.	Good
7	Evidence for structured feedback system.	Good
8	Evidence for NBA Accreditation of UG/PG programs.	Very good
9	Preparation and adherence to Academic Calendar by the institution.	Very good
10	Implementation of examination reforms.	Very good

- **Project-based Learning platforms**

The institute strongly focuses on the project based learning by including Innovative Product Development in the curriculum from second year. This helps students to achieve experiential, collaborative and participative learning. Here, students can also undertake interdisciplinary projects that further enhances their expertise.

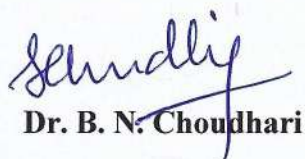
DJS IGNITE and DJS STRIKE are project-based learning platforms emanating out of systematic academic and strategic planning. DJS IGNITE, an official IETE-Student Forum newsletter attempts to provide solutions to the modern-day problems by focusing on different technologies, considering economic sustainability and demo graphical terms, hence inspiring the minds of the readers. Thus, it feeds on the inquisitiveness of the student and unfolds the latest aspects of scientific developments.

To further strengthen and test the project based learning, institute organizes a state level project competition DJSASCI for students of IT and Computer Engineering to showcase their project work.

Faculty members have good rapport and strong association with the industry experts which enables them to acquire live industrial projects. This helps students to acquaint themselves with real-life deployment and gain hands on experience. Additionally, faculty members and students have been associated with many Government and Non-Government projects. Along with seed money sanctioned and reimbursed by the institution, projects have also received external funding.

- **Mentor- Mentee Cell**

The institute has also established mentor-mentee cell with a vision to guide and extend support to the students for their academic and personal needs. It also garners a sense of security and belongingness in the students. Each faculty member is assigned a batch of around 20 students and their various educational, personal and professional issues are discussed personally with them.


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- **Well-established Feedback system**

The institute has a well-defined feedback system, considering feedback of all its stakeholders.


- **Co-curricular and Extra Curricular Activities**

Under autonomy, co-curricular activities are spread over the academic year, semester-wise and in alignment with the professional development as per the AICTE guidelines. These activities are conducted at the institute level, department level as well as at the student chapter level. For the same, each department has constituted professional bodies at their level. Following is the list of professional bodies existing in the institute:

Name of Department	Professional Body
Electronics and Telecommunication	IETE
Information Technology	CSI
Computer Engineering	ACM
Mechanical Engineering	SAE ISME ISHRAE RAS
Electronics Engineering	IEEE
Production Engineering	ISME
Biomedical Engineering	Pacemakers
Chemical Engineering	IChE
Computer Science and Engineering (Data Science)	DJS S4DS DJS Compute Club

These professional bodies actively organize various activities on a regular basis. Some of the activities organized during the A.Y. 2021-22 at the department level are as follows:

Name of Department	Activity Organized
Department of Electronics and Telecommunication	<ul style="list-style-type: none"> • Seminars on IoT • 1-Day Industrial Visit to Giant Metrewave Radio Telescope (GMRT), Pune.
Department of Information Technology	<ul style="list-style-type: none"> • Hands-on workshop on GUI Programming with Database Connectivity using Python, ReactJS,


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Dr. B. K. Mishra


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	<p>UI/UX.</p> <ul style="list-style-type: none"> • 2-days Hackathon “Codeshastra 8.0” in collaboration with Google Developer Student Club (GDSC).
Department of Computer Engineering	<ul style="list-style-type: none"> • 5 days AICTE-ISTE Approved STTP for faculties on “Smart Computing” from 12th to 16th July, 2021. • Webinars on “Educator Awareness session on Digital Edge Innovation”. • Webinar on “Technical Writing and Research Publication”. • Workshops on “Automation, Visualization and Reporting”, “Innovations in Research using Cloud and Web Based Tools”, “Significance of Cyber Security in Human Life”. • 2-days Hackathon “LOC4.0”. • Internship Fair Week.
Department of Mechanical Engineering	<ul style="list-style-type: none"> • Workshops on “Artificial Intelligence and Machine Learning” and “Arduino”. • Webinars on Additive Manufacturing, Emerging Advancements on Automotive Technology, Journey through Innovation, etc.
Department of Electronics Engineering	<ul style="list-style-type: none"> • Webinars on Self-Driving Cars, Advance PCB, Data Analytics, etc. • 1-day visit to Bosch Rexroth Centre and 3D Printing lab in NMIMS and Shri Bhagubhai Mafatlal Polytechnic College.
Department of Production Engineering	<ul style="list-style-type: none"> • Seminar on Business Startup Strategies by Indian School of Business.
Department of Biomedical Engineering	<ul style="list-style-type: none"> • Workshop on “Drone Required in Biomedical Engineering” conducted by MICE Lab. • Seminar on Management Skill Required for Biomedical Engineer.
Department of Data Science	<ul style="list-style-type: none"> • Workshops on AWS Academy. • Webinars on Machine Learning, Introduction to Data Science and ML, Natural Language Processing, Recommender System, etc.
Placement Cell	<ul style="list-style-type: none"> • Various activities for personality development and enhancement of soft skills.



