terna
Knowledge to Empower

T. P. C. T's TERNA ENGINEERING COLLEGE

ANNUAL REPORT
2023-2024

https://ternaengg.ac.in

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TERNA ENGINEERING COLLEGE
Nerul, Navi Mumbai - 400 706.

TPCT'S
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TERNA ENGINEERING COLLEGE
Nerul, Navi Mumbai - 400 706

TERNA PUBLIC CHARITABLE TRUST

Terna Public Charitable Trust(TPCT) is a Public Charitable Trust registered under the Bombay Public Trust Act(Registration No — E 91 dt. 30/9/1980) in Ternanagar, Osmanabad, Maharashtra, India. TPCT was established on 30th September 1980 to provide educational and health services to all sections of society. From its humble beginnings in 1980, the Trust today has grown into an educational colossus, imparting education in multiple streams to more than 10,000 students. TPCT continuously organises various Social & Medical programs in different parts of the state. To meet the objectives, TPCT has established its reputation as a landmark higher education and learning institution in Navi Mumbai, Aurangabad and Osmanabad region. As a trust, we aim to provide specialized training with experienced staff, excellent infrastructure, and practical industry exposure to create dynamic world-class professionals. The TPCT's ethos is marked by selfless service and the spirit of indigenous enterprise. These values permeate all the institutions set up by the TPCT and are the guiding principles for all of them.

PRINCIPAL
TERNA ENGINEERING COLLEGE
Nerul, Navi Mumbai - 400 706

OUR EMBLEM

terna

Knowledge to Empower
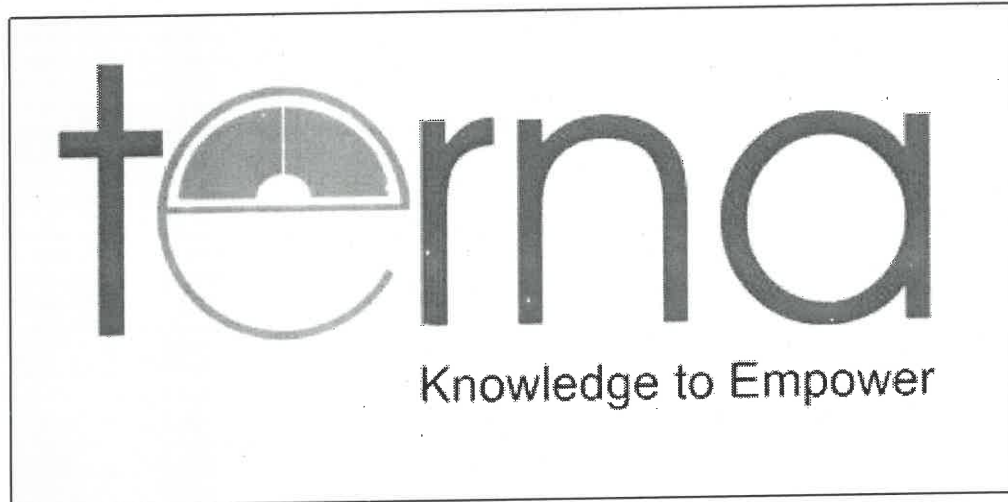
Tenets
Of
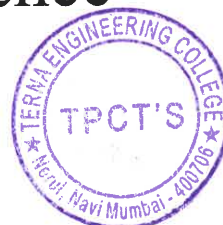# Terna Engineering College

T- Technological Advancement

E- Excellent Learning

R- Research

N- New Ideas, Techniques

A- Academic Excellence

ADVISORY BOARD
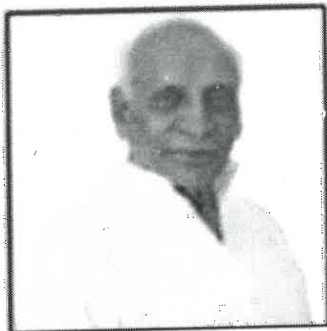
PRINCIPAL
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EDITORIAL BOARD

PRINCIPAL
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CHAIRMAN
TERNA PUBLIC CHARITABLE TRUST

students thrive in their professional pursuits following a top-tier education within such a vibrant academic milieu. I extend my heartfelt appreciation to the Dean and the college's esteemed faculty for their concerted endeavours.

Furthermore, I extend my felicitations to the students for their outstanding achievements, both on the university stage and within their respective specialist conferences. I am confident that we will continue to establish such significant milestones by aspiring to ever greater heights in the pursuit of excellence across all facets of dental education. This annual report stands as a splendid testament to the creative prowess of both our students and faculty. I extend my warmest congratulations to the entire team for their unwavering dedication and tireless efforts in this endeavour."

President
Dr. Padmasinha Patil

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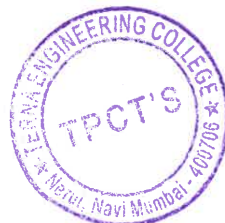
PRINCIPAL
TERNA ENGINEERING COLLEGE

Dr. Lakshmappa Ragha is a Senior Professor and has been working as Principal at Terna Engineering College, Nerul, Navi Mumbai. He was a research scholar at BARC, Mumbai from 2007 to 2011 for his research study on "Technological, Environmental and Biological aspects of Microwave and communication fields". His primary research interest is Microwave bioeffects and numerical simulation of radiating systems. He received his Ph.D. Degree in Electronics Engineering from University of Mumbai in 2011 and has been involved in teaching and administration.

He has 33 years teaching experience at different institutions. His teaching expertise covers a wide range of core subjects. He has huge enthusiasm for his subjects, and always tries to focus on a 'roadmap' for each course to encourage learning while being as organized as possible for all classes. He is a member of many professional societies and supervised a number of research projects at graduate, post graduate and Doctoral studies. He has published more than 40 research papers in international journals and conferences.

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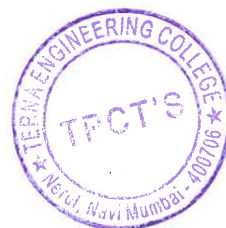
Principal
Dr. L.K. Ragha

VISSION

To deliver value-added quality education to the aspiring students, meeting stringent requirements of the changing technology, industry, business and society as a whole.

MISSION

To provide an environment of academic excellence and adopt appropriate teaching – learning processes to produce competent and skilled engineers to meet global challenges.
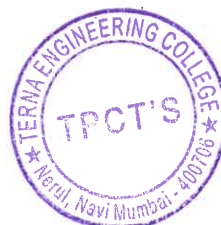
OUR VALUES

We are committed to imparting excellent education, employing meticulous methods that strive to enlighten the students to be industry ready.

We endeavour to excel in education by improving the study programmes that can provide students with an experience, to obtain the best outcome, and also make it memorable and enjoyable at the same time.

We are inspired to make students reach their maximum potential by participating in intellectual activities to help improve.

We continuously strive to lead our students to the right path, to their best tomorrow

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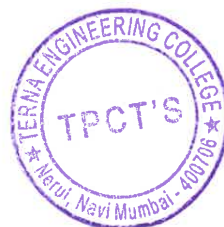
RECOGNITIONS

Sr. No	Course	Intake	Statutory Body	Date/ Year of Recognition	Recognition Letter No and Date
1	TEC (Establishment of Terna Engineering College, Nerul, Navi Mumbai)		AICTE	1991	F.P-2/B/III/RC BB/93. Date:06/04/1994
2.	Electronics Engineering	60	AICTE	1991	F.P-2/B/III/RC BB/93. Date:06/04/1994
3.	Electronics and Telecommunication Engineering	60	AICTE	1991	F.P-2/B/ III/RC BB/93. Date 06/04/1994
4.	Computer Engineering	60	AICTE	1991	F.P-2/B/ III/RC BB/93. Date 06/04/1994
5.	Electronics and Telecommunication Engineering	30	AICTE	2000-2001	F.P-740-89-275(E)-RC BB/94 Date 02/11/2000
6.	Computer Engineering	30	AICTE	2000-2001	F.P-740-89-275(E)-RC BB/94 Date 02/11/2000
7.	Information Technology	60	AICTE	2002-2003	F.P.740-89-275 (E)/RC/9. Date 14/06/2002
8.	PG in Electronics and Telecommunication Engineering	18	AICTE	2004-2005	F.P.PG/MS/ME/2004/ECE-0166.Date-22/07/2004
9.	PG in Electronics Engineering	18	AICTE	2010-2011	F.P.WR,MH/1-4011650/20101EOA Date23/08/2010
10.	PG in Computer Engineering	18	AICTE	2010-2011	F.P. WR,MH/1-4011650/20101EOA Date23/08/2010
11.	PG in Information Technology	18	AICTE	2011-2012	F.N.WESTERN/1425307133120S11/EOA. Date-06/09/2011
12.	Computer Engineering Second shift	60	AICTE	2014-15	F.No.Western/12018752176/2014/EOA. Date: 04-Jun-2014
13.	PhD in Electronics and Telecommunication Engineering and Information Technology	10	University of Mumbai	2014	
14.	Mechanical Engineering	60	AICTE	2014-2015	F.No.Western/12018752176/2014/EOA. Date: 04-Jun-2014
15.	Mechatronics Engineering	60	AICTE	2014-2015	F.No.Western/12018752176/2014/EOA. Date: 04-Jun-2014
16.	PhD in Electronics Engineering	10	University of Mumbai	2016	

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TPCT'S
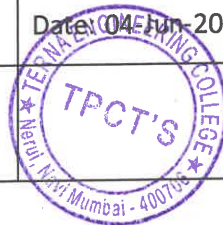
17.	Civil Engineering		60	AICTE	2017-2018	F.No.Western/12018752176/2014/EOA. Date: 04-Jun-2014
18.	PhD in Computer engineering		10	University of Mumbai	2021	TH./ICD/2019-20/1273date 14.07.2021
19.	AI & Data Science		60	AICTE	2021-2022	F.No. Western/1-9322581338/2021/EOA Date: 07-Jul-2021
20.	Design Program	Design	30		2022-2023	F.No. Western/1-10997608730/2022/EOA Date: 02-Jun-2022
		Industrial Design	30		2022-2023	F.No. Western/1-10997608730/2022/EOA Date: 02-Jun-2022

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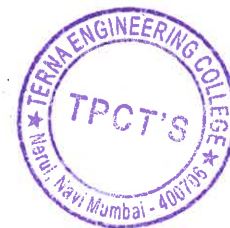
SIGNIFICANT MILESTONE

Sr.No	YEAR	MILESTONE
1	1991	TEC (Establishment of Terna Engineering College, Nerul, Navi Mumbai)
2	1991	Introduction of Courses Electronics Engineering,Electronics and Telecommunication Engineering, Computer Engineering with intake 60 each.
3	2000-2001	Increase in Intake by 30 for Electronics and Telecommunication Engineering, Computer Engineering
4	2002-2003	Introduction of Information Technology with 60intake
5	2004-2005	Introduction of PG in Electronics and Telecommunication Engineering with 18 intake
6	2010-2011	Introduction of PG in Electronics Engineering and Computer Engineering with 18 intake
7	2011-2012	Introduction of PG in Information Technology with 18 intake
8	2014	Introduction of PhD Center in Electronics and Telecommunication Engineering and Information Technology with 10 intake
9	2014-2015	Introduction of Computer Engineering Second shift with 60 intake and Introduction of Mechanical Engineering, Mechatronics Engineering with 60 intake
10	2016	Introduction of PhD Center in Electronics Engineering with 10 intake
11	2017-2018	Introduction of Civil Engineering with 60 intake
12	2017	TEC got Platinum Ranking for AICTE – CII survey and 93rd Rank in Times Survey Increase in intake for Electronics and Telecommunication and Computer Engineering from 90 to 120 and for Mechanical Engineering from 60 t0 120.
13	2018	TEC got Platinum Ranking for AICTE – CII survey and 61th Rank in Times Survey
	2020	TEC got Gold Ranking for AICTE – CII survey
14	2021	Introduction of PhD Center in Computer Engineering with 10 intake ARIIA ATAL Ranking of Institutions on Innovation Achievements in "Promising Band"
15	2021-2022	Introduction of AI & Data Science with 60 intake
16	2022-2023	Introduction of Design Program with two streams Design and Industrial Design with 30 intake each
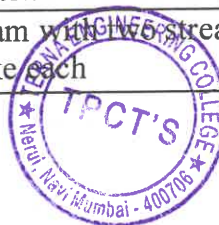
17	24/05/2016 to 30/06/2019 in **First Cycle** 31/07/2019 to 30/06/2022 in **Second Cycle**	TEC had NBA accreditation for Electronic Engineering, Electronics & Telecommunication Engineering, Computer Engineering
18	05/03/2020 to 30/06/2023 in **First Cycle** 01/06/2023 to 30/06/2026 in **Second Cycle**	TEC had NBA accreditation for Information Technology
19	**2018,2019 2020**	TEC got Platinum Ranking & Gold Ranking for AICTE – CII survey
20	**2021**	ARIIA ATAL Ranking of Institutions on Innovation Achievements in "Promising Band"

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ORGANOGRAM

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                    President of Governing Council
                                |
                                v
                         Governing Council
                                |
                                v
College Development Comittee -> Principal <- IQAC, Dears and Advisory Committee
                                |
        +-----------------------+-------------------+--------------------+
        v                       v                   v                    v
     HoDs            Management Coordinator    • Training and        Committees
                                               Placement Officer
                                               • Higher Education Cell
                                               • E cell
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HoDs
- DAB
- PAC
- Time Table co-ordr
- Class Advisors
- Lab Incharges
- Other departmental committees

Management Coordinator
- Registrar
- Librarian
  - Asst Librarian
    - Assistant

Admin Section
- OS
- Establishment Section
- Examination Section
- Store
- Accounts
- Scholarship
- Maintenance

Committees
- Anti-ragging Cell
- ICC and WDC
- SC/ST Grievance Redressal Cell
- R&D Committee
- Cultural Committee
- Sports Committee
- Time Table Committee
- Library Committee
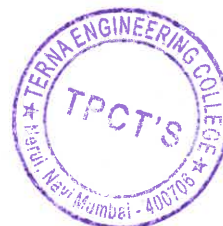
INTERNAL QUALITY ASSURANCE CELL (IQAC)
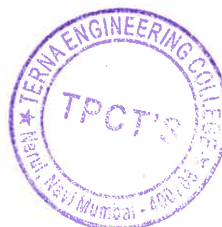
DEPARTMENTS

Sr. No	Designation	Name
1	Chairperson	Dr. Lakshmappa Ragha, Head of Institution
2	Administrative Officers	Mr. Manoj Kokate, Management Coordinator Mr. Ganesh Deshmukh, Office Superintendent
3	Teachers	1. Prof. Sambhaji. N.Patil, Faculty GE Dept 2. Dr. Salunkhe Priyanka Vijay, HOD Civil Engineering Dept. 3. Dr. Vrajesh Maheta, Associate Professor, IT Dept. 4. Dr.Raghvendra Upadhyay,Associate Professor, Mechatronics Engineering Dept. 5..Dr. Preeti Zade, Associate professor, GE Dept. 6. Dr. Manmohan Singh Bhatia, Professor, EXTC Dept. 7. Prof. R. D. Patane, HOD GE Dept 8. Dr. Jyothi Digge, HOD EXTC Dept. 9. Dr. Seema Biday, HOD CSE Dept 10. Dr. B. G. Hogade, HOD ELX Dept 11. Dr. Vaishali Khairnar, HOD IT Dept. 12. Dr. C. M. Choudhari ,HOD MECH Dept. 13. Prof. Vikram Vyavhare, HOD MTRX Dept 14. Dr. Sandeep Raskar, HOD AIDS Dept. 15. Dr. Sachin Kamble, HOD Design (B.Des) Industrial Design (B. Des)
	Management Representative	Mr. P. T. Deshmukh, CEO, TPCT
4	Nominee from Local Society, Students, alumni	Mr. A.V. Aher, Local society Mr.Shreyas Thakur, TE-CSE, Techninal Secretary, Student Council Mr. Prajwal Naik, TE-CSE, E-Cell Secretary Mr. Arya Raut, Alumni
5	Nominee from Employer/industrialist/Stakeholders	Mr. Gaurav Gilani (TCS), Employer Mr. Prashant Kamat, Industrialist Mr. Bilal Thakur (Parent Representative)
6	Coordinator IQAC	Dr. Shilpa Kharche, Professor, EXTC Dept
7	Co-Coordinator IQAC	Dr. Varsha Bodade, Professor, IT Dept.

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Name of program	Course code	Intake	NRI* Intake	Children of Gulf Worker(CGW) Intake	PIO*/OCI*/Foreign national Intake	Lateral Intake DSE*
Artificial Intelligence(AI) and Data Science	319026310	60	-	-	-	6
Electronics and Telecommunication Engineering	319037210	120	6	6	12	12
Computer Engineering	319024510	180	9	9	18	18
Information Technology	319024610	60	-	-	-	6
Mechanical Engineering	319061210	60	3	0	0	6
Mechatronics Engineering	319062410	60	3	3	6	6
Civil Engineering	319019110	60	-	-	-	6
Electronics Engineering	319037610	60	-	-	-	6
Bachelor of Design(Design)	319099610	30	-	-	-	0*
Bachelor of Design (Industrial Design)	319059410	30	-	-	-	0*
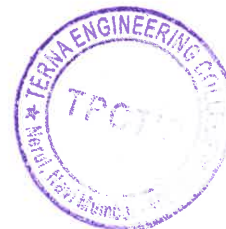
ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

Introduction

Established in 2021, the department of Artificial Intelligence & Data Science (AI & DS) had an initial intake of 60.

It is approved by AICTE, DTE and affiliated with the University of Mumbai. The department has been set up to train students and conduct research in the fields of Artificial Intelligence & Data Science. The department consists of highly qualified faculty members with doctoral degrees. The department aims to teach the students as leaders in AI & DS with world-class infrastructure, curriculum and comprehensive hands-on experience through industry connect programs. The department's goal is to ensure academic excellence in students with wide exposure to research and career opportunities. The ultimate goal is to nurture our students' academic excellence, industry exposure and outstanding career opportunities.

The AI & DS department is a member of one of the profound professional bodies called the Computer Society of India (CSI). It's a setup for conducting technical activities that help in the all-around development of students. The department is committed to achieving the highest order of excellence in the field of computer engineering. The AI & DS department has also initiated the process of becoming a member of the Indian Society for Technical Education (ISTE). Some of the faculty members are also members of "The Society of Data Science," and we plan to conduct seminars and workshops for students to enhance their knowledge.

Vision

Envisioning academic distinction in Artificial Intelligence and Data Science within the academic sphere includes fostering industry collaborations, interactive learning, diversity, and significant societal influence.

Mission

Empower students and researchers to become leaders in the fields of Artificial Intelligence and Data Science by delivering cutting-edge education, fostering interdisciplinary collaboration, promoting ethical practices, cultivating industry partnerships and driving innovation for positive societal transformation.

Head of Department's Message

The Department of Artificial Intelligence(AI) and Data Science is committed to developing engineering students with competent, technical, managerial, and social skills that will contribute to their professional growth. The department emphasizes all the important aspects of computers, such as Programming, Algorithm Design, Operating Systems, Artificial Intelligence, Machine Learning and many more.

Particular focus is given to subjects like Fundamentals of Data Science, Data Pre-processing, Data Wrangling, Data Analytics, Data Visualization, Data Mining etc. These will help the students acquire the required knowledge and
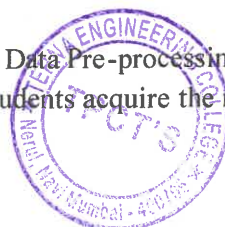
expertise to start their careers as data analysts, data engineers, data scientists, and many other opportunities in the current industry. The department also schedules many seminars, conferences, certifications, and training sessions to help students develop themselves globally.