Dr. B. N. Choudhari



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2. FACULTY ENRICHMENT

The institute has well-qualified and experienced faculty members. There are total of 163 faculty members in the institute and the details are given below.

Sr. No	Name of the Programme	Assistant Professor	Associate Professor	Professor
1	B.Tech. Chemical Engineering	08	01	--
2	B.Tech. Electronics Engineering	11	--	01
3	B.Tech. Computer Engineering	19	03	02
4	B.Tech. Electronics and Telecommunication Engineering	22	--	01
5	B.Tech. Information Technology	14	02	01
6	B.Tech. Mechanical Engineering	22	01	02
7	B.Tech. Computer Science and Engineering (Data Science)	04	00	00
8	B.Tech. Production Engg.	12	01	02
9	B.Tech. Bio-Medical Engg.	07	--	01
10	B.Tech. Applied Science & Humanities	25	01	--
11	B.Tech. Artificial Intelligence and Machine Learning	Recruitment process is in progress as students are in 1 st year only		
12	B.Tech. Artificial Intelligence (AI) and Data Science	Recruitment process is in progress as students are in 1 st year only		
13	B.Tech. Computer Science And Engineering (IOT and Cyber Security with Blockchain Technology)	Recruitment process is in progress as students are in 1 st year only		
Total		144	09	10

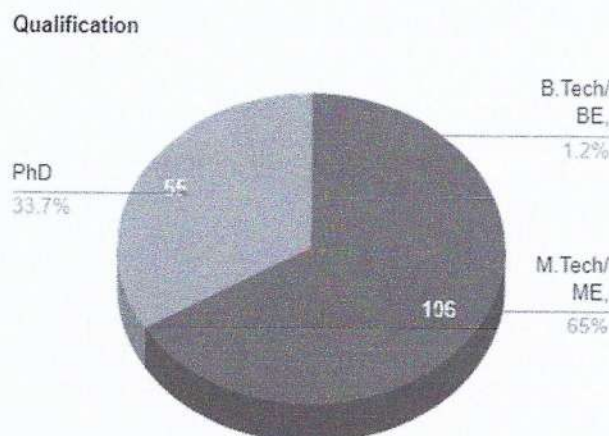
For recruitment of faculty members, the institute follows the recruitment procedures prescribed by the University of Mumbai in its holistic manner. The guidelines of All India Council for Technical Education (AICTE) are also adhered to during the recruitment process. This regular process of recruitment ensures that the institute has highly qualified and experienced faculty members.


Dr. B. N. Choudhari


Dr. B. K. Mishra

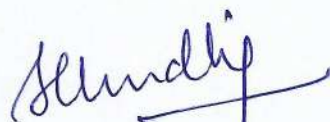

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The details of educational qualification of faculty members is illustrated in the following chart.



Some of the related observations of the committee are as follows:

Sr. No.	Criterion	Rating
1	Faculty : Student Ratio	Very good
2	Evidence of academic audits bring conducted.	Good
3	Utilization of ICT for teaching –learning.	Very good
4	Quality of Internal test papers and End semester exam papers.	Good
5	Student's progression without backlog in any semester.	Very good
6	Students completing the programs in the stipulated time.	Very good
7	Adequacy of workshops/training programs arranged for students.	Satisfactory
8	Adequacy of guest/technical lectures arranged for students.	Satisfactory
9	Effectiveness of student mentoring system.	Very good
10	Evidence for students completing NPTEL courses.	Very good
11	Evidence for students completing Coursera courses.	Very good
12	Learning beyond the class room.	Good


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Dr. Ajay Kambekar

The institute actively motivates its faculty members to enhance their skillset and expertise by indulging in various activities, namely research publications, intellectual property copyrighting, seminars/workshops/faculty development programs and conferences etc.

2.1 Research Publications


The institute aims to provide a conducive environment to promote Research and Innovation among its faculty members and students. Following are the statistics of total number of publications done during the A.Y. 2021-22.

Sr. No	Content type	Count
1	Journals	61
2	Conference / Book chapter	79
3	Books	13

2.2 IP (Copyright/Design Registration/Patent)

In addition to research, institute also systematically plans activities to enhance its intellectual properties. Faculty members and students are encouraged to apply for copyright, design registration and patents for registering the novelty in their work. During academic year 2021-22, faculty members received grant of 7 patents & design registrations as well as 2 copyrights. Details are given below:

Sr. No	Inventor/s Name	Title of the Patent	Copyright/design registration/ Patent Application No.	Status (Filed/Published / Granted)
1	Dr. Chetashri Bhadane	Method for Geo-Tagging	202121029556	Published
2	Pankaj A. Sonawane, Pranit Bari, Ramchandra S. Mangrulkar, Harshal Dalvi Dr. Narendra M. Shekokar	Deep learning based Language translator.	202141049460	Published
3	Smita Ambarkar Dr. Narendra Shekokar Dr. Hari Vasudevan	A method for securing Low Constrained devices of the IoT networks	202121042499 A	Published
4	Dhale Atul Devidasrao Modak J. P	An oil Press System and a method for oil extraction using human powered flywheel motor as an	2021104277	Granted


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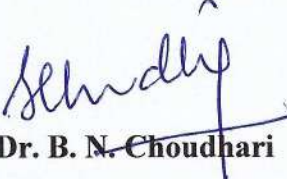

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		energy source		
5	Dr. Hari Vasudevan Dr. K.N. Vijaya Kumar, Venkatsai Muralidharan	'Solar assisted hybrid go-kart	318129-001	Published
6	Dr. K.N Vijaya Kumar Dr. Hari Vasudevan Prof. Vinit Katira	'Torque enhancer for heavy Vehicles'	318181-001	Published
7	Darshana Sankhe Rajendra Sawant Y. Srinivasa Rao	System-on-Chip Controller for On-Board Battery Charger in 2 and 3-Wheeler Electric Vehicle Applications	202121026340.00	Published
8	Dr. Vinaya Sawant Dr. Hari Vasudevan	Contactless Berathing Rate Detector for Smart Cradle	202221004780	Published
9	Prof. Arjun Jaiswal Prof. Neha Katre Prof. Harshal Dalvi	A method and system for implementing xml and xquery to perform Read and Write operations in minimum number of calls	2021107468	Granted

2.3 Awards

Several faculty members have been recognized by various awarding bodies and/or Agency (Government/Government-recognised agencies/bodies) for their contribution in academics and research. Following are some of the key highlights:

- Dr. Atul Dhale received Best Faculty Award from Knowledge Research Academy, Coimbatore, International Award Ceremony on Academic Achievers Awards for Engineering, Arts and Management (AAAEAM 2022) on 27th Feb. 2022
- Dr. Vishakha Kelkar has received SPOC appreciation certificate from NPTEL
- Prof. Ameya Kadam has been National Level Topper in the NPTEL course on "Advanced Microwave Guided-Structures and Analysis" securing Gold Medal with Elite Certification during Nov 2021.
- 2 faculty members have been ranked in top 2% toppers in SWAYAM-NPTEL courses while 1 faculty member has been ranked in top 5%.
- Dr. Venkataramanan V. received Excellent Reviewer award from web of science Portal Issued by International Journal of Interactive Mobile Technologies (IJIM) Editor.


Dr. B. N. Choudhari


Dr. B. K. Mishra


Dr. Ajay Kambekar

- 2 Ph.D. students under the guidance of Dr. Narendra Shekokar and Dr. Meera Narvekar secured 1st Rank at Final Round of Inter-Collegiate Avishkar Research Convention: 2021-22. Also 1 research scholar under guidance of Dr. Narendra Shekokar qualified for the final round of 16th Inter-Collegiate / Institute / Department Avishkar Research Convention: 2021-22
- Dr. Hari Vasudevan continued to be the Chairman, Board of Studies in Production Engineering as well as the member of RRC (Mechanical Engineering) of the University of Mumbai during the year.