The department also takes the initiative to improve the students' soft skills, analytical capabilities, and verbal communication skills so that they can confidently face the competition in the corporate world. The excellent infrastructure and experienced faculty team are dedicated to strengthening effective teaching-learning processes, which ensures quality education.

Student Strength

Class	Number of Students
SE	71
TE	63
BE	64

Teaching Staff

Name	Designation	Qualification
Dr. Sandeep Raskar	Associate Professor	PhD in CSE, ME
Sayalee Narkhede	Assistant Professor	ME Computer
Vishal Gotarane	Assistant Professor	ME Computer
Mrs. R. V. Chimankare	Assistant Professor	ME EXTC
Smita Amol Pawar	Assistant Professor	ME Computer
Saima Sayyed	Assistant Professor	ME Computer
Shatabdi Bhalerao	Assistant Professor	ME Computer

Non-Teaching Staff

Name	Designation
Mr. Ravi Bhadake	Lab Assistant
Mr. Chndrakant Wavekar	Peon

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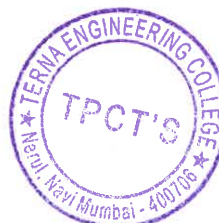
Publications

Name	Paper Title	Journal	Indexing
Vishal Gotarane	Effectiveness of Linear and Non-Linear algorithms in IoT Security	Springer	Scopus
Mrs. R. V. Chimankare	Mutated Leader Optimisation Algorithm-based Microclimate Modelling for Greenhouse Concerning Flower Plant Growth	Scopus	Scopus
Mrs. R. V. Chimankare	Implementation and Optimization of Agro-Voltaic Greenhouse Systems for Sustainable Agriculture and Energy Efficiency in Diverse Climates"	Springer	Scopus

Book Publications

Book Title	Name of Author	Publiser	Year of Publication	ISBN/ISSN NO
Machine Learning Algorithms	Dr. Sandeep Raskar, Mrs. R. V. Chimankare, Mr. Vishal Gotarane	Scientific International Publishing House	Aug 2023	ISBN 9789361325687

Patent

Faculty Name	Type	Title of Invention	Field of Invention	Publication date	Status
Mrs. R. V. Chimankare, Mr. Vishal Gotarane,	Private	A Novel Machine Learning-Enabled Wireless Communication Network	Computer Science	March 2024	Published

Chairperson/Judge/Reviewer/Resource Person Activities

Name	Activity	Work	Venue
Dr. Sandeep Raskar	Department Advisory Board Meeting	Advisory Board Meeting	AI&DS department , MMCOE, Pune

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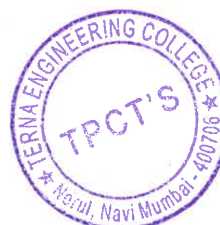
SWOT Analysis

Strengths
1. Good faculties
2. Lab with sufficient PC configuration

Weaknesses
1. Very less Infrastructure
2. Lack of other resources

Opportunities
1. To grab the AI & ML related industry trends in the market by enhancing the knowledge
2. Development of Mobile/Web based apps through mini/major projects where Machine/Deep Learning concept can be used.

Challenges
1. To prepare the students ready for the industry.
2. Get sufficient resources for the students

3. Less number of faculties

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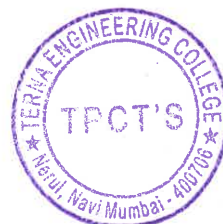
ELECTRONICS & TELECOMMUNICATION ENGINEERING

Introduction

Electronics and Telecommunication Engineering department was established during the inception of the institute in 1991. The department offers Bachelor of Engineering (BE) degree (Undergraduate) & Ph.D. Program in Electronics & Telecommunication Engineering with intake of 120 & 10 respectively. A highly qualified and experienced faculty is the strength of the department. Department has 5 PhD and 13 post graduate faculty. We have a well trained & highly motivated staff. In addition to the teaching assignments, some faculty members are engaged in research work which is actively supported by the college. The department has more that 400 students across SE, TE and BE classes. The primary objective of the department has been to impart quality education and cutting edge technology training to students. It also aims to provide holistic environment for overall personality development, and to bring to full blossom the potential in every student. The Department of Electronics & Telecommunication is one of the most reputed in Mumbai University, well known for both its academic excellence and innovative approach. It has been successfully organizing seminars /workshops/industrial visits for the benefit of the students. Stalwarts from the industry are frequently invited to conduct seminars on various subjects. The department has an active student chapter of IETE, under which students organize and participate in various technical activities.

Vision

To create self-motivated quality Engineers and technocrats to contribute effectively to value based society and in the field of science and technology.

Mission

To catalyze and inspire young minds for innovative thinking and creativity and to acquire knowledge and professional ethics essential for facing global challenges in rapidly changing technologies to serve the society and industry effectively.

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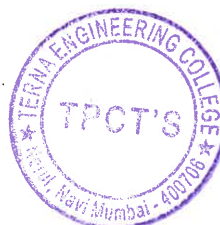
Head of Department's Message

The rapid growth of technology in Electronics and telecommunication engineering viz, semiconductor industries,5G-6G technology, Optical to quantum communication etc.... has raised many opportunities for our budding telecom. engineers. We believe in making the best use of it by providing them academic support and required platform.

This requires continuous learning through novel approaches, supported with research and development works in the areas of Electromagnetic theory, Optical Communication, Image Processing, Communication Networking, Microcontroller Embedded systems, IoT and DVLSI etc. Our department's vision and mission reflects this by producing knowledgeable and committed technocrats to serve our country and contribute to the value based society. The hard work, sincerity and perseverance are keys to success. Through our practices we strive to impress our students to inculcate these values and support the mission of TEC. I welcome whole heartedly our alumni to join hands in supporting our endeavors by all means of interaction, Collaboration and Start-ups. Our doors are always open to Universities, research organizations, industries and utility companies to collaborate with us.

Student Strength

Class	Number of Students
SE	142
TE	126
BE	99

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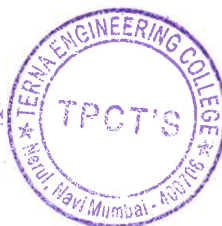
Teaching Staff

Name	Designation	Qualification
Dr. Digge Jyothi Jayaraj	Professor	PhD (OPTICAL COMM)
Dr. Gupta Rajiv Kumar	Professor	PhD (ELECTRICAL ENGINEERING)
Dr. Manmohan Singh Bhatia	Professor	PhD
Dr. Kharche Shilpa Uday	Professor	PHD (ANTENNAS AND MICROWAVES)
Shelkikar Ravindra Pralahadrao	Associate Professor	M.E. (ELECTRONICS)
Dr. Trimukhe Mahadu Annarao	Associate Professor	PhD (E & T)
Kadam Mahesh Murlidhar	Assistant Professor	M.E. (E & T)
Dere Pravin Uttamrao	Assistant Professor	M.TECH. (E & T)
Chede Vinodkumar Sukhdeorao	Assistant Professor	M.E. (ELECTRONICS)
Shekokar Rupali Narendra	Assistant Professor	M.E. (E & T)
Moon Vilas Nathaji	Assistant Professor	M.E. (E & T)
Kurule Deepak Shankarrao	Assistant Professor	M.E. (E & T)
Koli Virendra Ramesh	Assistant Professor	M.TECH. (VLSI TECHNOLOGY)
Kadam Atul Shivajrao	Assistant Professor	M.TECH (E & T)
Mane Ashok Pundlik	Assistant Professor	M.E. (INSTRU)
Rochkari Anjali Durgadas	Assistant Professor	M.E. (E & T)
Yadav Vijaypal Rajansingh	Assistant Professor	M.E. (E & T)
Tejpal Saurabh Avinash	Assistant Professor	M.TECH (ECE)
Dr. Pandit Vaibhav Ravikiran	Assistant Professor	PhD (E & T ENGINEERING)

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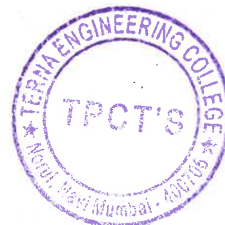
Non-Teaching Staff

Name	Designation
Mr. Bagul D V	Lab Assistant
Mrs Lalita Patil	Lab Assistant
Mr Sambhaji Bhosale	Lab Assistant
Mr Yuvraj Bhore	Lab Assistant
Mrs. Nilam Penkar	Clerk
Mr. Garje	Peon
Mr. Mahesh Kapase	Peon

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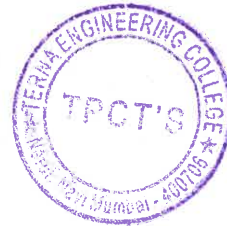
Patents & Publications

Name	Type of patent	Patent Title	Date of Publication	Patent Application Number
Mrs. Shubangi Verulkar, Dr. Mahadu Trimukhe, Alkha Khade and Dr. R.K. Gupta	Design	Quad Element MIMO Antenna	07-07-2023	382977-001
Dr. Rekha Labade, Dr. Mahadu Trimukhe, Dr. R.K. Guta and Dr. Varsha Bodade	Design	Integrated Bluetooth UWB Antenna	--	391991-001
Anjali Rochkari, Dr. Rajiv Gupta, Dr. Mahadu Trimukhe and Shubhangi Verulkar	Utility	High Gain Stack Antenna with Low Cross Polarization using Multiple Meta-Surfaces	14-06-2024	2024210 31001
Amit Deshmukh, Dr. Shankar Nawale, Dr. Kailash Karande, Dr. Mahadu Trimukhe, Dr. Rajiv Gupta and Shubhangi Deshmukh	Design	Semicircular Polygonal UWB Antenna	---	416193-001
Anjali Rochkari, Dr. Rajiv Gupta, Dr. Mahadu Trimukhe and Naina Chaskar	Utility	Slotted High Gain WideBand Stack Suspended Microstrip Antenna with Multiple Metasurfaces	21-06-2024	20242104 3311

Publications

Name	Paper Title	Journal	Indexing
Alka Khade, Shubhagini Verulkar, Mahadu A. Trimukhe and R. K. Gupta	Dual Band MIMO antenna with High Isolation for GSM and WLAN Applications	Progress in Electromagnetic Research C	Scopus
Shubhagini Verulkar, A. Khade, Mahadu A. Trimukhe, and R. K. Gupta	Compact Wideband Four Elements MIMO Antenna for 5G Applications	Progress in Electromagnetic Research C	Scopus
Anjali Rochkari, Shubhangi Verulkar, Mahadu Trimukhe, Varsha Bodade, Rajiv Gupta	Low Profile High Gain Wideband Stacked MSA Array for 5G, WLAN and C-Band Applications	International Journal of Microwave and Optical Technology	Scopus
R. P. Shelkikar, and S. M. Jagade	Automatic Number Plate Detection Using Optimal Black Window Evolutionary Transfer Moth Fly with Alex Net Classification Approach	Wireless Personal Communications	Scopus
Shubhangi Verulkar, Anjali Rochkari, Mahadu Trimukhe, Varsha Bodade, and Rajiv Gupta	High Gain Compact Dual Band Antenna Using Frequency Selective Surface for 5G and WLAN Applications	Progress in Electromagnetic Research C	Scopus
Anjali Rochkari, Shubhangi Verulkar, Nayana Chaskar, Mahadu Trimukhe and Rajiv Gupta	Cross Polar Reduction of a High Gain Wide-band Stacked Microstrip Antenna Using Metasurfaces	Progress in Electromagnetic Research Letter	Scopus
Vinayak Mahadik, Jogesh Chandra Dash, Raju Malleboina, Shilpa Kharche, Debdeep Sarkar	Wideband SIW Based Frequency Selective Surface using Exponential Tapering Technique	TechRixv	
Priya Patel, Rupali Shekokar	Advanced Safety & Awareness System for Car Drivers	MAT Journals	
Shrutika Kamble, Rupali Shekokar	"SAFETY SYSTEM TO PREVENT THE SPREAD OF COVID-19 USING RASPBERRY PI"	International Research Journal Of Modernization in Engineering Technology and Science	
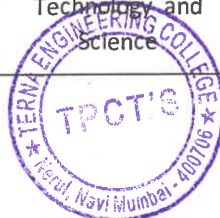
Workshops / Seminars/ Webinars/ Courses Attended

Name	Title	Date	Duration	Venue
Anjali Rochkari	Faculty Development Program on Quality Assurance in Academics	16/11/2023 to 22/11/2023	6 Days	Smt Indira Gandhi College of Engineering, Ghansoli, Navi Mumbai
Mahesh Kadam	Faculty Development Program on Quality Assurance in Academics	16/11/2023 to 22/11/2023	6 Days	Smt Indira Gandhi College of Engineering, Ghansoli, Navi Mumbai
Vinod S Chede	Faculty Development Program on Quality Assurance in Academics	16/11/2023 to 22/11/2023	6 Days	Smt Indira Gandhi College of Engineering, Ghansoli, Navi Mumbai
Deepak KuruleP	Faculty Development Program on Quality Assurance in Academics	16/11/2023 to 22/11/2023	6 Days	Smt Indira Gandhi College of Engineering, Ghansoli, Navi Mumbai
Pravin Dere	Faculty Development Program on Quality Assurance in Academics	16/11/2023 to 22/11/2023	6 Days	Smt Indira Gandhi College of Engineering, Ghansoli, Navi Mumbai
Mahadu Trimukhe	Faculty Development Program on Quality Assurance in Academics	16/11/2023 to 22/11/2023	6 Days	Smt Indira Gandhi College of Engineering, Ghansoli, Navi Mumbai
Vilas Moon	Faculty Development Program on Quality Assurance in Academics	16/11/2023 to 22/11/2023	6 Days	Smt Indira Gandhi College of Engineering, Ghansoli, Navi Mumbai
Rupali Shekokar	NPTEL course on Programming in Java	Jan 2024 to April 2024	4 Months	NPTEL
Virendra Koli	ATAL FDP on AI in supply Chain management of Agriculture Produce	08/01/2024 to 13/01/2024	6 Days	Thadomal Shahani Engineering College, Bandra, Mumbai
Saurabh Tejpal	ATAL FDP on AI in supply Chain management of Agriculture Produce	08/01/2024 to 13/01/2024	6 Days	Thadomal Shahani Engineering College, Bandra, Mumbai
Saurabh Tejpal	AI/ML & Data Science for Industry 4.0	26/02/2024 to 01/03/2024	5 Days	NITTR Chandigarh
Prof Saurabh Tejpal	VLSI to System Design-Silicon to End application Approach	31/07/2023 to 04/08/2023	6 Days	AICTE Arm education and STMicroelectronics

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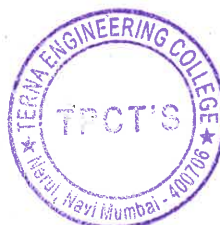
Chairperson/Judge/Resource Person Activities

Name	Activity	Title	Venue
Jyothi Digge	Technical competition at University Level	Judge for 18th Aavishkar: Inter-Collegiate / Institute / Department Research Convention	Mumbai University
Shilpa Kharche	Technical competition at University Level	Judge for 18th Aavishkar: Inter-Collegiate / Institute / Department Research Convention	Vivekanand Education Society's Institute of Technology, Chembur, Mumbai
	Expert Talk	"MIMO antenna Technology and its applications"	IETE/ETSA Chapter program at Agnel Charities C Rodrigues Institute of Technology, Vashi

Placement/ Higher Study/ Entrepreneur

A.Y.	Total No of Students	Placed	Range of Package	Entrepreneur	Higher Education
2023-2024	54 - Eligible	23	Max: 5.82 Lakhs Min: 3.36 Lakhs Median: 3.36 Lakhs	02	02
2022-2023	124	29	Max: 5.5 Lakhs Min: 3:00 Lakhs Median: 3.6 Lakhs	01	01

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Activities and Achievements of the Departments

Faculty and Students are actively involved in curricular and co-curricular activities. Out of the research done by faculty, the department has 11 research papers published in peer reviewed journals 80 % of which are Scopus indexed journals.

Faculty are also involved in various university activities. One of the faculty is Member, Board of University, University of Mumbai. Most of the faculty are involved in university paper setting of courses and result moderation.

Students are actively involved in project competitions and hackthons.

Sr. No.	Details Of Type/Topic Of Activities	Speaker's	Date Of Conduction	Centre/ Completion Status	No Of Participants
1	Seminar on Awareness of how to Enroll for Military and Defence	Captain R. S. Tope 9372425879	20/10/2023	Offline/ Conducted	47
2	Seminar on AI & Robotics	Mr Pranit Bhoir	March,2024	Offline /Conducted	61
3	Seminar on What Is New In Cyber Security?	Dr. Shravani Shahapure, Head Of Cryptography And Quantum Computing- Deloitte,	12/02/2024	Offline /Conducted	32
4	Workshop on Ethical Hacking.	Mr. Yogesh Hudale, Director- Tele Networks Vashi	15/02/2024 to 19/02/2024	Offline /Conducted	47

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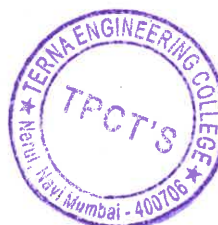
Capture from Events

SWOT Analysis

Strengths

The department boasts a team of highly proficient professors with experience ranging from 10 to 38 years across diverse areas of Electronics and Telecommunication. We offer state-of-the-art laboratories equipped with specialized facilities such as Vector Network Analyzers (VNA) and Optical Links. Our dedicated faculty supports research and development through the Terna Center of Excellence for Electromagnetics, which supports a wide array of wireless and optical communication projects. Additionally, we provide access to advanced software tools, support high-impact research, and maintain a strong record of patents. Our faculty includes 04 PhD guides, 09 PG guides, a Board of Studies (BOS) member, and a high volume of publications with over 2000 citations.

Weaknesses

Lack of funding from national organizations for nurturing advanced research. The Industry Institution Interface can be enhanced further.

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Opportunities

To be employable in 5G and beyond network industries

Capacity to work in the multidisciplinary area and excel

To contribute to the value based society in terms of research, resource persons, and consultants

Challenges

Urgent measures are needed to review the course content to make them relevant to the present-day industry requirements.

Participation of Alumni and their contribution to the development of department

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Computer Engineering

Introduction

The department of Computer Engineering was established in 1991 with initial intake of 60 and later it increased to 180. It is approved by AICTE, DTE and affiliated to University of Mumbai and accredited by the National Board of Accreditation (NBA). The department also has PG programme (ME) & Ph.D. Program with the intake of 18 and 10 respectively. Laboratories of the department are well equipped with the latest hardware and software.

We have experienced and highly competent faculty members with excellent academic credentials and expertise in all core and emerging courses of computer engineering. Faculties are always motivated to upgrade their skills and knowledge through various training and certification programs.

Students at the department are always encouraged and supported to participate in various technical and extra curricular activities at regional, National and International level. We have an enthusiastic team of staff and students for co-ordination and execution of the activities throughout the year under Computer Society of India (professional Body). Every year team of young engineers from department exhibit their advanced and technical skills in Smart India hackathon and many such national or international competitions.

The department is committed to achieve the highest order of excellence in the field computer engineering.

Vision

To produce trained computer professionals who can successfully meet the demands of academia, IT Industry and research by building a strong teaching and research environment.

Mission

To provide industry and research oriented quality education to UG and PG students and train them to apply this knowledge for solving real world problems and make them competitive in the ever-changing and challenging global work environment.