2.4 Faculty Participation in Seminars/Conferences

Participation of faculty members in FDP, NPTEL, Seminar, Expert Sessions and Symposia etc. is appreciable. The count of all such activities during the year is as follows:

Activity	Count
Coursera courses completed	671
FDP	86
ATAL FDP	47
NPTEL courses completed	43
Webinar	25
STTP	24
Refresher courses	7
AWS Academy Cloud Foundations	5
Innovation Ambassador Training	5
Workshop	4
Faculty Orientation	1
World Intellectual Property Organization	1
Others	237

Further observations of the committee are as follows:

Sr. No.	Criterion	Ratings
1	Faculty profile and the adequacy of Faculty members as per the norms of AICTE.	Very good
2	Faculty members recognized as research guides.	Good
3	Faculty members with PhD	Good


Dr. B. N. Choudhari


Dr. B. K. Mishra


Dr. Ajay Kambekar

4	Quality of faculty publications	Satisfactory
5	Quality of research projects	Good
6	Evidence for patents/published/ awarded.	Very good
7	Adequacy of number of conferences and workshops attended by the faculty members.	Very good
8	Adequacy of number of workshops/ FDPs/ STTPs/Conferences conducted by the department.	Satisfactory

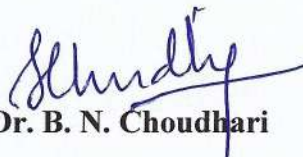
3. STUDENT SUPPORT AND PROGRESSION

Apart from academic and administrative activities, college also carries out extension activities to address its social responsibility and obligations. This enables the college to sensitize its students towards societal issues at large.

3.1 Extension activities Undertaken

In its quest to constantly serve the society and the community at large, the National Service Scheme (NSS) chapter was set up with the motto "Education and Service to the community and by the community". The college has a very vibrant NSS Unit. NSS cell carries out numerous initiatives towards Health and environment sustainability. A series of lectures/webinars were organized periodically for the students to inculcate moral and ethical values in them.

Sr. No	Criterion	Rating
1	Student's participations in various competitions held online.	Good
2	Prize achievements in various online events.	Very good
3	Institutional mechanism for students' grievances, addressing of sexual harassment and ragging cases.	Good
4	Participants in social awareness activities (online activities).	Good
5	Student progression to higher Education.	Very good
6	No of awards/medals for outstanding performance in online competitions activities at national and international levels.	Satisfactory
7	Role of alumni in institution development	Very good


Dr. B. N. Choudhari

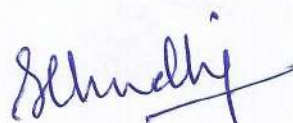

Dr. B. K. Mishra


Dr. Ajay Kambekar

4. INFRASTRUCTURE AND LEARNING RESOURCES

- The institute has excellent infrastructure facilities and it conforms to the requirements of AICTE.
- The college has invested in licensed version of Microsoft outlook to ensure a smooth teaching learning process.
- The college central library has a collection of over 83,000 Engineering books (e-books & printed books) and more than 94,500 e-books of all other disciplines. In addition, each department also has separate libraries.
- The college also has a licensed version of 'Turnitin' software to promote academic integrity, deter plagiarism and improve the student outcomes.
- IQAC and the department of Electronics Engineering initiated the application for AICTE – IDEA Labs scheme for the year. The scheme envisaged setting up of a state-of-art, design development & tooling, ideation-laboratory for students. The proposal successfully cleared 3 rounds of scrutiny and fulfilled the conditions for the final round.
- Brief observations are as follows:

Sr. No.	Criterion	Rating
1	Adequacy of facilities for teaching learning. viz., classrooms, laboratories.	Very good
2	Adequacy of modern equipment in the laboratories.	Good
3	Adequacy of facilities for sports and cultural activities.	Satisfactory
4	Improvements in the library services.	Good
5	Adequacy of books and journals available in library.	Very good
6	Computerization of administration and the process of admissions and examination results, issue of certificates.	Very good
7	Computer and internet access and Training to teachers, non-teaching staff and students.	Very good
8	Usage of Plagiarism software	Satisfactory


Dr. B. N. Choudhari


Dr. B. K. Mishra


Dr. Ajay Kambekar

5. GOVERNANCE, LEADERSHIP AND MANAGEMENT

The College has been taking new initiatives on quality academic activities every year. The IQAC has been proactive in strengthening the best practices in the college and ensuring high quality standards in all activities.


The college has increasingly focused their attention on the pedagogical training programmes for the teaching staff members. These programmes have been aiming for an understanding of engineering pedagogy, the purpose of which is the targeted design of technical and technologically specific teaching and learning methods & practices. Few observations are given below:

Sr. No	Criterion	Rating
1	Functioning of the academic bodies as per UGC guidelines (Governing Body, Academic Council, Finance Committee and Board of Studies etc.).	Very good
2	Evidence of Minutes of the Boards of Studies/Academic Council meetings etc.	Very good
3	Functioning of IQAC	Good
4	Institution has performance Appraisal system for faculty members.	Good

5.1 Strategy Development and Deployment

The institutional Strategic/ Perspective plan has been clearly articulated and implemented through various practices, such as budget preparation and constitution of various committees.

Budget: The revenue and capital budget are prepared prior to the start of the financial year. Budgetary proposal is invited in a prescribed format. The Management ensures that adequate budgetary provisions are made, based on targets of the Trust. The budget estimate for the financial year 2022-22 is prepared as per the guidelines, after discussing it with various authorities and department HODs. The disbursement is based on the Institute's Vision and Mission with a consideration towards budgetary liabilities. Salaries and benefits as well as capital expenditure, maintenance and operations costs fundamentally drive fiscal expenses for the college. Clauses in budget identify initiatives to sustain world class education and training, student success and


Dr. B. N. Choudhary


Dr. B. K. Mishra


Dr. Ajay Kambekar

provide financial sustainability.

The list of committees existing in the college is given below:

Statutory Committees	Non-Statutory Committees		
<ul style="list-style-type: none"> ▸ Governing Body ▸ Academic Council ▸ Finance Committee ▸ Board of Studies 	<ul style="list-style-type: none"> ▸ Planning and Evaluation Committee ▸ Grievance Committee ▸ Examination Committee ▸ Admission Committee ▸ Student Welfare Committee ▸ Sexual Harassment Committee ▸ Internal Audit Committee ▸ Library Committee ▸ Extra-curricular Committee - Culture ▸ Extra-curricular Committee - Sports 	<ul style="list-style-type: none"> ▸ Alumni Committee ▸ Vigilance Committee ▸ Code of Conduct Committee ▸ Anti Ragging Cell ▸ Anti Ragging Squad ▸ Emergency Responce Team ▸ DJSCE Internship Cell (DIC) ▸ Institute Innovation Council (IIC) 	<ul style="list-style-type: none"> ▸ Unfair Means Committee ▸ Internal Complaint Committee ▸ Placement Committee ▸ Disciplinary Committee ▸ Institute Development Committee ▸ Purchase Committee ▸ E-Cell Committee ▸ Maintenance Committee ▸ Branding Committee ▸ ISTE Committee ▸ Conference Committee

Further, to coordinate various academic and administrative activities, the college implements decentralization and participative management through various statutory and non-statutory committees. The institute has various committees in place that work to achieve the best overall performance of the Institute. The members of the same are appointed by the Head of the Institution.

Brief descriptions of the committees are as follows.

IQAC of the college works in the direction of creating an ecosystem for holistic and inclusive improvement of the institute. IQAC takes rigorous efforts to ensure that quality at all stages is accomplished.

Alumni Association of the college actively works towards promoting and fostering a good relationship between Alumni, Students and Teachers. This enables the institute to achieve its vision. There are more than 5600 registered Alumni members.

Anti-ragging committee: DJSCE has constituted an Anti-Ragging Cell as well as Anti-Ragging Squad to protect students from the menace of ragging. The cell is headed by Head of the institution, along with several other committee members comprising of senior faculties. Anti-Ragging Squad members and Anti-Ragging squad members have been deputed from all departments to monitor



Dr. B. N. Choudhari



Dr. B. K. Mishra



Dr. Ajay Kambekar

students' discipline, both inside the campus and on-board.


Women Development cell aims to prevent sexual harassment and to promote general well-being of female students, teaching and non-teaching women staff of the college and organize seminars, workshops for creating general awareness and orientation of students, teachers, non-teaching staff etc. for their active and sustained participation in the activities of Cell.