Head of Department's Message

It gives me immense pleasure to lead the Department of Computer Engineering, the most wanted programme by the students. The modern era has witnessed a rapid development in Computer Engineering, both in hardware and software. Each year, new advancements are exposed, like Machine Learning, Block Chain, Data Science, Social Media Analytics.. The students of Computer Engineering are highly needed by the society.

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Our department looks forward to contribute in solving the technological challenges of the society with active participation from all sections of the society. Thank you for visiting us

Student Strength

Class	Number of Students	
SE	A=56 B=83 C=66	Total=205
TE	A=66 B=80 C=70	Total=216
BE	A=62 B=81 C=75	Total=218

Teaching Staff

Name	Designation	Qualification
DR. SALUNKHE SATISH SAMPATRAO	Professor	PHD (COMPUTER)
MATHUR RAVI RAJENDRANATH	Professor Adjunct Faculty	M.SC. (ELECTRONICS)
CHITRE DNYANOBA KHANDU	Associate Professor	M.E. (COMPUTER)
GAIKWAD VISHWAJIT BALASO	Associate Professor	M.E. (COMPUTER)
PALVE ROHINI DHARMANATH	Associate Professor	M.E. (E & T)
DR. SIDDHARTH HARIHARAN	Associate Professor	PHD (GEO INFORMATICS)
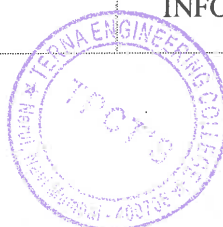
SHAHABADE RAMESH VISHWANATH	Assistant Professor	M.E. (IT)
PATIL ROHINI ANANT	Assistant Professor	M.E. (COMPUTER)
GAIKWAD UJWALA VISHWAJIT	Assistant Professor	M. TECH (COMP)
MATE PRAMILA BHASKARRAO	Assistant Professor	M.E. (COMPUTER)
BAVKAR DNYANESHWAR MADHUKAR	Assistant Professor	M.E. (COMPUTER)
SAKURE KISHOR SHAMRAO	Assistant Professor	M. TECH COMPUTER
BOKEFODE SHUDHODHAN BALBHIM	Assistant Professor	M.TECH (COMPUTER)
MISALE MOHINI DEVCHAND	Assistant Professor	M.E. (COMPUTER)
DESHMUKH GAURAV SUDHIR	Assistant Professor	M.E. (IT)
SURYAWANSHI KIRTI MANOJ	Assistant Professor	M.E. (COMPUTER)
JADHAV PRADNYA PRABHAKAR	Assistant Professor	M.TECH (E & T)
PATIL PREETI SHIVRAJ	Assistant Professor	M.TECH (EMB. SYS. AND VLSI DESIGN)
CHAUDHARI MINAL RAHUL	Assistant Professor	M.E. (COMPUTER)
DHAWALE DHANASHRI MARUTI	Assistant Professor	M.E. (E & T)
PATIL SUMEDHA DNYANESHWAR	Assistant Professor	M.E. VLSI
DHAMELE SONALI JAIDEEP	Assistant Professor	M.E. (COMPUTER)

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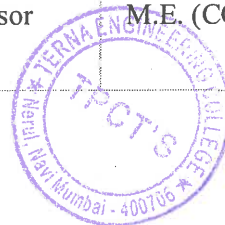
Non-Teaching Staff

Name	Designation
Mr Dayanand Mane	Lab Assistant
Mr Shrikrishna Deshmukh	Lab Assistant
Mr. Pritam Mote	Lab Assistant
Mrs Maya Kshirsagar	Lab Assistant
Ms Rasika Mahajan	Lab Assistant
Mrs Vandana Rai	Lab Assistant
Mr Rakesh Sharma	Office Clerk
Mr Hanumant Babar	Peon
Mr. Gorakh Kharat	Peon

Publications

Name	Paper Title	Journal	Indexing
Alka Khade (Rohini Palve)	"Miniaturization of Printed Rectangular Monopole Antenna by using Slots for Triple Band Applications	Progress In Electromagnetics Research C	Scopus
Alka Khade (Rohini Palve)	Miniaturization of Printed Rectangular Monopole Antenna by Using Slots	Progress In Electromagnetics Research C, Vol. 130,	Scopus
Alka Khade (Rohini Palve)	Dual Band MIMO Antenna with High Isolation for GSM and WLAN Applications	Progress In Electromagnetics Research C, Vol. 136,	Scopus
Dr. Vanitha Soman	Secured Cognitive Wireless powered communication Network for energy Harvesting and Attack Classification	2nd international conference on advances in Data-driven computing and intelligenc systems (ADCIS-2023)	SCRS
Kishor Sakure	Cryptoroots: offset your carbon footprint by planting trees and earn climate change impact badges	TIJER-international research journal	Scopus

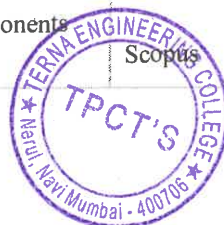|			
Kishor Sakure	A NOVEL APPROACH FOR IRIS RECOGNITION SYSTEM USING GENETIC ALGORITHM	Journal of Artificial Intelligence and Technology	Scopus
Kishor Sakure	A NOVEL APPROACH FOR IRIS RECOGNITION SYSTEM USING GENETIC ALGORITHM	Journal of Artificial Intelligence and Technology	Scopus
Kishor Sakure	Using a Clustering Algorithm and a Transform Function, Identify Forged Images	International Research Journal of Multidisciplinary Scope (IRJMS)	Google scholar
Rohini Anant Patil	A Machine Learning Approach for Phishing Attack Detection	Journal of Artificial Intelligence and Technology	Scopus
Rohini Anant Patil	A NOVEL APPROACH FOR IRIS RECOGNITION SYSTEM USING GENETIC ALGORITHM	Journal of Artificial Intelligence and Technology	Scopus
Rohini Anant Patil	A NOVEL APPROACH FOR IRIS RECOGNITION SYSTEM USING GENETIC ALGORITHM	Journal of Artificial Intelligence and Technology	Scopus
Rohini Anant Patil	Machine Learning based Forest Fire Prediction: A Comparative Approach	Int. Res. J. multidiscip. Technovation	Scopus
Rohini Anant Patil	Gesture Controlled Virtual Mouse with Voice Assistant	International Research Journal of Multidisciplinary Scope (IRJMS)	Scopus
Rohini Anant Patil	Using a Clustering Algorithm and a Transform Function, Identify Forged Images	International Research Journal of Multidisciplinary Scope (IRJMS)	Scopus
Rohini Anant Patil	Modified Deep Q Optimizer with Updated SARSA for Improving Learning Efficiency through Optimum Resource Utilization in Reinforcement Learning	International Journal of Intelligent Systems and Applications in Engineering	Scopus
Satish Salunkhe	Grid-Connected RES Integration for Power Optimization Using Multi-Level Inverters and AI	Electric Power Components and Systems	Scopus

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	Techniques, Electric Power Components and Systems		
Satish Salunkhe	Integrated agriculture IoT-based farm monitoring and management systems	International Journal of Nanotechnology	Scopus
Satish Salunkhe	Novel nature-inspired optimization approach-based svm for identifying the android malicious data	Multimedia Tools and Applications	Scopus
Satish Salunkhe	Energy Trading and Optimum Scheduling for Microgrids Using Multiple Agents Based DL	Electric Power Components and Systems	Scopus
Shudhodhan Bokefode	Using a Clustering Algorithm and a Transform Function, Identify Forged Images	International Research Journal of Multidisciplinary Scope (IRJMS)	Scopus
Shudhodhan Bokefode	A Novel Approach for Iris Recognition System Using Genetic Algorithm	Journal of Artificial Intelligence and Technology (2023),	Scopus
Ujwala Vishwajit Gaikwad	WEB 3.0 DECENTRALIZED CROWDFUNDING APP USING BLOCKCHAIN	International Research Journal of Modernization in Engineering Technology and Science	Google scholar
Ujwala Vishwajit Gaikwad	E-KYC System Using Blockchain	International Journal for Research in Applied Science & Engineering Technology (IJRASET)	Google scholar
Ujwala Vishwajit Gaikwad	Comparison of Credit Card Fraud Detection Algorithms	Journal of Computer Based Parallel Programming	Google scholar
Ujwala Vishwajit Gaikwad	Comparison of Credit Card Fraud Detection Algorithms	Journal of Computer Based Parallel Programming	Google scholar
Ujwala Vishwajit Gaikwad	Hidden Markov Random Field Model Based VGG-16 for Segmentation and Classification of Head and Neck Cancer	International Journal of Intelligent Engineering and Systems, Vol.17, No.1, 2024	Scopus
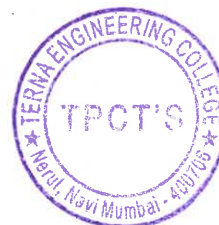
Workshops / Seminars/ Webinars/ Courses Attended

Name	Title	Date	Duration	Venue
DR. SAKURE KISHOR SHAMRAO (KSS)	Management Information System (NPTEL)	23/07/23 to 13/10/23	9	Online
DR. SAKURE KISHOR SHAMRAO (KSS)	ATAL FDP Blockchain Technology: Architecture and its Application	04/12/23 TO 09/12/23	6	FRCR COE, Bandra
DR. SALUNKHE SATISH (SS)	Faculty Development Program on Quantum-Enabled Intelligence: Innovations in Computing and Communications at	04/12/2023 to 09/12/2023	6	RAMRAO ADIK INSTITUTE OF TECHNOLOGY, Nerul
MR. SHAHABADE RAMESH VISHWANATH (RVS)	AI/ML and Data Science for Healthcare	11/12/23 to 22 /12/23	12	SPIT, Andheri
DR. PATIL ROHINI ANANT (RAP)	AI in Supply Chain Management of Agriculture Produce	08/01/2024 to 13/01/2024	6	Thadomal Shahani Engg. College, Bandra
MRS. GAIKWAD UJWALA VISHWAJIT (UVG)	AI/ML and Data Science for Healthcare	11/12/23 to 22 /12/23	12	Online
MRS. MATE PRAMILA BHASKARRAO (PBM)	Building Advanced Data Analytics Application with Cloud	18/12/23 To 22/12/23	6	Online
MRS. KIRTI SURYAVANSHI	Quantum Enabled intelligence : Innovations in Computing and communication	4/12/2023 to 9/12/23	6	RAMRAO ADIK INSTITUTE OF TECHNOLOGY, Nerul
MRS. MINAL CHAUDHARI	ISTE approved Online/SF-STTP/FDP Programme on "Introduction to DevOps"	12/12/23 TO 16/12/23	5	Online
MRS. JADHAV PRADNYA	ISTE approved Online/SF-STTP/FDP Programme on "Introduction to DevOps"	12/12/23 TO 16/12/23	5	Online
MRS. SUMEDHA PATIL	FDP on ChatGPT and Prompt Engineering	18/12/23 TO 22/12/23	6	Online
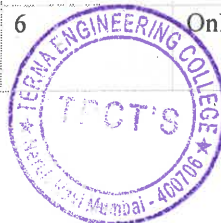
MRS.SUMEDHA PATIL	FDP on Blockchain Technology	8/01/2024 to 12/01/2024.	5	Online
MRS.SUMEDHA PATIL	FDP on Latest Trend and Techniques in Softeare Engineering: An Industry Perspective	20/01/2024 to 27/01/2024	8	Online
Prof. Ankita Mahamune	STTP on Research Publication, Copyright and Patents in Science and Technology at Department of Applied Sciences & Humanities at	3/07/2023 to 07/07/2023	5	P. R. Pote Patil College of Engineering & Management, Amravati
Dr. Vishwajit Gaikwad	AI/ML and Data Science for Healthcare	11/12/23 to 22 /12/23	12	Online
Dr Siddharth Hariharan	AI in Supply Chain Management of Agriculture Produce	08/01/2024 to 13/01/2024	6	Thadomal Shahani Engg. College,Bandra

Publications by Students

Name	Paper Title	Journal	Indexing
Soham Chakraborty, Akhil Boddul, Vivek Patil , Ganesh Raje, Prof. Ujwala Gaikwad	E-KYC System Using Blockchain	International Journal for Research in Applied Science & Engineering Technology (IJRASET)	Google Scholar, Academia.edu, Issue, Scribd, Research Gate
Mr. Sahil Bhosale, Mr. Shantanu Raje, Ms. Kalpita Birhade, Mr. Sarvesh Patil, Mrs. Ujwala Gaikwad	Algo trading Dynamics: Pioneering Automated Platforms For Enhanced Trading	International Research Journal of Modernization in Engineering Technology and Science	Google Scholar, Academia.edu, Issue, Scribd, Research Gate
Ujwala Gaikwad, Sakshi Vijay Rangari, Dikshita Milind Pawar, Mrunali Dilip Patil, Mohit Suresh Kolte	Comparison of Credit Card Fraud Detection Algorithms	Journal of Computer Based Parallel Programming	Google Scholar, Academia.edu, Issue, Scribd, Research Gate
Aditya Ugale, Rishav Thapliyal, Prathmesh Gaikwad, Umesh Hivarale, Prof. Ujwala Gaikwad	Sentiment Analysis on Movie Reviews	International Research Journal of Modernization in Engineering Technology and Science	Google Scholar
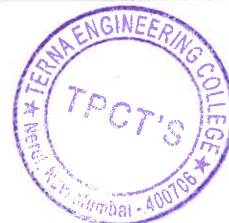
Neeraj Shetkar, Abhishek Jaiswar, Affan khan, Hemant Khutmode, Pramila Mate	Anomaly Detection in Brain MRI Scan Using Deep Learning	TIJER - INTERNATIONA	Google Scholar, Semantic Scholar
Prof. Varsha pande, Mainak saha, Shaiban mulla, Sumedh gamare, Sumedh Gamre	Fraud detection in UPI transaction using AI	IJCRT	UGC care
Ishita Raut, Ankush Jha, Tushar Suryavanshi, Mrs. Varsha Pande	AI Projection Model	IJCRT	UGC care
Sharvari Gaikwad, Ruchi Singh, Dr. Siddharth Hariharan	Comparative Analysis of Extractive Text Summarization Approaches	International Journal of C	Google scholar
Ritika Dwivedi, Raunak Chaudhary, Sanket Dagade, Chetan Gaikar, Mrs. Pramila Mate	E-Commerce for Direct Marketing of Fresh Food from Farmers to Bulk Ordering Buyers and Local Buyers	Equinox, IJCRT	Google Scholar
Viraj Mahesh Gunjal, Sumedh Sanjay Bengale, Mayur Baban Argade, Mayur Baban Argade, Om Prashant Jadhav	Campus Calm	IRJMETS	Google Scholar
Nikhil kamble, Raj Nagotkar, Yash Kokare, Siddesh Mahind, Prof. Ramesh Shahabad	TrekXplorer	IJCRT	Google Scholar
Jatin Kumar, Neha Veer, Zeel Shah, Saanvi Balki	Face Recognition Voting	IJCRT	UGC
Ramesh shahabade, Mukund Patil, Prasad Gaikwad, I Vivek Gawas, Mayur Totre	Multilingual video conference app	IJCRT	Google scholar
Aryan Patil, Mohit Yadav, Bhavesh Chaudhari, Sanchit Gorlewar, Mohit Yadav	Data Crawler	IJCRT	Google Scholar

Prof. D. M. Bavkar, Aakanksha Pawar, Satej Sawant, Aman Pande, Amey Deore	STEGANOGRAPHY USI	IJCRT	UGC care
DHANASHREE SHELKE, Dr. Shudhodhan Bokefode, SHRUTI PATIL, JUHI RAUT, AKSHATA DANGE	DEEPFAKE DETECTION SYSTEM	SIRJANA JOURNAL (WE HAVE TO PUBLISH IN SCOPUS)	UGC CARE
Dnyaneshwar Bavkar, Hafeez Shaik, Hafeez Shaik, Samruddha Patil, Sarojkumar Panda	EMPOWERING DIGITAL COLLABORATION AND REMOTE WORKSPACES WITH WORKPLACE	IRJMETS	International Research Journal of Modernizatio
Harshali Kadam, Nawaf Lokare, Gaurav Natekar, Aditya Bhuran, DR. Shudhodhan Bokefode	Credit card fraud detection	International journal of In	Google scholar, UGC care
Disha Ramesh Parmar, Pooja Ashok Lashkare, Aniket Arvind Patil	Stock Tracker	IJCRT	Google Scholar
Satyam Yendhe, Zarmin Khatib, Sajida Shaikh, Sudhanshu Dubey, Prof. Dnyanoba Chitre	Network Management and Monitoring System using Python	International research journal of modernization in engineering technology and science	Google scholar, issue, academia.edu,mendely advisor community,doi,crossref content registration
Ujwala Gaikwad, Umesh Hivarale, Prathmesh Gaikwad, Rishav Thapliyal, Aditya Ugale	Sentiment Analysis On M	International Research Journal Of Modernization in Engineering Technology and Science	Google Scholar
Pauras hulavale, Vedant Patil, Anish Parab, Dr. Satish Salunkhe	Lip Reading System	IJSREM	UGC care
Shraddha Kadam, Sakshi Tupsundar, Sakshi Tupsundar, Shreya Joshi,	Text Extraction and Trans	TIJER - INTERNATIONAL RESEARCH JOURNAL - (TIJER)	UGC care

Sharvari Shivagunde			
Anilkumar P. Yadav, Anilkumar P. Yadav, Pranitha S. Cuddapah, Anushka S. Bhilare, Dr. Kishor Sakure	Shutter Spaces: Empowering Photographers and Preserving Genuine Art in The AI Era	IJCRT (International Journal of Creative Research Thoughts)	UGC care, Google scholar, Academia edu, ResearchGate, Scribd, WikiCFP, Issue, arXive.org, ENDNOTE, SiteSeer, Docstoc, SSRN
Rushikesh Waghmare, Amar Wakhare, Ashish Kushwaha, Rohit Gupta, Prof. D K Chitre	Attendance System Using Face Recognition	IRJMETS	Google Scholar
Prof. Dhanashri Dhawale, Saurabh Kadam, Durvesh Kolhe, Abdullah Surve	Parking Zone with EV Chargers	International Journal for Research in Applied Science & Engineering Technology	Google Scholar
Shakti Seniyar, Mahanand Sharma, Husain Champawala, Prof. Pramila Mate	Project SyncUP - A Project Management System	EQUINOX ICERI - 2023	Google Scholar
Khushbhoo bhoolwani, Anay bhave, U. B. Mantale	MULTI MODAL AI FOR INTELLIGENT CONTENT SUMMARISATION: TEXT AND IMAGES	SIRJANA JOURNAL	Google Scholar
Palak Kumari, Vivek Yadav, Gaurav Dubey, Pradnya Jadhav	Alzheimer's Disease Detection through MR images using Machine Learning and Deep Learning Techniques	SIRJANA JOURNAL[ISSN:2455-1058] (Ugc approved journal)	UGC care
Rohit Kadu, Ajaykumar Nishad, Hitesh Thawale, Aniket Tagadkar, Dnyaneshwar Thombre	E-Commerce Product Recommendation System and Comparative Study of Recommendation Algorithms	International Journal of Creative Research Thoughts (IJCRT)	UGC Care
Sanskruti Itkar, Poonam Salunkhe, Prerna Gade, Juhilee Dhole, Dr. Kishor Sakure	AgroGenie: Bridging Agriculture & Technology Using Machine Learning and Deep Learning	INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS	UGC care