Examination Committee of the college takes care of the efficient conduct of all Internal, External and Oral/Practical Exams of the College as per the norms of the University of Mumbai. The committee also addresses the grievances/ complaints of students and staff concerning exam-related issues.

Planning and Evaluation Committee of the college evaluates the progress of the college on a regular basis and provides guidance & directives for constant improvement in ensuring higher standards of education in the college. It also designs various strategic plans for the overall requirements and the development of the Institute. This includes infrastructural and instructional necessities as per the required norms. It also monitors the progress in carrying out the decisions taken by Management and plans for future requirements.

Placement Committee of the college plays a vital role in the smooth & efficient placement process. The committee helps students to prepare for placement interviews/higher studies. The committee coordinates all the efforts and activities directed towards ensuring utmost satisfaction to the needy students for their placement. The committee also helps students to prepare for placement interviews/higher studies and helps them to choose an appropriate organization.

The Student Welfare Committee designs various strategic plans for the overall requirements and the development of the Institute. This includes infrastructural and instructional necessities as per the required norms. It also monitors the progress in carrying out the decisions taken by Management and plans for future requirements. The committee identifies and encourage creative talents, inculcate a spirit of discipline, leadership, social awareness and promotes physical and mental development among the students.


Dr. B. N. Choudhari


Dr. B. K. Mishra


Dr. Ajay Kambekar

Library committee is responsible for the formulation of the Library policy from time to time and look after the general maintenance of the library in terms of reading material and Infrastructure.

Program Assessment Committee (PAC) is formed at department level to ensure high quality in the process of teaching learning. This committee issues guidelines for preparation of assignments and question papers. The faculty members ensure that issued guidelines are adhered to.

Academic monitoring committee takes a diagnostic approach, cross referencing between curriculum & instructional elements. It provides guidance & support in improving the implementation of curriculum at the institute level. The committee understands the academic programs and supervises the teaching learning process on a routine basis.

Admission committee is formed in the beginning of academic year. 80% seats are allocated by MHCET Cell, while other 20% of the seats called intuitional seats are allotted based on merit. The institute received 1826 applications for institute and vacancy seats.

Co-curricular contributes to the overall development of students. It helps them to discover their inherent/ hidden skills, showcase their talent at various intra and inter collegiate platforms and enhance their leadership skills.

Extra-curricular Sports: Trinity is the institute level student committee, where students organize Technical, Cultural and Sports events to develop technical competency, socially responsibility with sportsmanship. Participants across India participate in various technical, cultural and sports events organized by Trinity for the year. Some examples of the events are E-Sports, Robot-wars, Block-chain Hackathon, Inter-college dance competition, Sports day and many more. Trinity offers platforms to budding engineers to showcase their ideas in various engineering fields.

Students are always encouraged in the form of moral and monetary support to participate in sports competitions, which happens at University of Mumbai level or state level and national level. To bring awareness about physical fitness as well as importance of sports activities in individual life, sports committee organises "Sports Day" every year.



Dr. B. N. Choudhari



Dr. B. K. Mishra



Dr. Ajay Kambekar

Likewise, each committee performs their respective responsibilities and is monitored by the IQAC cell of the college.

5.2 Staff Empowerment Strategies

Institute takes various initiatives towards empowerment of teaching and non-teaching staff members. For the same, it has constituted various welfare policies as follows:

Mediclaim: All members of institute along-with their immediate dependents are provided health insurance cover, under the group insurance policy, for a sum of ₹2,00,000/-. In the A.Y. 2021-22, 6 members from the institute could avail-of the benefits for health hospitalization.

Personal Accident Cover: All member of the institute has been provided a personal accident cover, upto ₹ 10,00,000/- under group personal accident cover policy.

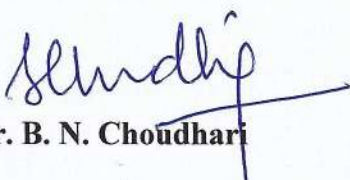
Group Insurance Savings Linked Insurance Scheme: All members of the institute are covered under the scheme, which provides death benefits to the nearest (nominated) member and savings benefits for surviving members upon resignation / retirement. In AY 2021 – 22, two members, who resigned from the institute and nominee of one deceased member, could avail of the benefits.

Pension: All members of the institute retiring with minimum 10 years of service, are provided a monthly pension by SVKM under the Employee Retirement Benefit Scheme. This entitles teaching members to receive monthly pension of ₹10,000/- pm and non-teaching ₹ 5,000/- pm for a period of 10 years after retirement upon survival. As on date, 6 members have been benefited from pension pay-outs.

Gratuity is also paid to staff members as per rules and book allowance is also provided.

Home Town Leave Travel Concession: All members of the institute can avail Home Town Leave Travel Concession for themselves and their immediate family dependents and seek travel expense reimbursement for travel to home town. This facility can be availed once in a block of 2 years.

Leave Travel Concession: All member of the institute can avail of Leave Travel Allowance for themselves and their immediate family dependents and seek travel expense reimbursement for travel anywhere within the state of Maharashtra. This facility can be availed once in a block of


Dr. B. N. Choudhari


Dr. B. K. Mishra


Dr. Ajay Kambekar

four years. In AY 2021 – 22, 16 members of the institute have been able to avail of LTC and Home Town LTC facilities.

Financial assistance is provided to staff members to attend conferences / workshops and towards membership fees of professional bodies during the academic year.

Fee concession for SVKM employees: All members of the institute having daughter /son /brother /sister studying in any of SVKM's institutions are offered concession in fees of 25% for professional courses and 50% for non-professional courses.

Admission preferences: Daughter / Son / Brother / Sister of SVMK employees are given preferences in admissions to programs of non-professional courses in SVKM's institutions.

In addition to staff welfare schemes, institute also has a student welfare committee that designs various strategic plans for the overall requirements and the development of the students. The committee inculcates a spirit of discipline, leadership, social awareness and promotes physical and mental development among the students.

Differently abled 'Divyangjan' friendliness: The institute has a disabled-friendly and barrier-free ecosystem. It has provision of ramps/lifts for easy access to classrooms and laboratories.

6 INSTITUTIONAL VALUES AND BEST PRACTICES

The institution has separate manuals of best practices, teaching methodologies, manual of professional ethics and clearly stated & integrated pro-development policies. Some of the observations in this context are:

Sr. No	Criterion	Rating
1	Adequacy of MoUs signed with institutions /industries.	Satisfactory
2	Adequacy of gender equality promotion programs organized by the institution.	Good
3	Differently abled Friendliness Resources in the institution.	Very good
4	Industry Institute interaction	Good


Dr. B. N. Choudhari



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5	Institutional best practices	Very good
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CONCLUDING REMARKS & OBSERVATIONS

1. Continuous efforts by the faculty members to improve the standing of the institute is seen, as evidenced through various interactions & records.
2. Regular meetings are held twice in a year each of the statutory bodies (BOS, Academic Council, Governing Body & Finance Committee) as well as non-statutory bodies.
3. Many faculty members have published their research work in good number of reputed journals and conferences.
4. A total 16 papers have been published by the students in reputed journals, with the help of faculty support.
5. Books published by faculty members in A.Y. 2020-21 have increased to 14, as compared to the last academic year.
6. Research papers published by the faculty members in national/International Journals in A.Y. 2020-21 has increased to 120 in total.
7. The Internal Quality Assurance Cell (IQAC) has made a substantial contribution to the institutionalization of quality assurance standards, procedures and policies.
8. The Institution periodically reviews its teaching-learning process structures, methodologies of operation and learning outcomes through the IQAC.
9. The college has taken good initiatives to make good use of available time during the Covid-19 pandemic to upgrade the faculty members with the new technologies by providing free Coursera licenses as well as helped in conducting seminars and webinars by appropriate industry personnel on a regular basis.
10. Student participation in various online competitions are encouraged and have grown to a significantly high level.


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Dr. Ajay Kambekar

SUGGESTIONS FOR IMPROVEMENT

1. Faculty members may be encouraged to develop e-content modules for their academic courses.
2. More courses/seminars may be offered to students as well as faculty members to make them be aware of ongoing emerging and disruptive technologies.
3. More attention may be required to be given by faculty members towards patenting. Students may be encouraged and motivated for their involvement.
4. Faculty members are advised to take additional initiatives and their attention is needed in getting funds from Government and Semi-Government funding agencies.

Overall the work done by the IQAC team of the college is found satisfactory and acceptable.



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