Prof. Ramesh Shahabade, Vishal V. Shinde, Bhargav V. Modak, Manas N. Telavane, Shantanu Parameswaran	A Proposed Approach for AI Doodle Generation with a Hybrid Intelligent Agent	International Journal for Multidisciplinary Research	Google Scholar
Amrut Mane, Pranit Misal, Siddhesh Navale, Atharva Umap, Prof. Ramesh Shahabade	Resume Analyzer Using NLP	International Journal of Creative Research Thoughts	UGC care
ESHA MILIND GAIKWAD, SEJAL SATISH MESHRAM, PRATHAM RAJENDRA MUNGE, VAISHALI RAMESH KHURHADE	Pose Estimation And Virtual Yoga Assistant Using Media Pipe	JOURNAL OF TECHNOLOGY	Scopus
VIKAS CHAURASIYA, AVINASH CHAURASIA, PRATHAMESH AMRUTKAR, OMKAR TAWADE, SONALI DHAMELE	Enhancing Tour Package Recommendations through Integrated Machine Learning and Text Vectorization: A Personalized Approach	IJCRT	Scopus, UGC care
Prof. Vishwajit Gaikwad, Aryan Bhandare, Mitali Malusare, Falguni Gongan	Hand Controlled Fruit Inspection Drone	IRJMETS	Scopus
PROF.KISHORE SAKURE, ABHISHEK UGHADE, ARYAN NAKUL REDKAR, CHETAN KESARE, ANUJ MHATRE	NUTRITIONAL DEFICIENCY AND HEALTH EVALUATION SYSTEM	IRJMETS	Google Scholar
Bhuvan Shingade, Yash Matha, Suyash Kasar, Ved Kolambkar, Prof. Rohini Palve	A Survey of Text Summarization Using NLP	Sirjana Journal	UGC Care
Amol Patole, Prof Rohini Palve, Akash Kinage, Saba Shaikh, Sahil Mote	A Survey of deep learning-based cyclone intensity estimation	Sirjana Journal	UGC care
Siddhi Pusalkar, Aishwarya Gadhave, Rohan Zanje, Atharva Sawant, Regina Fernandes	Hotel Sentiments Explored: A Deep Dive into Customer Reviews	International Journal of Innovative Research in Technology	UGC care,Google Scholar
Surya Ganesh, Atharva Mhaske, Rahul Shekhade,	Understanding Trends and	INTERNATIONAL JOURNAL OF CREATIVE	Google Scholar

| Authors	Title	Journal	Indexing
Aayush Rane, Dr. Sudhodhan Bokefode	Predicting the Stock Market	RESEARCH THOUGHTS - IJCRT	
Himanshu Raut, Alisagar Fatakdawala, Rohan Kambli, Kishan Singh, D.M. Bavkar	Event Management System - Evently	Journal of Technology	Scopus, UGC care
Rina Anil Pawar, Rajashri Hemant Chaudhari, Sanskruti Mohan Kadam, Dr. Siddharth Kalpagam	Cipher Shield Steganography Project Using React And Python Libraries	INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS	UGC Care
Mr.Sahil Bhosale, Mr.Shantanu Raje, Ms.Kalpita Birhade, Mr.Sarvesh Patil, Mrs. Ujwala Gaikwad	ALGOTRADING DYNAMICS: PIONEERING AUTOMATED PLATFORMS FOR ENHANCED TRADING	International Research Journal of Modernization in Engineering Technology and Science	UGC care,Google Scholar
KUNAL PRADEEP BHOLE, SAHIL MANOJ SINGH, PRIYANSHU VASUDEV PATEL, AYUSH BASAVRAJ PATIL, DR. SIDDHARTH HARIHARAN	CALORYSUM : CALORIE TRACKER WEB APPLICATION	International Research Journal of Modernization in Engineering Technology and Science	Google Scholar
TEJAS MORE, AUN FAROOQUI, SAHIL CHILUKA, SIDDHARTH HARIHARAN, KISHOR SAKURE	MINTING DIGITAL ASSETS USING ETHEREUM BLOCKCHAIN	IRJMETS	UGC
Umair Shaikh, Sahil Mhatre, Niranjan Dukhande, Anurag Yadav, Dr. Kishore Sakure	Fraud Prevention in Real Estate using Blockchain	IRJMETS	Google Scholar
Kuldeep Rathor, Amankumar Singh, Ananya Raorane, Vinayak Ranjane, Prof B.Umesh Mantale	Remote Vehicle Authentication, Authorization And GPS Tracking	International Journal of Creative Research Thoughts (IJCRT)	UGC care
Prathmesh Jadhav, Krishna Bandgar, Krishna Bandgar,	BREAKING THE ILLUSION: A COMPARATIVE STUDY OF DEEP FAKE DETECTION STRATEGIES	International Research Journal of Modernization in Engineering Technology and Science	UGC care, Google Scholar
Nitesh Wani, Akshay Phalke, Pranav Mane,	SMART CROWDFUNDING: LEVERAGING BLOCKCHAIN FOR FRAUD	International Research Journal of Modernization in Engineering Technology and Science	UGC care, Google Scholar

|	PREVENTION AND TRANSPARENCY		
Sharvari Gaikwad, Ruchi Singh, Dr. Siddharth Hariharan	Comparative Analysis of Extractive Text Summarization Approaches	INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS - IJCRT (IJCRT.ORG)	Google Scholar
Dhanashree Shelke, Shruti Patil, Juhi Raut, Akshata Dange, Prof. Shudhodhan Bokefode	Deepfake detection System	IJARESM	UGC Care
Vaidehi Ingale, Dhruv More, Om Pandey, Prasad Hibare, Minal Chaudhari	Collab-Bro: A Holistic Approach to Enhancing College Student Engagement and Learning	Journal of Technology	Scopus, UGC
Aditya kadam, Dhanashri Dhawale, Sejal Dhotre	ExpenseXpert: Revolutionizing Expense Management through Machine Learning	International Journal of Innovative Research in Technology	UGC care, Google Scholar, Microsoft Academic, Research Gate, Academia.edu
Kanishk Patil, Prof.DK Chitre, Shantanu Rane, Anuj Sawant, Siddhant Pupulwad	Times Series Sales Forecasting using ARIMA Model	IRJMETS	Google Scholar
Shreyas deo, Vedant choudhari, Atharv ghosalkar, D thombre	Network anomaly detection using machine learning	IRJMETS	Google Scholar
Viraj Gunjal, Sumedh Bengale, Mayur Argade, Om Jadhav, Prof. Umesh Mantale	Campus Calm	IRMETS	Google Scholar
More Neha Narsing, Sumit Ashok Koli, Rounak Singh, Rishabh Mukadam	UPSKILL: INTERACTIVE APTITUDE MASTERY PLATFORM	IRJMETS	Google Scholar
Sayali Bhanushali, Srihari Nair, Vedant Mishra, Amitoj Singh Jassal	MahaXplore	IJCRT	Google Scholar
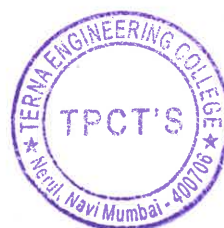
Placement/ Higher Study/ Entrepreneur

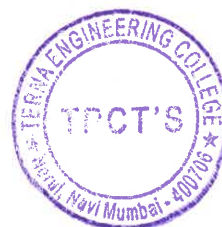|	Total No of Students	Placed	Range of Package	Entrepreneur	Higher Education
2023-2024	188	108	2.5LPA-7LPA	0	5
2022-2023	193	92	1.8 – 13.5 LPA	0	3
2021-2022	189	121	3.1 – 20 LPA	0	4

Graphical Representation:
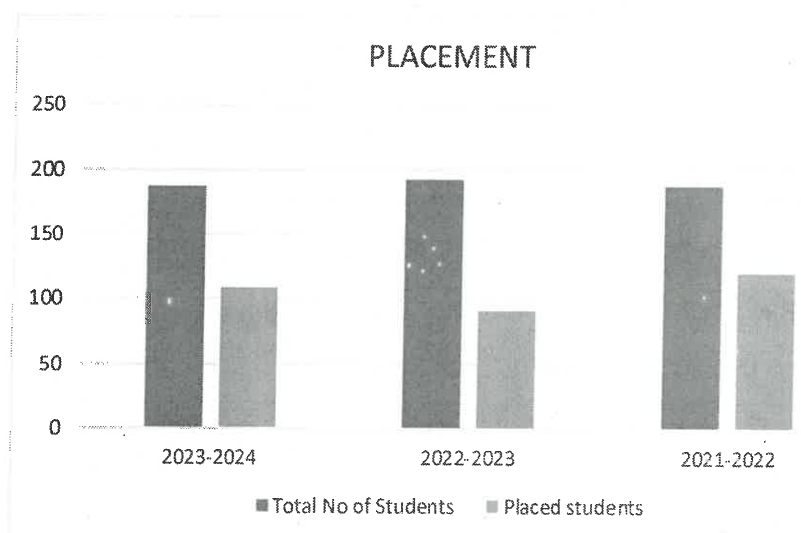
Achievements of the Departments:

- Ph.D. awarded to:1) Mr. Kishor Sakure 2) Mr. V. B. Gaikwad

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Students achievements:

- Ritvik Salian — **3rd** position in football and **2nd** position in long jump.
- Rahul Nair — Secured **3rd** place in Quasar 2.0 held on 16th and 17th march 2023.
- Swaraj Chaudhary — **Winner** of Table Tennis Tournament (Boys) at Sportec 2024
- Shakti Seniyar — Secure **1st** position in National Level Project Competition in AVALON-2024.
- Hussain Champawala — Secured **1st** position in National Level Project Competition in AVALON 2024.
- Shreeram Sawant — Secured **3rd** place in Quasar 2.0 held on 16th and 17th march-2023

SWOT Analysis

Strengths

1. Well-qualified and experienced faculty members

2. Faculties with Publication and Patents Granted

3. Active students' participation in national level hackathons and project competitions

4. Good placement ratio

5. Good admission ratio

6. Students paper publication ratio is good

Weaknesses

1. The Department and Industry Interface can be enhanced further.

2. Industry based Major projects need to be enhanced further.

3. Lack of departmental structured entrepreneurship promotional activities.

4. Participation of departmental alumni in the overall development of the department to be improved.

Opportunities

1. College has good fame in the city as a good engineering college in Mumbai so can attract students for admission to core branches.

2. Good sport facilities are provided

3. By providing good facilities and resources research activities can be encouraged.

Challenges

Retention of faculties.

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Information Technology

Introduction

In today's information era people need information anywhere and anytime. The creative thinking and thrust for information laid down the foundation for the Information Technology Department. The establishment of IT was the dawn of innovative applications and touched nearly every field in every part of the country. Its sheer presence offers innumerable job openings and has become the cornerstone of the engineering fraternity.

Terna Engineering College enriched IT Infrastructure for students to build IT skills, apply innovative ideas, implement real world projects, and make them competent in the IT Sector. The Department is reputed in Mumbai University for both its academic excellence and innovative approach. The Faculty forms the nerve of the department and has been successfully organizing seminars, workshops, guest lectures, internships, real-time projects, and industrial visits for students to keep them updated with the real world.

Vision

To be a centre of excellence in the field of Information Technology Education and Training.

Mission

To educate and train the students to acquire professional competencies by applying fundamental knowledge to solve real time problem which will serve need of industry and society.

Head of Department's Message

The Department of Information Technology was established in 2002. The department offers Bachelor Degree, Master Degree and Ph. D in Information Technology. The Master Degree in Information Technology was approved in 2011-2012 academic year. Ph. D in Information Technology was approved in 2014-2015 academic year.

Department is NBA Accredited. Department has collaboration with Industries for consultancy projects, and currently two consultancy projects ongoing. Department has got funded project grant of Rs. 29 lacs form DST in 2022-2024 respectively.

The graduates have found remarkable placements in prestigious companies like Microsoft and many students have obtained for higher studies. Our vision of department is providing center of excellence in the field of Information Technology Education & Training. Department has Professional Bodies Students Chapters like CSI,ISTE etc.

Our goal is to provide students with a balance of training and practical experiences that will enable them to serve a problem solving ability to serve Industry and Societal needs. In our department students are nurtured to become best Software Professionals as Project Managers, System Analysts, and Network Administrator or Team leaders in Industry or become Entrepreneurs in their own innovative way. We are having hard-working students, a young and dynamic faculty, whose expertise spans the range of disciplines in Information Technology stream and a very healthy work-culture, are the basic elements that comprise the Department of Information Technology, the hub of the Institute's Academia. We are pioneer of creating Apple Lab with 21 iMac PC, iPad, Mac Laptop and iPhone, Blockchain and Cloud Setup in Terna Engineering College. We hold firm belief in our ability to succeed, and we nurture an attitude of self-reliance, confidence, commitment and responsibility to the motherland that we are to

serve. The Department of Information Technology believes in building career, enriching minds and provides a remarkable experience that lasts a life time. I am confident that the students of the department would justify their credibility by showing a high level of professional competence in their respective areas.

-Student Strength

Class	Number of Students
SE	74
TE	68
BE	69

Teaching Staff

Name	Designation	Qualification
DR. KHAIRNAR VAISHALI DINESH	Professor	PHD (COMPUTER)
DR. BODADE VARSHA HEMANTKUMAR	Professor	PHD (E & T)
DR. MAHETA VRAJESH	Associate Professor	PHD (MICRO ELECT)
DR. KADROLI VIJAYALAXMI PRABHUKUMAR	Associate Professor	PHD (COMP & INF SCIENCE)
DESHMUKH SMITA SUDHAKARRAO	Assistant Professor	M.E. (COMPUTER)
DR. KADU SUJATA RAJESH	Assistant Professor	PhD (E & T)
ARGADE DAKSHATA BALSHIRAM	Assistant Professor	M.E. IT
PATIL PREETI ASHISH	Assistant Professor	M.E. (COMPUTER)
NAMRATA SINGH	Assistant Professor	M.E. (INFORMATION TECHNOLOGY)

Non-Teaching Staff
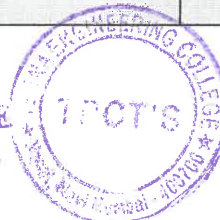
Name	Designation
Mr. Navnath Fand	Lab Assistant
Mrs Maibai Pandhare	Lab Assistant
Mr. Rakesh Sharma	Department Clerk (up to January 2024)
Mr. Bhagyvant Bhosale	Department Clerk (From January 2024)
Mr. Pravin Dhage	Peon

Publications

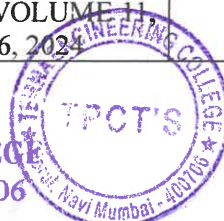| Sr. No.	Name of Faculty Member	Title of Paper	Journal/Conference	Indexing
1	Prof. Namrata Singh	AI based crop yield prediction for precision agriculture	International conference of creative natural thoughts	
2.	Dr. Varsha Bodade	Vertical Hydroponic System using IoT	Hinweis Second International Conference on Artificial Intelligence and Data Science- AIDE (Online Mode) during 28 October 2023,publish in Grenze International Journal of Engineering and Technology, Jan 2024	Scopus
3.	Dr. Varsha Bodade	High Gain Compact Dual Band Antenna Using Frequency Selective Surface for 5G and WLAN Applications",	Progress in Electromagnetic Research, 142, pp, I-II, 2024	Scopus
4.	Dr. Varsha Bodade	Low Profile High Gain Wideband Stacked MSA Array for 5G, WLAN and C-Band Applications",	International Journal of Microwave and Optical Technology, 19(1), pp, 80-88, 2024	Scopus
5.	Dr. Varsha Bodade	Autistic Spectrum Disorder Screening using Machine Learning and IoT,"	Grenze International Journal of Engineering and Technology, Volume 12,Issue 2 June 2024	

6.	Dr. Varsha Bodade	Human Disease Prediction and Drugs Recommendation",	International Journal of Engineering and Technology(GIJET), Vol 10, Issue 2 June 2024	
7	Dr. Vaishali D. Khairnar	Traffic Signal Timing Optimization on Superstreet Using Ecology-Based Optimization	International Conference on Intelligent Systems Design and Applications	Scopus
8	Mrs Smita Deshmukh	A Review on Detection of Diabetic Retinopathy using Deep Learning and Transfer Learning based Strategies	International Journal of Computer (IJC), ISSN 2307-45	
9	Dr. Vaishali D. Khairnar	Machine Learning based Assessment of Mental Stress using Wearable Sensors	2024 11th International Conference on Computing for Sustainable Global Development (INDIACom)	Scopus
10	Dr. Vaishali D. Khairnar	Multimodal Abstractive Summarization using bidirectional encoder representations from transformers with attention mechanism	Heliyon Journal	Scopus
11	Dr. Vaishali D. Khairnar	Issues and Challenges in Detecting Mental Stress from Multimodal Data Using Machine Intelligence	SN Computer Science Journal	Scopus
12	Dr. Vaishali D. Khairnar	Behavioural Profiling for Adaptive Video Summarization: From Generalization to Personalization	MethodsX Journal	Scopus
13	Dr. Vrajesh D. Maheta	Tool Rental E-Commerce Platform-Go Tool	5th International Conference on Inventive Research in Computing Applications (ICIRCA 2023)	
14	Dr. Vrajesh D. Maheta	A Decentralized and Immutable E-Voting System using Blockchain	International Conference on Sustainable Computing and Smart Systems (ICSCSS 2023)	
15	Dr. Sujata R. Kadu	Dev Voice AI	GIS Science Journal, ISSN NO : 1869-9391,VOLUME 11, ISSUE 6, 2024 pp 280-290	UGC care
16	Dr. Sujata R. Kadu	Short Video Application	SRIJANA Journal, ISSN : 2455 – 1058,VOLUME 11 ISSUE 6, 2024	UGC care

Workshops / Seminars/ Webinars/ Courses Attended

Name of the faculty	Name of the STTP/workshop	Duration	Dates	Venue
Dr Varsha Bodade	FDP on "Cultivating the Future of Healthcare with Generative AI"	6 Days	11th Dec to 15th Dec 2023	SFIT Mumbai
Dr. Varsha Bodade	ATAL FDP on " AI in Supply Chain Management of Agriculture Produce" organized by	6 Days	8th Jan 2024 to 13th Jan 2024	Thadomal Shahani College of Engineering, Bandra Mumbai
Dr. Vijaylaxmi Kadroli	ATAL FDP on " AI in Supply Chain Management of Agriculture Produce" organized by	6 Days	8th Jan 2024 to 13th Jan 2024	Thadomal Shahani College of Engineering, Bandra Mumbai
Dr. Sujata R. Kadu	RECENT TRENDS IN GREEN COMMUNICATION FOR SUSTAINABLE SMART CITIES	6 Days	JULY 03 – 08, 2023.	Online RAMRAO ADIK INSTITUTE OF TECHNOLOGY, NERUL, NAVI MUMBAI - 400706.
Dr. Vrajesh D. Maheta	ISTE Approved Short Term Training Programme (STTP) on "Exploring recent trends and opportunities in Data Science using IoT"	7 days	23 June to 01 July 2023	Online organized by Thakur College of Engineering & Technology
Dr. Vrajesh D. Maheta	AICTE approved FDP on "Cloud Infrastructure (AWS)"	5 days	21st to 25th August, 2023	Online organized by SMT. KASHIBAI NAVALE COLLEGE OF ENGG, PUNE, MAHARASHTRA
Dr. Vrajesh D. Maheta	ISTE approved STTP/FDP on "Introduction to DevOps"	5 days	12.12.2023 to 16.12.2023	Online organized by Sindhudurg Shikshan Prasarak Mandal's (SSPM's) College of Engineering, Kankavli, Maharashtra.
Dr. Vrajesh D. Maheta	ISTE approved STTP/FDP on "Cloud Computing and Its Services"	6 days	01.01.2024 to 06.01.2024	Online organized by C. Patil College of Engineering, Kharghar, Navi Mumbai, Maharashtra
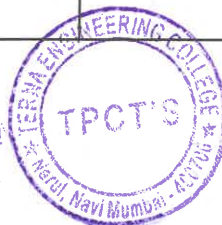
Conferences Attended

Sr. no.	Group no	Guide name	Title of the paper	Students name	Publication details	Conference/ journal	Communicated/ published
1		Dr. Vaishali D. Khairnar	AI-Based Segmentation Model to Detect Brain Tumor	P Kashid, K Patil, H Desai, P Kore	International Conference on Advances in Information Communication Technology & Computing	Conference	Scopus
2		Dr. Vrajesh D. Maheta	Tool Rental E-Commerce Platform-Go Tool	Rushikesh Bandiwadekar; Tejas Kolhe; Pranav Bulbule; Sanika Pharande	5th International Conference on Inventive Research in Computing Applications (ICIRCA 2023)	Conference	
3		Dr. Vrajesh D. Maheta	A Decentralized and Immutable E-Voting System using Blockchain	Ashish Balti; Abhishek Prabhu; Sanskar Shahi; Shrutika Dahifale	International Conference on Sustainable Computing and Smart Systems (ICSCSS 2023)	Conference	

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Chairperson/Judge/Resource Person Activities

| Name	Activity	Title	Venue
Dr. Vaishali D. Khairnar	BoS-Chairman-Information Technology	BoS-Chairman-Information Technology	University of Mumbai

Placement/ Higher Study/ Entrepreneur

Academic Year	Total No of Students	Placed	Range of Package	Entrepreneur	Higher Education
2023-2024	69	30	3 to 6.42 LPA	0	4
2022-2023	73	42	3.36 to 5LPA	0	2
2021-2022	81	57	3 TO 11LPA	0	2

Graphical Representation:
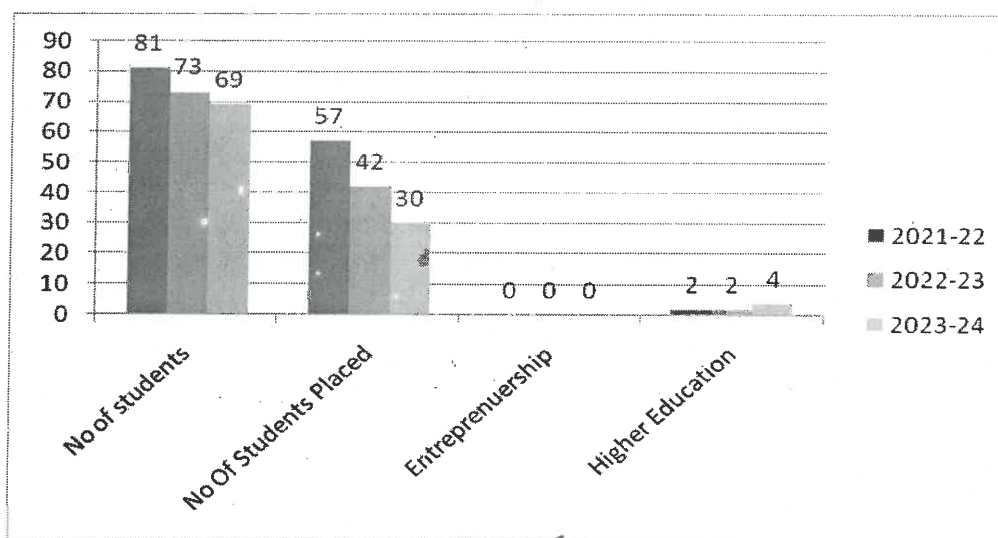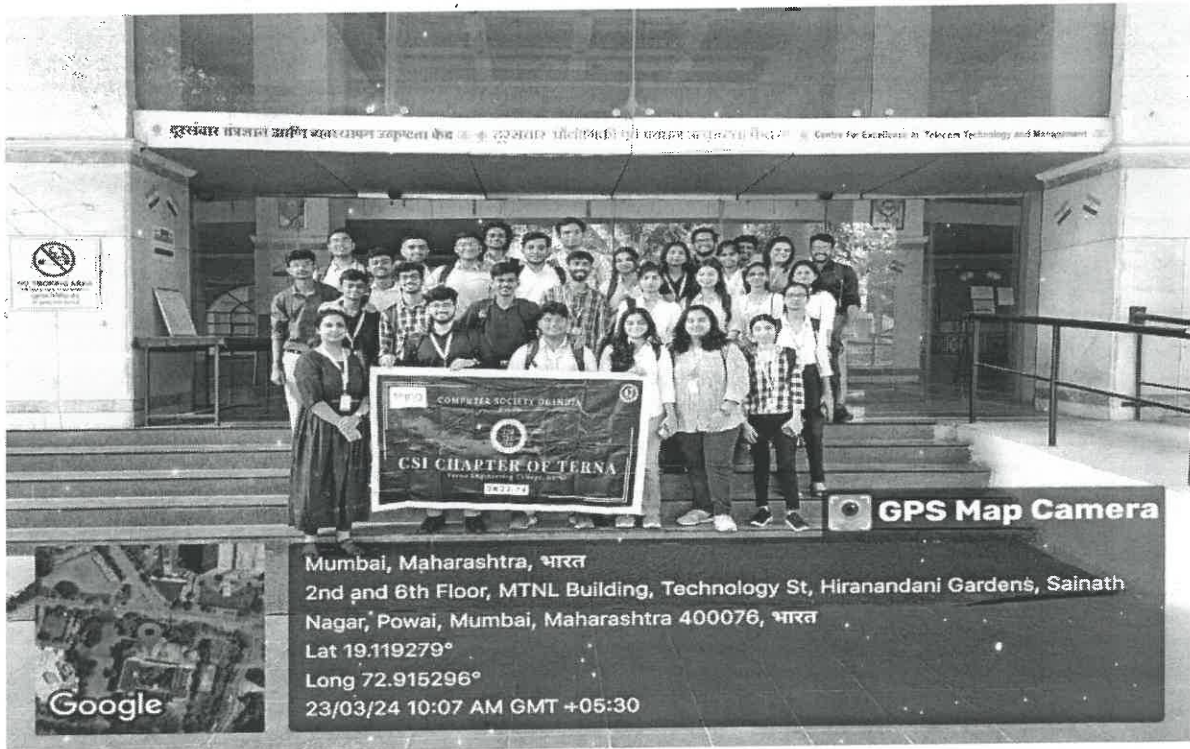

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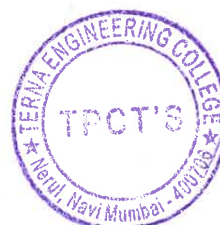
Achievements of the Departments under CSI:

Sr. No	Name of Event	Date of Event
1.	Expert talk on "Data analysis and data science : A must have skills for the 21st century"	04/09/23
2.	Guest lecture on " Mastering web development : strategies, tools and current market trends"	12/09/23
3.	Webinar on Insights into ethical hacking, AI&ML, Java and Web3"	04/02/24
4.	Guest lecture on " Career in Defence forces"	14/02/24
5.	Workshop on "Machine learning with Matlab"	14/03/24
6.	Inauguration of CSI committee	20/03/24
7.	1 Day visit at MTNL powai	23/03/24

Mumbai, Maharashtra, भारत
2nd and 6th Floor, MTNL Building, Technology St, Hiranandani Gardens, Sainath Nagar, Powai, Mumbai, Maharashtra 400076, भारत
Lat 19.119279°
Long 72.915296°
23/03/24 10:07 AM GMT +05:30

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SWOT Analysis

Strengths

1. Total five PhD faculty members in the department and well qualified experienced faculty members.

2. Good Faculties and students Publication.

3. Funded research projects in the department

4 Active students' participation in professional bodies and Technical events.

5. Active participation of faculty members in various committees at University of Mumbai.

Weaknesses

1. The Academic and Industry collaboration can be enhanced further.

2. Lack of Higher Education and entrepreneurship motivation activities.

3. Lack of Alumni involvement in the overall development of the department to be improved.
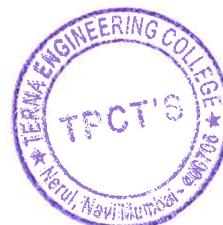
Opportunities

1. Good sport facilities are provided

2. By providing good facilities , resources for innovation and Hackathon activities can be encouraged.

Challenges

1. Improvement in Placement with higher-end packages.

Mechanical Engineering

Introduction

Mechanical Engineering started in 2014 with the intake of 60 seats. The academic team consists of 13 Teaching Faculty members, 04 Technical staff and 01 supporting staff. Two faculty members having PhD qualification. Total student strength of **211** (SE to TE).

Mechanical Engineering is one of the oldest and core branches of engineering. It is rapidly spreading its wings in an interdisciplinary field. Hence, in near future, an increase in the demand of skilled Mechanical Engineers in different sectors/industries is expected. Our goal for undergraduate students is to give them a quality education with the emphasis on Project Based Learning which will be useful to the Industry and Society at large.

The department has well equipped laboratories as per the curriculum with high-end software used in industry. The Machine Shop has received a Center of Excellence certification from Godrej & Boyce. The CNC lab has two Industrial Grade CNC Lathe and Milling Machines. Our students bring laurels by succeeding in various International/National technical competitions. We have a strong culture of encouraging students to understand real life challenges through activities like SUPRA, GO KART etc. The department has active student chapters of professional bodies like SAE, ASHRAE, and MESA.

Vision

To deliver value based quality education to achieve excellence in the field of mechanical engineering to meet technological challenges.

Mission

1. To create an environment that stimulates students to reach their highest potential in academics.

2. To impart value based education for imbibing skills to solve real life problems.

3. To strengthen the association with industry and research organizations to enhance innovation and entrepreneurship.

Head of Department's Message

A hearty welcome to the Department of Mechanical Engineering at Terna Engineering College, Navi Mumbai. Mechanical Engineering started in 2014 with the intake of 60. Later on, it was increased to 120 seats in the year 2017.. The department's vision is to offer value based education and pursue excellence in the field of Mechanical Engineering.

The department has well qualified and dedicated faculty. The department strives to impart knowledge and training of the highest standard. The objective of the department is to prepare students for a successful career in Industry, Research and Academics to meet the needs of growing technology. Our efforts are to develop the ability among students from concept generation to product design and development.

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We encourage the students to work as members of a team on multidisciplinary projects. The Department of Mechanical Engineering provides students with a sound foundation in the mathematical, scientific and engineering fundamentals necessary to formulate, solve and analyze engineering problems and to prepare them for higher studies as well as research.

For the overall development of the students; Department of Mechanical Engineering is associated with the professional bodies such as SAEINDIA, ISHRAE, and ASHRAE. We have an active Mechanical Engineering Students Association (MESA). These clubs organize various activities such as seminars, workshops and competitions to provide knowledge about cutting edge technology to the students. This helps the students to develop skills like Leadership, Team Building, Managerial, and Work ethics with Lifelong learning. Our Students participate in various State and National level technical competitions and win prizes. Students showcase their talent in various sports and intercollegiate events and win prizes. Our graduates are working in various Multinational Companies, Government and Research organizations. The Department has an active Alumni Association that helps in exchange of professional knowledge, seminars, workshops & training courses.

Student Strength

Class	Number of Students
SE	25
TE	61
BE	125

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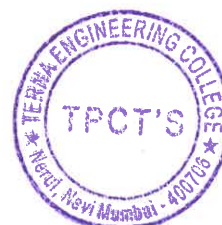
Teaching Staff:

Name	Designation	Qualification
Dr. C. M. Choudhari	HOD & Professor	Ph D
Dr. R. R. Jaware	Professor	Ph D
Prof. S. T. Walunj	Asst.Professor	M E
Dr. M.S. Bembde	Asst.Professor	M E
Prof. M. S. Kavre	Asst.Professor	M E
Prof. L.S. Bhoye	Asst.Professor	M E
Prof. S. P. Bargat	Asst.Professor	M E
Prof. C. N. Deshmukh	Asst.Professor	M E
Prof. Mangesh Nalwade	Asst.Professor	M E
Prof. Jagirdar Faraz	Asst.Professor	M E
Prof. B. A. Mule	Asst.Professor	M E
Prof. V. A. Ajmire	Asst.Professor	M E
Prof.MD Tahsin Akhtar	Asst.Professor	M E

Non-Teaching Staff:

Name	Designation
Mr. S. V. Dhage	Lab Assistant
Mr. D. K. Surwase	Lab Assistant
Mr. Ganesh Choudhari	Lab Assistant
Mr. Ganesh Gavar	Lab Assistant
Mr. B. B. Bhosale	Dept. Clerk
Mr. A.A Kshirsager	Peon

Publications:

Name	Paper Title	Journal	Indexing
Prof. Md. Tahsin Akhtar	Weldability and electrode life determination of resistance spot welding of secondary coated automotive interstitial free steel	Scienxt Journal of Mechanical Engineering & Tech. Vol.-I, Issue-2, pp. 51-68. e-ISSN: 2583-9519	Google Scholar
Dr. M. S. Bembde	Experimental Analysis of Double Pipe Heat Exchanger with Helical Fins.	International Research Journal of Modernization In Engineering Technology And Science e-ISSN: 2582-5208 15/07/2023 Vol 5, Issue 07/50700041194	Google Scholar
Dr. M. S. Bembde	Design and development of IOT Based Sustainable Multifunctional Machine	Sirjana Journal ISSN 2455-1058, Vol. 54, Issue 4, 2024 ID: SRJ23/A419	UGC Approved Journal, Google Scholar, Crossref
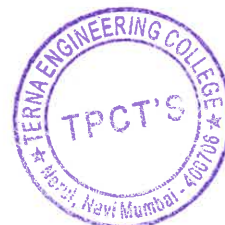
Conferences Attended

Workshops / Seminars/ Webinars/ Courses Attended

| Name	Title	Date	Duration	Venue
Prof. Sharad P. Bargat	Scope of IOT For Industrial Automation	08th to 13th April 2024. FDP	One Week	Datta Meghe College of Engineering, Airoli (Online)
Prof. M. S. Kavre	Digital Twin-Based Predictive Maintenance Approach for Industry 4.0 Using Machine Learning Techniques	4th to 9th December 2023.	One Week	VJTI, Mumbai ATAL/2023/1700721677
Prof. M. S. Kavre	Artificial Intelligence and Machine Learning	01st to 6th January 2024	One Week	MGM'S College Of Engineering And Technology ATAL/2023/1700723012
Prof. M. S. Kavre	"Harmony in Innovation: Navigating Global Business Landscapes through Emerging Technologies and Dynamic Management Strategies,"	3rd to 5th, April 2024.	One Day	Dr. D. Y. Patil B-School, Pune,

Publications by Students

Name	Paper Title	Journal	Indexing
NIL	-	-	-

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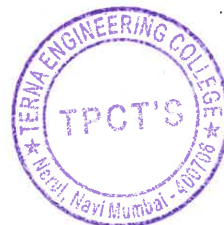
Awards and Recognition

1. Mr Vishwanath Malandkar has been awarded as Mr University in 56 Intercollegiate Youth Festival Organized by the University of Mumbai. (2023-24)
2. Mr. Vishal Gupta secured rank 1 in CNC MILLING category - Maharashtra State Skills Competition / India Skills 2023-24.

Placement/ Higher Study/ Entrepreneur

	Total No of Students	Placed	Range of Package	Entrepreneur	Higher Education
2023-2024	125 (24 students Eligible for placement)	21	1.5 LPA to 6 LPA	NIL	NIL

Placement Graphical Representation:

TERNA ENGINEERING COLLEGE, NERUL
DEPARTMENT OF MECHANICAL ENGINEERING
PLACEMENT DATA

ACADEMIC YEAR	NO. OF STUDENTS PLACED	TOTAL NO. OF STUDENTS	% PLACEMENT	HIGHEST SALARY(LPA)	NAME OF COMPANY
2017-18	38	65	58	3.6	BKT TYRES
2018-19	39	75	52	4.06	SANMAR GROUP
2019-20	30	63	48	3.6	INFOSYS
2020-21	33	136	24	4.5	TCS/CODVITAI
2021-22	38	147	26	6	NEOSOFT TECHNOLOGIES
2022-23	35	53	66	4.45	SANMAR GROUP
2023-24	21	24*	87	6	Hike Education
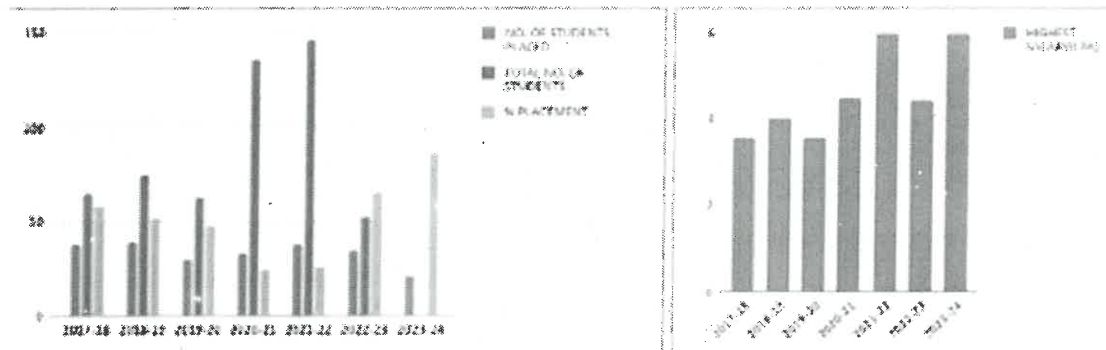
Achievements of the Departments:

1. Rohit Singh secured GATE AIR 26 in GATE 2024 Exam.
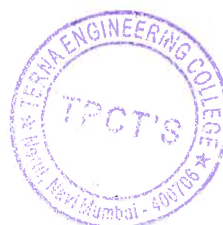
SWOT Analysis

Strengths:

1. Well-qualified and experienced faculty members
2. Faculties with Publication and Patents Granted
3. Funded research projects in the department
4. Excellent geographical location
5. Active students participation in national events

Weaknesses:

1. The Department and Industry Interface can be enhanced further.
2. Industry based Major projects need to be enhanced further.
3. Lack of departmental structured entrepreneurship promotional activities.
4. Participation of departmental alumni in the overall development of the department to be improved.

Opportunities:

1. College has good fame in the city as a good engineering college in Mumbai so can attract students for admission to core branches.
2. Good sport facilities are provided
3. By providing good facilities and resources research activities can be encouraged.

Challenges:

1. Retention of faculties.
2. Inclination of students to opt for Non-mechanical branches.
3. Lack of basic knowledge in some subjects creates a problem in the progress of the curriculum.
4. Placement of Students in the Core industry has become a major challenge.

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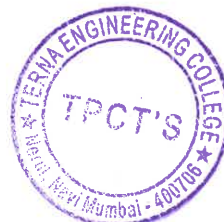
MECHATRONICS ENGINEERING

Introduction

Our department at Terna engineering college started in 2015 and is the first department to offer a bachelors degree in Mechatronics Engineering, among the state university affiliated colleges in Maharashtra.

Mechatronic systems integrate electrical/electronics, mechanical, and computer science/IT disciplines, permeating everyday life through products like autofocus cameras, electronic washing machines, and printing devices. Modern vehicles feature mechatronic components such as electric power steering and engine management systems, while advanced systems like medical scanners and surgical robots are becoming increasingly prevalent.

Mechatronics not only enhances product design but also revolutionizes intelligent manufacturing with servo controllers optimizing process parameters and CNC machines improving flexibility and quality in factories. This interdisciplinary field empowers engineers to innovatively tackle real-world challenges across diverse industries.

Vision

To pioneer engineering education by inculcating an interdisciplinary approach to system design and cultivate engineers and technology managers for the future industry and society.

Mission

To enable our students to apply analytical skills and technical knowledge for finding creative and optimal solutions to real life problems using an interdisciplinary approach.

Head of Department's Message

I am delighted to share exciting updates from the Department of Mechatronics Engineering at Terna Engineering College. We have made significant strides in setting up our laboratory facilities to align with the latest advancements and industry demands.

Our Virtual Instrumentation Lab features state-of-the-art equipment utilizing LabVIEW, enabling students to delve into advanced techniques in data acquisition, analysis, and control systems development. Our Pneumatic and Hydraulic Lab has kits from SMC, offering hands-on experience in designing and troubleshooting pneumatic and hydraulic systems, crucial for modern industrial applications. Our Instrumentation and Control Lab comprehensive training in switches, valves and control systems, equipping students with essential skills for precision engineering. Our CNC Lab has been setup with industrial CNC machines from Jyoti and a Digital CNC Simulator from DoNC, allowing students to master computer numerical control programming and operation in a realistic manufacturing environment.

Additionally, department faculty have contributed to the introduction of a new syllabus of Mechatronics Engineering at Mumbai University starting in 2019, designed to incorporate the latest industry trends and technological advancements. This updated curriculum will empower our students with the knowledge and skills required to excel in the dynamic field of mechatronics engineering.

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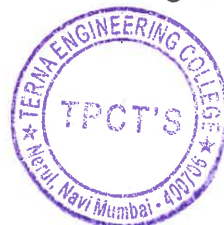
Student Strength

Class	Number of Students
SE	47
TE	56
BE	65

Teaching Staff

Name	Designation	Qualification
Prof. Vikram Vyawahare	HOD	M.E. (Mechatronics), ME (Mechanical)
Dr, Manmohan Singh Bhatia	Professor	PhD (Power Electronics)
Dr. Raghvendra Upadhyay	Associate Professor	PhD (Mechanical)
Prof. Mayur Bembde	Assistant Professor	PhD (Mechanical)
Prof. Rahul Kulkarni	Associate Professor	M.Tech (Production Engineering)
Prof. Abhijit Chate	Assistant Professor	ME (Machine Design)
Prof. Dattatraya Bhanudas Shinde	Assistant Professor	ME (Mechatronics)
Prof.Rajkumar Ashok Patil-Tekale	Assistant Professor	M.E. (Design Engineering)
Prof. Vrushali Walanj	Assistant Professor	ME (EXTC)
Prof. Kiran Awate	Assistant Professor	ME (Thermal Engineering)
Prof Chetan Deshmukh	Assistant Professor	ME (Mechanical)
Prof Vaibhav Ajmire	Assistant Professor	ME (CAD/CAM and Robotics)
Prof. Sushant Satish Savant	Assistant Professor	M Tech (EXTC)

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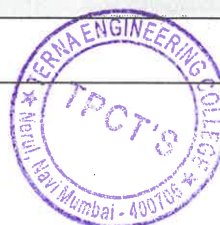
Non-Teaching Staff

Name	Designation
Mrs. Nivedita Ohal	Lab Assistant
Mr. Vaibhav Kamble	Lab Assistant
Mr. Ladke	Peon

Workshops / Seminars/ Webinars/ Courses Attended

Name	Title	Date	Duration	Venue
Dattatraya Shinde	AI in Supply Chain Management of Agriculture Produce	08/01/2024 to 13/01/2024	6 Days	Thadomal Shahani Engineering College, Mumbai
Dattatraya Shinde	Hardware Integration with Matlab and Simulink	05/03/2024	1Days	Workshop Organized By Mechatronics Engineering Department at Terna Engineering College
Vikram Vyawahare	Hardware Integration with Matlab and Simulink	05/03/2024	1Days	Workshop Organized By Mechatronics Engineering Department at Terna Engineering College
Rahul Kulkarni	Hardware Integration with Matlab and Simulink	05/03/2024	1Days	Workshop Organized By Mechatronics Engineering Department at Terna Engineering College

Chairperson/Judge/Resource Person Activities

| Name	Activity	Title	Venue
Prof Vikkram S. Vyawahare	"8th International Conference on Engineering Research and Innovations (ICERI-2023)"	SESSION CHAIR	Online

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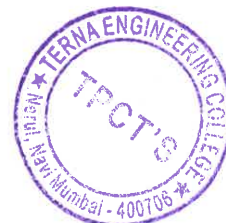Nerul, Navi Mumbai - 400 706

Placement/ Higher Study/ Entrepreneur

Academic Year	Total No of Students	Placed	Range of Package	Entrepreneur	Higher Education
2023-24	31	10	1.68 LPA – 10 LPA	0	0

Graphical Representation:
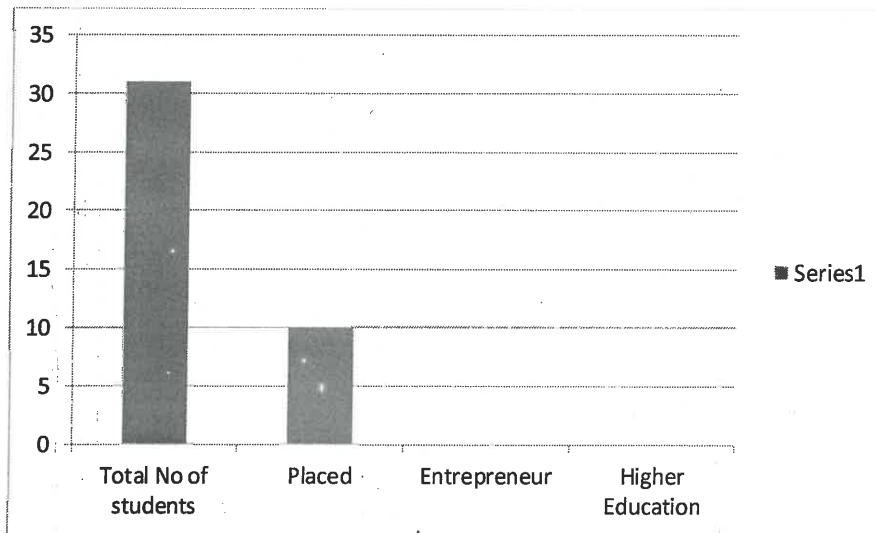
Achievements of the Departments:

Sr. No	Event Name	Student Name	Learning Mode	Date	Position
1	ABU Robocon 2024		Offline	12-14 July 2024	Finalist
2	Inter zonal weight lifting tournament	Mithil Chaudhari	Offline		Second
3	Flipcart Grid 5 Robotics Challange		Offline		Finalist

SWOT Analysis

Strengths

- **Advanced Laboratory Facilities:** The department boasts state-of-the-art labs such as Virtual Instrumentation using LabVIEW, Pneumatic and Hydraulic Lab with SMC kits, Instrumentation and Control Lab, and a CNC Lab equipped with industrial machines and simulators.

- **Updated Curriculum:** The introduction of a new syllabus in 2019 reflects responsiveness to industry trends and technological advancements, ensuring students receive relevant and up-to-date education.

- **Experienced Faculty:** The department has a team of experienced and knowledgeable faculty members who bring industry experience and academic expertise to the classroom.

- **Industry Collaboration:** Partnerships with industry leaders like B&R, SMC, Jyoti, and DoNC indicate strong industry collaborations, providing students with exposure to real-world applications and cutting-edge technologies.

- **Placement record** of placing students in reputed organizations like B&R Automation, Godrej, Mahindra etc.

- **Atmosphere promoting innovation** that has enabled students to excel in both corporate and academic contests earning them several accolades.

Weaknesses

- Lack of awareness among the students and employers regarding the value of a Mechatronics Engineering Degree.

- Ensuring consistent availability of resources, such as lab materials, software licenses, and maintenance of equipment, is a challenge.

Opportunities

- Branch has unique appeal and is available in less than 20 other colleges in the state of Maharashtra.

- **Research and Development:** Encouraging research initiatives could enable innovation within the department, potentially leading to patents, publications, and collaborations with industries and research organizations.

- **Skill Development Programs:** Offering specialized workshops, certification courses, or collaborations with industry for internships could enhance students' practical skills and employ-ability.

- **Industry Partnerships:** Strengthening existing partnerships and establishing new ones can facilitate guest lectures, industry visits, and joint projects, enriching the learning experience.

Challenges

- **Competition:** The presence of other well-established engineering institutions in Maharashtra could pose a challenge in terms of attracting top-tier faculty and students.

- **Technological Obsolescence:** Rapid advancements in technology necessitate continuous updates to curriculum and infrastructure to ensure relevance and competitiveness.
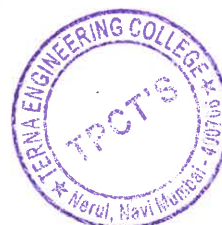
ELECTRONICS ENGINEERING

Introduction

The Electronics Engineering Department, since its inception in 1991, has achieved great recognition in the field of technical education. The department offers B.E. in Electronics Engineering, a four-year degree program with an intake of 60 students. The department also runs a research program (Ph.D. Electronics) with an intake of 10 research scholars. The National Board of Accreditation accredited the department in 2016 and re-accredited in 2019. It comprises highly qualified and professionally skilled faculty members with a good record of published work. The faculty members organize training programs in the various areas of engineering such as embedded systems, VLSI and networking.

The department keeps up to date with the continuous changes in the field of technology and encourages the students to keep track of the constantly changing world. The faculty members and students are involved in organizations like the IEEE, IETE. Projects done by department students are appreciated at various national level competitions and exhibitions like Robocon. Experts from the industry are frequently invited to conduct seminars on topics on various subjects.

Vision:

To be recognized by the society at large as an excellent department offering quality education in Electronics Engineering.

Mission:

To continuously strive for the total development of students by educating them in "State-of-the-Art" technologies & helping them to imbibe professional ethics and Societal Commitments, so that they emerge as competent professionals to meet the global Challenges.

Head of Department's Message:

As the Head of the Department of Electronic Engineering, I am delighted to share some insights about this exciting and enhancing field.

Electronic Engineering is a highly diverse and ever-evolving field that deals with the design, development, and maintenance of electronic circuits and systems. The field's range is extensive, encompassing anything from the creation of consumer electronics, telecommunications networks, and medical devices, to the design of microprocessors and semiconductors. The world has been revolutionized by electronic engineering, and its applications are ubiquitous in our daily lives.

The versatility that electronic engineering offers is among its many noteworthy benefits. Graduates of this program can pursue a range of careers in various sectors, including research and development, manufacturing, telecommunications, aerospace, and the automotive industry. Furthermore, electronic engineering graduates can also

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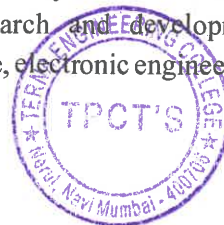
opt for a career in academia, where they can contribute to the development of new technologies and mentor future generations of engineers.

The job opportunities in electronic engineering are vast and varied. Due to the increased use of electronic systems in all sectors, there is a high demand for electronic engineers not only in Indian industries but foreign industries as well. Electronic engineers can work in design and development of electronic systems, manufacturing, testing and maintenance of electronic equipment, and in research and development.

In conclusion, Electronic Engineering is a highly sought-after field that offers significant job opportunities and career growth. As a department, we are committed to providing the best possible education and training to our students to ensure they are ready to tackle the challenges of this dynamic and promising field.

Student Strength:

Class	Number of Students
SE	45
TE	37
BE	17

Teaching Staff:

Name	Designation	Qualification
B. G. Hogade	Professor	PhD
M.B. Limkar	Assistant Professor	M.E.
K. S. Gorde	Assistant Professor	M.E., PhD Pursuing
S. M. Kadam	Assistant Professor	M.E.
R.B. Waghmare	Assistant Professor	M.E.
P.C. Kamble	Assistant Professor	M.E., PhD Pursuing
A.A.Deshmukh	Assistant Professor	M.E., PhD Pursuing
V. A. Pande	Assistant Professor	M.E.
R. T. Thorat	Assistant Professor	M.E.

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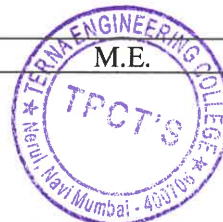
V.S.Chaudhari	Assistant Professor	M.E.

Non-Teaching Staff:

Name	Designation
Mr. Hanumant Dange	Lab Assistant
Mr. Satish Pawar	Lab Assistant
Mr. Vilas Lokhande	Peon

Publications:

Name	Paper Title	Journal/ Conferences	Indexing
Hogade Balaji Gundappa	2.4 GHz Wearable Cotton Antenna as temp sensor	International journal of COMADAN Volume 26 No-3, July 23	Scopus
	2.4 GHz Compact textile Antenna For Body wear Application and Monitoring of Health Parameter	International journal of COMADAN Volume 13 No-5, Oct 23	Scopus
	IoT based Smart Hydroponic Monitoring system	Journal of Emerging Technologies and Innovative Research, April 2024, Volume 11, Issue 4, ISSN-2349-5162	Scopus
Hogade Balaji Gundappa	Various Techniques of Cryptanalysis, Their Challenges And Remedial Solutions	2023 3rd Asian Conference on Innovation in Technology, IEEE 25-27 Aug. 2023, Date Added to IEEE Xplore: 10 October 2023 Electronic ISBN:979-8-3503-0228-8, ISBN:979-8-3503-0229-5	Scopus
Gorde Kanchan Sudhir	Multipurpose Agricultural Machine for Smart Farming	Journal of University of Shanghai for Science and Technology Vol 26, no.4 April 2024 ISSN: 1007-6735	Scopus indexed UGC Care 2 journal
Kadam Shailaja Mahesh	Indoor Mapping with RFID	SIRJANA JOURNAL, Vol 54, Issue 4 2024, ISSN 2455 1058	UGC Approved Journal
Waghmare Raosaheb Bhimrao	Smart Green Electric Vehicle Charging Station	International Journal Of Novel Research And Development, Volume 12 Issue IV Apr 2024, ISSN: 2321-9653	
P. C. Kamble	Sensing Health: Exploring Issues, Scope, and Future of Smart Wearable Sensors in Healthcare	International conference on computing for sustainable global development INDIAcom 2024, March 24 ISBN:979-8-3503-9450-4	
Deshmukh Amit	Survey Paper on Different Techniques for Reducing Mutual	SIRJANA JOURNAL, Feb 2024, Volume 54 Issue 2, ISBN:2455-1058	UGC CARE
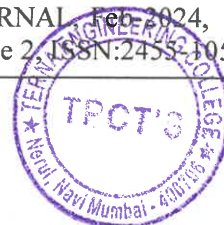
Arjun	Coupling between MIMO Antennas			

Workshops / Seminars/ Webinars/ Courses Attended:

Name	Title	Date	Duration	Venue
Gorde Kanchan Sudhir	Deep Learning	11-09-2023 to 15-09-2023	5 days	NITTTR, Chandigarh (Online mode)
Gorde Kanchan Sudhir	AI Evaluation	22-01-2024 to 29-01-2024	8 days	TechSaksham (Online Mode)
Gorde Kanchan Sudhir	Simulators for ECE Lab	11.03.2024 to 15.03.2024	5 days	NITTR, Chandigarh (Online Mode)
Deshmukh Amit Arjun	Antenna Design Techniques and Tools	11-09-2023 to 15-09-2023	5 days	NITTTR, Chandigarh (Online Mode)
Deshmukh Amit Arjun	Research Paper Writing	21-08-2023 to 26-08-2023	5 days	BPIT, RFI-CARE
Deshmukh Amit Arjun	AI in Supply Chain Management of agriculture Produce	08-01-2024 to 13-01-2024	5 days	Thadomal Shahani Engg. College, Mumbai
Hogade Balaji Gundappa	Quality assurance in Academic	16-11-2023 to 22-11-2023	7 days	Smt. Indira Gandhi College of Engg., Ghansoli

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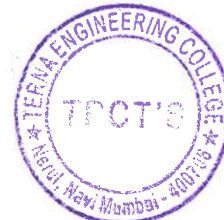
Publications by Students:

S.N.	Paper	Students Name	Publisher and Year
1	Multipurpose Agricultural Machine For Smart Farming	Rohit Salunkhe, Utkarsh Mishra, Hinge Tejal, Shreyas Palshikar	Journal of University of Shanghai For Science & Technology, ISSN:1007-6735 Volume 26, Issue 4, April- 2024
2	3D object Scanning Machine	Vikas Gupta, Amrit Kumar, Suraj Sharma Shruti Dikale	IRJMETS,e-ISSN:2582- 5208 Volume 06, issue 4.April- 2024
3	Smart Electrical Vehicle Charging Station	Prathmesh Gound, Bhavesh Lad, Anvit, Harshada	IRJET, e-ISSN:2395-0056 Volume 10 issue 3, March- 23
4	Indoor Mapping Using RFID	Atharva Chandorkar, Shivam Mishra, Vinit, Anurag	Sirjana Journal, Volume 54, issue 4 ISSN:2455-1058
5	Survey on hand gesture controlled Biomedical Wheelchair Components, design, and Challenges	Vedant Helwatkar, Vaishnavi Shirshkaar, Shwetali Patil, Manoj Ghadi,	Sirjana Journal, Volume 54, issue 3 ISSN:2455-1058
6	To Design and Develop the MIMO Antenna Using DGS method	Shubham Arekar, Chetan More, Ashitosh Shirame, Ashlesha Jagtap	Sirjana Journal, Volume 54, issue 3 ISSN:2455-1058

Chairperson/Judge/Resource Person Activities:

Name	Activity	Title	Venue
Dr. B.G.Hogade	Session Chair	8th International Conference on Engineering Research and Innovations, Sept 21-22, 2023	Terna Engineering College, Navi Mumbai

Awards and Recognition:

1. **Students Awards**

Purva shivram Kinare Participated in 36th National Games (Yoga Competition) held at Ahmedabad, Gujrat and won Gold medal in artistic group event, Silver medal in artistic pair, and Bronze medal in artistic single event.

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2. **Faculty Awards**

Name	Award/Recognition	Description
Kanchan S. Gorde	Recognized as a Reviewer at Scopus Indexed Journal -Journal of Advances in Information Technology	Journal of Advances in Information Technology, October 2024

Placement/ Higher Study/ Entrepreneur:

Year	Total No of Students	Placed	Range of Package	Entrepreneur	Higher Education
2023-2024	28	6	3.00 L to 4.00 L	Nil	1

Achievements of the Departments:

Sr. No	Name Of Students	Competition	Achievements	Year
1	Purva Shivaram Kinare	4th State Yogasana Championship, Maharastra	Gold Medal	2023-24
2	Purva Shivaram Kinare	4th State Yogasana Championship, Amroha, Uttar Pradesh	Gold Medal	2023-24
3	Deep Naik Aditya Khodade Anjali Yadav	" Quintet"working in TEC, E Yantra Robotic Lab Bharti Vidyapeeth college of Engineering, Navi mumbai	1st Prize Won a cash Prize of Rs 7000/-	2023-24
4	Deep Naik Aditya Khodade Anjali Yadav	BITS , Pilani, Hyderabad	1st Prize Won a cash Prize of Rs 8000/-	2023-24

2. SWOT Analysis

Strengths:
1. Highly Experienced and Well-qualified faculty members
2. Faculty have Publication in reputed journals and published Patents
3. Well established department
4. Students participate in national sports competitions and academics.
5. Faculty pursuing Ph. D.

Weaknesses:
1. Lack of Industry Institute Interaction
2. Students with low CET and JEE score
3. Lack of entrepreneurship promotional activities.
4. Lack of Consultancy work
5. Participation of alumni in the overall development of the department is missing.

Opportunities:
1. College is one of the well-established engineering colleges in Mumbai so can attract students with higher CET and IEEE Score for admission.
2. Department is well established with good infrastructure hence students will get more opportunities to gain quality education
3. Looking at the current trend and growth in electronics and Semiconductor Industry the possibilities of placement are increased for Electronics Engineers.

Challenges:
1. Getting students admission with good CET and JEE score.
2. Students opt for Computer related branches and need to be attracted to core engineering

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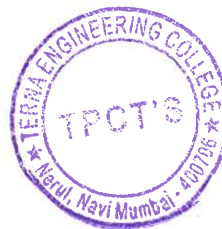TERNA ENGINEERING COLLEGE
Nerul, Navi Mumbai - 400 706

branches like Electronics Engineering.

3. Involvement of Industry Experts in Curriculum development.
4. Improving students' fundamental Knowledge to attract placement in core industries.

BACHELOR OF DESIGN

Introduction

The Bachelor of Design (B. Des.) program at Terna Engineering College, Navi Mumbai, is strategically designed for highly creative and motivated students who aspire to be pioneers in the Design industry. Our program commenced in 2022 with a carefully selected intake of 30 students and continues to witness a surge in applications.

The program is geared towards practical and applied research which accelerates design related knowledge, with approaches to defining and solving problems resulting in high-quality outcomes. The program is four-years long which offers building the foundation of design in year one and developing expertise in your chosen field in years 2 to 4. Considering we build a thorough foundation in design in year one, our program is also open to students from arts and commerce backgrounds. We can facilitate their admission process given they appear for the CET exams with promising results that meet our requirements.

We also ensure that all our students, including the ones from arts and commerce backgrounds, are given unconditional support throughout the program and are determined to assist them to our maximum ability. We foster creativity and explorative experiences for students in order to enable businesses and industries to overcome traditional and old-fashioned ideas. Design has a multi-faceted application in the development of cities, buildings, transport, bridges and landscapes to name a few. Designers are innovators who enhance the way we live and interact with the world around us.Our department welcomes you to the world of learning design in an enriching environment!

Vision

To aspire to lead in the field of design education, preparing innovative, environmentally and socially responsible citizens who positively impact society.

Mission

1. To empower students to address concerns of the 21st century and make them global design professionals.

2. To encourage students by offering theoretical and practical Design knowledge in diverse areas along with commitment to society.

3. To enable students to handle the complexities of modern requirements and encourage exploration, innovation and creative experimentation in shaping the living environment.

Head of Department's Message

I proudly welcome you to the Department of Design at Terna Engineering College, Navi Mumbai. As The Head of the Design Department, I take a privilege to invite you to the world of creativity in Design, where we provide technologically advanced resources for a fulfilling learning experience. We have established ourselves as one of the few, most recognised departments in the state of Maharashtra through our state-of-the-art infrastructure and

facilities. Unlike other universities, our course is a four-year intensive program which focuses on varied designs including industrial design.

The courses offered by the Design Department will equip the designers with holistic knowledge and equated perspective of designing. The ultimate aim of the courses is to catalyse responsible designers who will serve the country and society through innovation, expertise and research. Apart from the academic curriculum, we offer various other activities to encourage students to showcase their talent and creativity through diversified art and illustrations.

It is with immense pleasure and pride that I undertake to lead a team of intellectuals who are constantly striving to strengthen the department of design every year. Our carefully selected faculty are geared to impart their qualitative knowledge and prior experiences to facilitate engaging learning experience. They are constantly trying to transfer their skills and resources to their pupils in order to ensure they are confident to take on challenges and succeed to their best potential.

The curriculum and syllabus is designed meticulously in order to provide pragmatic skills development to blossom as a successful designer along with building entrepreneurial skills, to succeed independently. We also facilitate internship opportunities to prepare them for real-world projects and contribute to first-hand experience in the design industry. Me and my faculty, collectively look forward to admitting a pristine batch of students every academic year. Along with providing academic excellence, our campus is surrounded with enchanting flora & fauna and is bustling with sports, cultural and co-curricular activities.

- Dr. Sachin K Kamble, Ph.D. (IIT Bombay)

Student Strength

Class	Number of Students
SE	08
TE	04
BE	--

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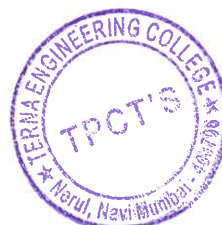
Teaching Staff

Name	Designation	Qualification
Dr Sachin K Kamble	HOD & Professor	Ph.D.
Mr. Sunil Ningule	Asst. Professor	M.F. A
Mr. Sumit Shinde	Asst. Professor	M.E.

Non-Teaching Staff

Name	Designation
Mr. Ravi Bhadke	Lab Assistant
Mr. Wavekar Chandrashekhar	Peon

Publications

Name	Paper Title	Journal	Indexing
Dr Sachin K Kamble	"Assisting over thinkers to reframe cognitive processes ",. 11th International Conference on Transformations in Engineering Education (ICTIEE 2024), KLE Technological University, Hubballi, India, January 2-4, 2024.	Journal of Engineering Education	SCOPUS
Dr Sachin K Kamble	"Computer based Concept maps as a tool for assessment for meaningful learning", 11th International Conference on Transformations in Engineering Education (ICTIEE 2024), KLE Technological University, Hubballi, India, January	Journal of Engineering Education	SCOPUS

Chairperson/Judge/Resource Person Activities

Name	Activity	Title	Venue
Dr Sachin K Kamble	Session Chair	8th International Conference on Engineering, Research and Innovations (ICERI-2023)	Terna Engineering College

SWOT Analysis

Strengths-
Faculty from premier institutes and various disciplines

6. 1st institute in University of Mumbai having Bachelor design course

7. Active students participation in national events

8. Faculty from premier institutes and various disciplines

Weaknesses-
More scope for lab developments

Opportunities-
By providing good facilities and resources research activities can be encouraged

Challenges-
To enhance awareness about Bachelors of Design Course in MAHARASHTRA

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Department of Civil Engineering

Introduction

While living in a time of technological advancement and IT revolution, the field of civil engineering nevertheless adheres to its historical foundations. This area of engineering deals with all of society's and the general public's needs, such as water and shelter, bridges and roads, dams and tunnels, environmental pollution, power plants, and other industrial projects. As long as society continues to expand and develop, the civil engineering profession will continue.

The Department of Civil Engineering was established in the year 2017. Apart from academic syllabus, we provide intensive training, internships, expert talks, site visits, etc. to make the industry ready. We are associated with American Concrete Institute, Institution of Engineers (INDIA), Bentley Education, students are benefitted by these organisations by scholarships and free software licences.

Vision

To be a Centre of excellence for imparting quality education in Civil Engineering encompassing Ethical Environmental and Economical aspects of the Society.

Mission

To provide highly competent Civil Engineers to the society and industry with effective teaching and research experience.

Head of Department's Message

We are working diligently to meet the objective of giving students a blend of academic and practical experiences that will enable them to meet a range of societal requirements in a professional and cost-effective manner. We adhere to a curriculum that has been approved by the University of Mumbai. The main goals of teaching and learning are to convey technical knowledge, foster problem-solving abilities, and foster the development of new technologies that may benefit society. A wide range of skill-based training courses and project-based learning are offered by the department and institute, both of which may contribute to the development of highly skilled civil engineers. The department's professors have outstanding academic, research, and professional credentials. In addition to serving on the editorial boards of national and international journals, reviewing technical articles for journals on a regular basis, and planning international symposia and conferences, a number of faculties have received prestigious awards at both the national and international levels. Our goal is to give the greatest technological solutions in line with our vision and mission, creating highly skilled civil engineers that contribute to the development of the country.

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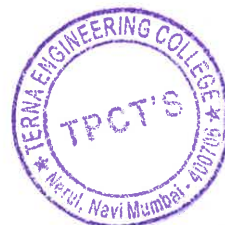
Student Strength

Class	Number of Students
SE	59
TE	65
BE	71

Teaching Staff

Name	Designation	Qualification
Dr. Priyanka Salunkhe	Associate Professor	PhD (Structural Engineering)
Mr. Mate Ashok	Associate Professor	ME (Environmental Engineering)
Mr. Maghrabi Jamaluddin	Assistant Professor	ME (Structural Engineering)
Mr. Kawale Agarchand	Assistant Professor	ME (Water Management Engineering)
Mrs. Vaishali Kishan	Assistant Professor	ME (Structural Engineering)
Mrs. Baviskar Sonali	Assistant Professor	ME (Environmental Engineering)
Mr. Tandekar Ritesh	Assistant Professor	M. Tech (Environmental Engineering)
Mr. Sonawane Pradeep	Assistant Professor	ME (Structural Engineering)
Mr. Gangani Dharmesh	Assistant Professor	ME (Structural Engineering)
Mrs. Patil Poonam	Assistant Professor	ME (Construction Engineering & Management)
Mrs. Kulkarni Bhakti	Assistant Professor	ME (Environmental Engineering)
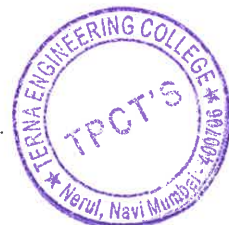
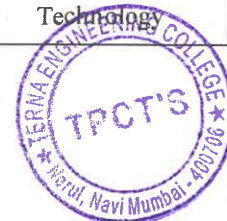## Non-Teaching Staff

Name	Designation
Mrs. Desai Manasi	Department Clerk
Mr. Ramkrishna Patil	Lab Assistant
Mr. Shendge Balaji	Peon

Publications

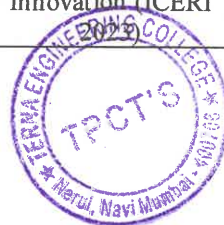| Sr. No.	Faculty Name	Student Name	Title of Paper	Name of Journal/Conference	Scopus/ UGC
1	Ritesh Tandekar & Pradip Sonawane	Kartik Siddamal, Yogesh Malvani	Experimental Investigation and Effect of Activated Charcoal on Textile Waste Water	Journal of Technology	Scopus
2	Priyanka Salunkhe & Ritesh Tandekar	Rohit Bedekar, Hrishikesh Dongare, Rohan Parab & Sahil Wayal	Review Paper on Design of Eco-Friendly Detachable Toilet System Using Ferro Cement Concrete	Journal of Technology	Scopus
3	Priyanka Salunkhe & Pradip Sonawane	Vijay Dabhade, Digvijay Bhusara, Anurag Ambre, Zaid Dhansay	Review paper on Experimental Investigation of castellated Beam, with Different Openings.	Journal of Technology	Scopus
4	Priyanka Salunkhe & Dharmesh Gangani	Palash Patel, Pranav Khedkar, Hasmita Chaudhari, Aishwarya Chavan	Review Paper on Design and Modelling of Interlocking Bricks for Strengthening of Wall	Journal of Technology	Scopus
5	Jamaluddin Maghrabi	Palash Patel, Vijay Dabhade, Digvijay Bhusara, Pranav Khedkar	Comparative Study of Industrial Building with And Without Bracing	Journal of Technology	Scopus
6	Priyanka Salunkhe & Poonam Patil	Tanishq Kharat, Sahil Singh, Sahil Mahadik, Saurabh Gawde	A Review on Effect of Magnetic Water on Properties of Concrete.	Journal of Technology	Scopus
7	Priyanka Salunkhe & Ritesh Tandekar	Mansi Khandekar, Rohit Shelke, Siddhi Gharat	Review Paper On Uses Of Titanium Dioxide For The Purification Of Industrial Waste Water	Journal of Technology	Scopus
8	Priyanka Salunkhe	Kartik Siddamal, Yogesh Malvani,	Review Paper on Experimental Investigation of Ultra High-Performance	Journal of Technology	Scopus

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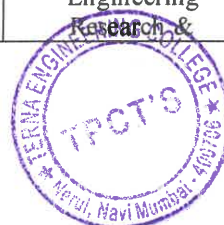TERNA ENGINEERING COLLEGE
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		Krutika Sawant, Shweta Chavan	Fibre Reinforced Concrete Using Shape Memory Alloy Fibres		
9	Vaishali Kishan	Tejas Suryavanshi, Sahil Patil, Rushikesh Mohite, Anjali Bhusara	Effect of High Temperature on Self Healing Concrete	Journal of Technology	Scopus
10	Ritesh Tandekar	Keshar Lawane, Sakshi Jadhav, Kajal Gaikar, Shivani Pomendkar	Waste water management for small village by MBR Method	International journal of research in Engineering and Science	UGC
11	Jamaluddin Maghrabi	Pranjal Mukherjee, Vismay vinoy, Nilesh Waghmare, Shubham Prasad	Review paper on Analysis, Design & Cost estimation of RCC & Steel Chimney	International journal of scientific research in engineering & management	UGC
12	Pradip Sonawane	Rohit Matekar, Srushti Mali, Akshata Hotkar & Satyjeet Dubey	A Review Paper on Experimental Investigation of Stabilized Mud Blocks By Partial Replacement of Clay With Cement	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference
13	Dr. Priyanka Salunkhe & Ritesh Tandekar	Rohit Bedekar, Hrishikesh Dongare, Rohan Parab & Sahil Wayal	Review Paper on Design of Eco-Friendly Detachable Toilet System Using Ferro Cement Concrete	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference
14	Dr. Priyanka Salunkhe & Dharmesh Gangani	Palash Patel, Hasmita Chaudhari, Pranav Khedkar, Aishwarya Chavan	Design and Modelling of Interlocking Bricks for Strengthening of Wall	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference
15	Sonali Baviskar	Brijesh Duduka, Aditya Jadhav, Kalpesh Badgujar	Design of Irrigation System for Village Using Storm Water Harvesting Technique In Water Gems Software	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference
16	Jamaluddin Maghrabi	Sakshi Mane, Shubhangi Phadtare, Akshata Hotkar, Srushti Mali	Comparative Analysis of RCC and Steel Structure	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference
17	Dr. Priyanka Salunkhe & Ritesh Tandekar	Mansi Khandekar, Yash Bhosale, Rihit Shelke, Siddhi Gharat	Review Paper on Uses Of Titanium Dioxide For The Purification on Industrial Waste	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference

				8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference
18	Jamaluddin Maghrabi, Ritesh Tandekar	Dhanshree Patil, Ankit Singh, Sahil Mhatre, Vaibhav Gholap	Experimental Investigation of Plastic and CNS Soil in The Production Of Brick and Paver Blocks	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference
19	Dr. Priyanka Salunkhe & Pradip Sonawane	Vijay Dabhade, Digvijay Bhusara, Anurag Ambre, Zaid Dhansay	Experimental Investigation of castellated Beam, with Different Openings.	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference
20	Dr. Priyanka Salunkhe & Dharmesh Gangani	Keshar Lawane, Sakshi Jadhav, Kajal Gaikar, Shivani Pomendkar	Use of Demolition Brick and Masonry Wall to Improve the CBR of Black Cotton Soil	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference
21	Dr. Priyanka Salunkhe	Kartik Siddamal, Yogesh Malvani, Krutika Sawant, Shweta Chavan	Review Paper on Experimental Investigation of Ultra High-Performance Fiber Reinforced Concrete Using Shape Memory Alloy Fibers	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference
22	Dr. Priyanka Salunkhe	Komal Gondke, Sagarika Koli, Sanika Bohir, Sharv Mhatre	Review Paper on Experimental Performance of Ultra High-Performance Concrete Using Shape Memory Alloy Fibres	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference
23	Sonali Baviskar	Aman Pathak, Shivani Pomendkar, Aditya Sahasane, Sumit Patil	Review Paper on Water Distribution Network Planning and Design Using Watergems	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference
24	Dr. Priyanka Salunkhe, Poonam Patil	Tanishq Kharat, Sahil Singh, Sahil Mahadik, Gawade Saurabh	A Review on Effect of Magnetic Water on Properties of Concrete.	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference
25	Dr. Priyanka Salunkhe, Poonam Patil	Tejashree Pawar, Parth Chougule, Shubham Chakor, Ashok Koppula	A Review Paper on Concrete Block by Partial Replacement of Coarse Aggregate by Steel Slag	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference
26	Prof. Vaishali Kishan	Pratik Gaikwad, Nimish Loke, Kaustubh Panpaliya	Experimental Study on Replacement of Cement with GGBS and Fine Aggregate with Glass Powder	8th International conference on Engineering Research &	International Conference

|				Innovation (ICERI 2023)	
27	Prof. Pradip Sonawane & Ritesh Tandekar	Rohit Bedekar, Hrishikesh Dongare, Rohan Parab & Sahil Wayal	Experimental Investigation of Strength Improvement by Partial Replacement of Cement by Alccofine in Concrete	Journal of Advanced Cement & Concrete Technology	UGC
28	Pradip sonawane & Jamaluddin Maghrabi	Rohit Matekar, Srushti Mali, Akshata Hotkar & Satyjeet Dubey	A Review Paper on Experimental Investigation of Stabilized Mud Blocks By Partial Replacement of Clay With Cement	Journal of Structural Engineering, its Applications and Analysis	UGC
29	Dharmesh Gangani	Keshar Lawane, Sakshi Jadhav, Kajal Gaikar, Shivani Pomendkar	Use of Demolition Brick and Masonry Wall to Improve the CBR of Black Cotton Soil	International Journal of Research in Engineering and Science (IJRES)	UGC
30	Pradip sonawane	Rohit Matekar, Srushti Mali, Akshata Hotkar & Satyjeet Dubey	A Review Paper on Experimental Investigation of Stabilized Mud Blocks By Partial Replacement of Clay With Cement	International Journal of Research and Analytical Reviews (IJRAR)	UGC
31	Ritesh Tandekar	Dhanshree Patil, Ankit Singh, Sahil Mhatre, Vaibhav Gholap	Experimental Investigation of Plastic and CNS Soil in The Production Of Brick and Paver Blocks	Bulletin For Technology And History Journal	Scopus
32	Priyanka salunkhe & Ritesh Tandekar	Rohit Bedekar, Hrishikesh Dongare, Rohan Parab & Sahil Wayal	Design of Eco-Friendly Detachable Toilet System Using Ferro Cement Concrete	Bulletin For Technology And History Journal	Scopus
33	Ritesh Tandekar	Mansi Khandekar, Rohit Shelke, Siddhi Gharat	Review Paper On Uses Of Titanium Dioxide For The Purification Of Industrial Waste Water	Bulletin For Technology And History Journal	Scopus
34	Jamaluddin Maghrabi	Sakshi Mane, Shubhangi Phadtare, Aditya Kedari, Pratik Walumj	Replacement of Brick Masonry Using Eps Core Panels	International Journal of Scientific Research in Engineering and Management (IJSREM)	UGC
35	Jamaluddin Maghrabi	Pranjal Mukherjee, Vismay vinoy, Nilesh Waghmare, Shubham Prasad	Analysis, Design & Cost estimation of RCC & Steel Chimney	International Journal of Scientific Research in Engineering and Management (IJSREM)	UGC
36	Agarchand Kawale	Tanishq Patil, Abhay Nagothanekar,	Design of Gabian Wall	International Research Journal of Modernization in Engineering	UGC
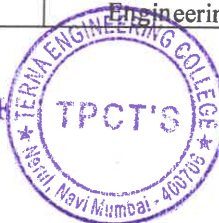
		Dhananjay Kasbe, Junaid Wani		Technology and Science	

Workshops / Seminars/ Webinars/ Courses Attended

Name of the faculty	Name of the STTP/workshop	Duration	Dates	Venue
Mrs. Poonam Patil	Workshop on "Recent Trends in Geotechnical Engineering"	7	25 June 2024 to 29 June 2024	Jaihind College of Engineering, Pune
Mr. Pradip Sonawane	Workshop on "Recent Trends in Geotechnical Engineering"	7	25 June 2024 to 29 June 2024	Jaihind College of Engineering, Pune
Mr. Dharmesh Gangani	Workshop on "Recent Trends in Geotechnical Engineering"	7	25 June 2024 to 29 June 2024	Jaihind College of Engineering, Pune
Mrs. Poonam Patil	Pedagogical Practices with NEP Implementation for circular Development	7	03 June 2024 to08 June 2024	Jawaharlal Darda Institute Engineering & Technology, Yavatmal
Mr. Pradip Sonawane	Pedagogical Practices with NEP Implementation for circulars Development	7	03 June 2024 to 08 June 2024	Jawaharlal Darda Institute Engineering & Technology, Yavatmal
Mrs. Poonam Patil	Promoting Social Equity : Revisiting constitutional Rights	5	27 May 2024 to 31 May 2024	Testo College, Nagaland & A.C.T. Academy, Kerala
Mrs. Poonam Patil	FDP on " Advanced Research Methodology Workshop"	7	22 Nov 2023 to 30 Nov 2023	Digiskills Center & A.C.T. Academy, Kerala
Mrs. Poonam Patil	FDP on " NAAC Assessment and Accreditation: Procedures and Process"	7	18 Oct 2023 to 24 Oct 2023	ARASU Group of Institution, Karur & A.C.T. Academy, Kerala
Mrs. Poonam Patil	Webinar on Sustainability and Practices- A Timeline Requirement of the Construction industry	1	7 Sept 2023	Q Crete
Mrs. Poonam Patil	Webinar on Making Concrete Sustainable and Moving Towards Net Zero	1	27 Sept 2023	Q Crete
Mrs. Poonam Patil	Webinar on Pervious Concrete- Can it Mitigate Some Effects of Climate Change	1	28 July 2023	Q Crete

Conferences Attended

Sr. No.	Faculty Name	Student Name	Title of Paper	Name of Journal/Conference	Scopus/ UGC
1	Pradip Sonawane	Rohit Matekar, Srushti Mali, Akshata Hotkar & Satyjeet Dubey	A Review Paper on Experimental Investigation of Stabilized Mud Blocks	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference

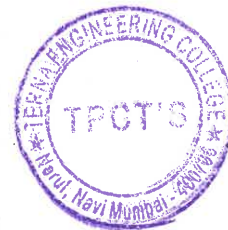|			by Partial Replacement of Clay With Cement		
2	Dr. Priyanka Salunkhe & Ritesh Tandekar	Rohit Bedekar, Hrishikesh Dongare, Rohan Parab & Sahil Wayal	Review Paper on Design of Eco-Friendly Detachable Toilet System Using Ferro Cement Concrete	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference
3	Dr. Priyanka Salunkhe & Dharmesh Gangani	Palash Patel, Hasmita Chaudhari, Pranav Khedkar, Aishwarya Chavan	Design and Modelling of Interlocking Bricks for Strengthening of Wall	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference
4	Sonali Baviskar	Brijesh Duduka, Aditya Jadhav, Kalpesh Badgujar	Design of Irrigation System For Village Using Storm Water Harvesting Technique In Water Gems Software	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference
5	Jamaluddin Maghrabi	Sakshi Mane, Shubhangi Phadtare, Akshata Hotkar, Srushti Mali	Comparative Analysis of RCC and Steel Structure	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference
6	Dr. Priyanka Salunkhe & Ritesh Tandekar	Mansi Khandekar, Yash Bhosale, Rihit Shelke, Siddhi Gharat	Review Paper on Uses Of Titanium Dioxide For The Purification on Industrial Waste	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference
7	Jamaluddin Maghrabi, Ritesh Tandekar	Dhanshree Patil, Ankit Singh, Sahil Mhatre, Vaibhav Gholap	Experimental Investigation of Plastic and CNS Soil in The Production Of Brick and Paver Blocks	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference
8	Dr. Priyanka Salunkhe & Pradip Sonawane	Vijay Dabhade, Digvijay Bhusara, Anurag Ambre, Zaid Dhansay	Experimental Investigation of castellated Beam, with Different Openings.	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference
9	Dr. Priyanka Salunkhe & Dharmesh Gangani	Keshar Lawane, Sakshi Jadhav, Kajal Gaikar, Shivani Pomendkar	Use of Demolition Brick and Masonry Wall to Improve the CBR of Black Cotton Soil	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference
10	Dr. Priyanka Salunkhe	Kartik Siddamal, Yogesh Malvani, Krutika Sawant, Shweta Chavan	Review Paper on Experimental Investigation of Ultra High Performace Fibre Reinforced Concrete Using Shape Memory Alloy Fibres	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference
11	Dr. Priyanka Salunkhe	Komal Gondke, Sagarika Koli, Sanika Bohir, Sharv Mhatre	Review Paper on Experimental Performance of Ultra High-Performance Concrete Using Shape Memory Alloy Fibres	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference
12	Sonali Baviskar	Aman Pathak, Shivani	Review Paper on Water Distribution Network	8th International conference on	International Conference

		Pomendkar, Aditya Sahasane, Sumit Patil	Planning and Design Using Watergems	Engineering Research & Innovation (ICERI 2023)	
13	Dr. Priyanka Salunkhe, Poonam Patil	Tanishq Kharat, Sahil Singh, Sahil Mahadik, Gawade Saurabh	A Review on Effect of Magnetic Water on Properties of Concrete.	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference
14	Dr. Priyanka Salunkhe, Poonam Patil	Tejashree Pawar, Parth Chougule, Shubham Chakor, Ashok Koppula	A Review Paper on Concrete Block by Partial Replacement of Coarse Aggregate by Steel Slag	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference
15	Prof. Vaishali Kishan	Pratik Gaikwad, Nimish Loke, Kaustubh Panpaliya	Experimental Study on Replacement of Cement with GGBS and Fine Aggregate with Glass Powder	8th International conference on Engineering Research & Innovation (ICERI 2023)	International Conference

Chairperson/Judge/Resource Person Activities

Name	Activity	Title	Venue
Dr. Priyanka Salunkhe	Technical activity related to civil engineering section of University of Mumbai	Board of Studies	University of Mumbai
Dr. Priyanka Salunkhe	Monitoring Construction Activity	State Quality Monitor	Tribal Development Department, PWD, Maharashtra 2023

Placement/ Higher Study/ Entrepreneur

Academic Year	Total No of Students	Placed	Range of Package	Entrepreneur	Higher Education
2023-2024	67	25	2.29 Lakhs	0	5
2022-2023	84	32	3.12 Lakhs	2	9

Graphical Representation:

Placement/ Higher Study/ Entrepreneur

(Bar chart — Y-axis: No of Students, X-axis: Academic Year)

- 2023-2024: Placed 25, Entrepreneur 0, Higher Education 5
- 2022-2023: Placed 32, Entrepreneur 2, Higher Education 9

Legend: ■ Placed ■ Entrepreneur ■ Higher Education
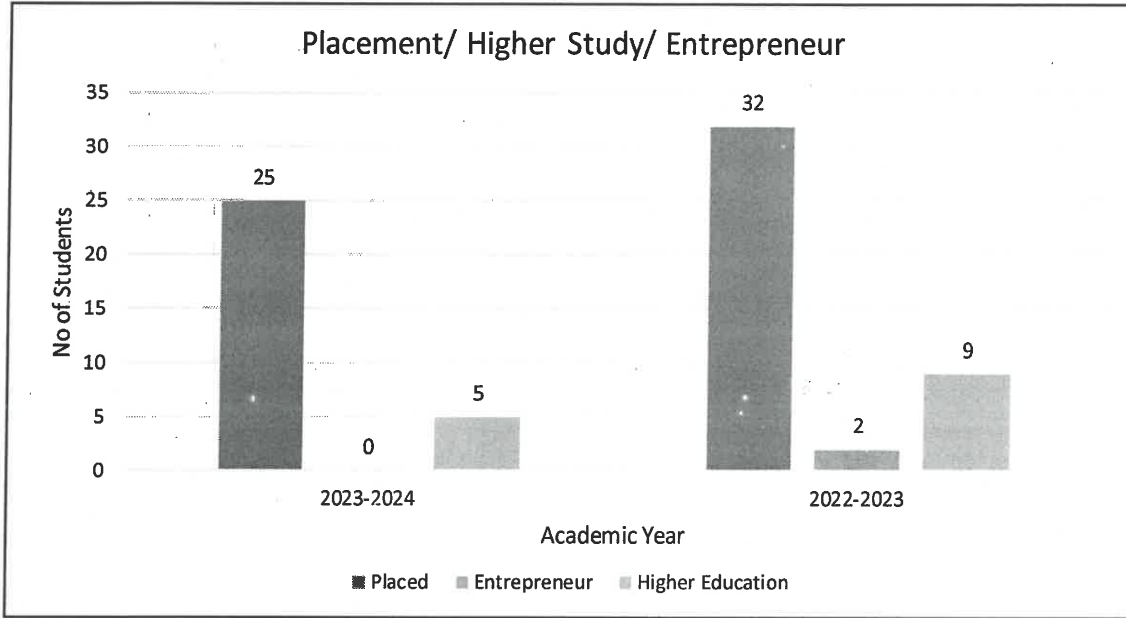
Achievements of the Departments:

Sr. No	Name of Event	Date of Event
1	Application of GGBS in concrete by JSW cements.	7th August 2023
2	Celebration of Outstanding university Award by IC-ACI 2023	7th August 2023
3	Preparation Strategies for ESE & GATE Exam	28th August 2023
4	Geotechnical Challenges in urban Infrastructure	26th September 2023
5	Structural Audit & NDT for building	5th April 2024
6	Effect of Admixture on Properties of concrete	10th April 2024

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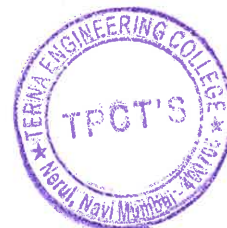
DEPARTMENT OF GENERAL ENGINEERING

Introduction

In the last few years there have been enormous changes in technology, opening up new challenges and opportunities everyday which have been embraced gracefully by our educational institute. The Department of General Engineering trains all students of all UG programs at first year level to strengthen their Scientific, Mathematical and Technical base.

This department has been set up in TEC since its inception in 1991. The department consists of subjects under Humanities and Sciences such as Mathematics, Applied Physics and Chemistry, Engineering Mechanics, Engineering Drawing, Basic Electrical Engineering and Communication Skills. These subjects provide the basic knowledge and skill that will help students to imbibe fundamental concepts necessary to become engineers in the core subjects. The department has inputs of 660 students from all the engineering disciplines of TEC.

We work persistently and diligently towards our Vision to become Pioneers of the modern education system by providing world class facilities to our students. To be at par with global standards of education and technology, we constantly keep upgrading our facilities, laboratories, technology and teaching methodologies.

This department has a perfect blend of highly qualified, experienced and compassionate faculty members who work on polishing every student individually to bring out the best in him. We believe in developing the overall personality of our students and make them a worthy technocrat by keeping them abreast with the latest developments in the field of technology. The state-of-the-Art facilities in Terna like huge class rooms, well equipped laboratories, well designed seminar hall, big auditorium, full edged library, computer center with latest systems, softwares and internet facilities to work with diverse cultures across the globe. The department has Learning Management Systems (LMS) to foster e-learning among students.

Finally, "Our Motto" is to inculcate best values in our students to make them the best technical employee/ entrepreneur and most importantly a good human being who will serve their best to the society and mankind.

PRINCIPAL
TERNA ENGINEERING COLLEGE
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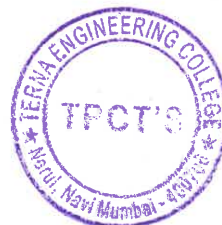
Vision

To deliver value added quality education to the aspiring students, meeting stringent requirements of the changing technology, industry, business and society as a whole.

Mission

To provide an environment of academic excellence and to adopt appropriate teaching- learning processes to produce competent and skilled engineers ready to meet global challenges.

Head of Department's Message

The First-Year Engineering Program is the entry point for all beginning engineering students. It is one of the basic and important departments to establish the important relationship between pure sciences and engineering branches.

All engineering students must complete the First-Year Engineering requirements before entering in specific departments. First year curriculum includes the subjects Engineering Mathematics, Engineering Chemistry, Engineering Physics, Basic Electrical & Electronics Engineering, Engineering Graphics, Engineering Mechanics, Basic Work-shop Practices, C programming and Professional Communication & Ethics. The First-Year Engineering Program provides students with a firm foundation and initial understanding of engineering and career options.

This department is furnished by well-equipped laboratories ,Computer center, Language Laboratory and Work-shop, which gear up to ensure strong fundamentals. Our aim is to teach our students with new trends, as it becomes easy for them to accommodate themselves anywhere across the industries, in today's globalized world.

Student Strength

Class	Number of Students
FE - AI&DS	60
FE - CIVIL	60
FE - COMPUTER	180
FE - DESIGN	30
FE - ELX	60
FE - EXTC	120
FE-IT	60
FE - MECH	60
FE - MTRX	60

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Teaching Staff

Sr.No.	Name	Designation	Qualification
1	Mr. R. D. Patane	Associate	ME (ELECTICAL POWER SYSTEM)
2	Dr. Preeti Zade	Associate Professor	MSc.B.Ed.Ph.D.
3	Dr. Geetanjali Yempalle	Associate Professor	MA. M.Ed. Ph. D
4	Ms. Kusum K. Rathore	Assistant Professor	MSc.M.Phil.
5	Mr. Sambhaji N. Patil	Assistant Professor	MSc.B.Ed..
6	Mr. Vijaykumar Chaudhary	Assistant Professor	ME
7	Mr. Shrinivas N. Patil	Assistant Professor	MSc.M.Ed.
8	Mrs. Sunita Dhumale	Assistant Professor	M.Tech.
9	Mrs. M. P. Sonth	Assistant Professor	MSc.B.Ed.
10	Mr. B P Deshmukh	Assistant Professor	MSc.B.Ed..
11	Mrs. A. R. Kulkarni	Assistant Professor	MSc.
12	Mrs. A. S. Kawathekar	Assistant Professor	BE
13	Mr. A.N. Barure	Assistant Professor	MSc.
14	Dr. Gauree Arolkar	Assistant Professor	MSc.Ph.D.
15	Dr. Runmoni Gogoi	Assistant Professor	MSc., B.Ed., Ph.D.
16	Mrs. Rupali Thorat	Assistant Professor	ME
17	Mr. R. S. Ohal	Assistant Professor	ME
18	Mr. M. N . Kshirsagar	Assistant Professor	ME
19	Mr. Jitesh Shewale	Assistant Professor	ME
20	Dr. Taiseen Shaikh	Assistant Professor	MA.M.Ed. Ph.D.
21	Dr. Balaji Mundhe	Assistant Professor	MSc.Ph.D.
22	Mr. Ashutosh Shingare	Assistant Professor	ME

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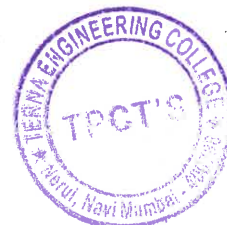
Non-Teaching Staff

Name	Designation
Mr. Surykant.Karde	Lab assistant
Mr. Ajay Sawant	Lab assistant
Mr..Phopale	Workshop Instructor
Mr Rajesh Gadse	Workshop Instructor
Mr. Shivaji Suryvanshi	peon
Mr. Hanumant Bhosale	peon

Publications

Name	Paper Title	Journal	Indexing
Dr. Preeti Zade	Profile of Solar Panel Recycling Technology	IJCRT (www.ijcrt.org) Volume 12 Issue 3 March 2024	UGC approved 7.97 Impact Factor by Google Scholar http://www.ijcrt.org/papers/IJCRT2403110.pdf

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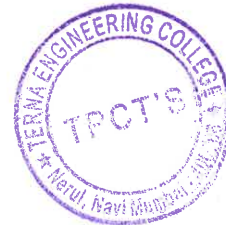
Workshops / Seminars/ Webinars/ Courses Attended July 2023-June 2024

Name	Title	Date	Duration	Venue
Sunita Dhumale	NPTEL Online course Education for sustainable development & scored 86%	Jan 2024 to April2024	12 weeks	IIT, Kharagpur
Sunita Dhumale	NPTEL FDP online Education for sustainable development scored 86%	Jan 2024 to April2024	12 weeks	IIT, Kharagpur
Dr Runmoni Gogoi	International Faculty Development Program on Functional Materials and Devices: Energy, Environment and Sustainable Development'	10-14th of July, 2023	5 days	Department of Physics, Presidency University
Dr. Preeti Zade	International Faculty Development Program on Functional Materials and Devices: Energy, Environment and Sustainable Development'	10-14th July, 2023	5 days	Department of Physics, Presidency University
Dr. Preeti Zade	One-Week International Faculty Development Programme on "Significance of Composite Materials & AI in Industry 4.0 "	03/07/2023 to 07/07/2023	5 days	Department of Mechanical Engineering, A. C. Patil College of Engineering, Kharghar, Navi Mumbai, Maharashtra.
Dr. Preeti Zade	Online short-term Faculty Development Programme on "Emotional intelligence for teachers in higher education " with A Grade	16/11/2023 to 25/11/2023	12 days	Shri Shivaji College of Science, Amravati in collaboration with UGC Malviya Mission Training Centre.

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Dr. Preeti Zade	International Short Term Training Program faculty development program on "Environmental Pollution"	5th June to 11th June 2023.	7day	Raj Ruhri Govt.Autonomo us college, Alwar, Rajasthan
Dr. Preeti Zade	International faculty development program on "Integrating cutting-edge technical tools for enhanced research and teaching excellence"	12th February, 2024 to 27th February, 2024.	14 day	Department of Chemistry, SRM Institute of Science and Technology, Ramapuram, Chennai in Association with Association of Chemistry Teachers (ACT) Mumbai
Dr. Preeti Zade	Online Faculty Development Programme on Advances in Materials Chemistry Organized by	17 - 21 July, 2023,	5day	Department of Chemistry, School of Engineering, Presidency University, Bengaluru
Anandi Kawathekar	University level soft skill development program	13th Feb-20 Feb,2024	8 Days	University of Mumbai in association with NSS unit(B-28)
nandi Kawathekar	International Conference on Integration of yoga in higher education. Harmonizing minds & Academia	3 March 2024	1 Day	Somaiya Vidyavihar University, Mumbai
Meenakshi Sonth	Asteroid Day Quiz	30th June 2024	1 Day	Vigyan Setu Foundation
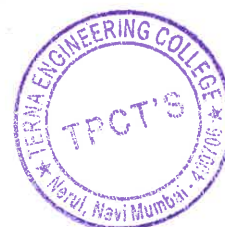
Dr. Gauree Arolkar	'One-Week Online Certificate Course on Patenting System in India'	4th to 10th July 2023	7 days	MAHARASHTRA NATIONAL LAW UNIVERSITY, MUMBAI CENTRE FOR RESEARCH IN IP & DPIIT – IPR CHAIR
Dr. Gauree Arolkar	'International Faculty Development Program on Functional Materials and Devices: Energy, Environment and Sustainable Development	10th to the 14th of July, 2023.	5 days	Department of Physics, Presidency University, Kolkata, West Bengal

Chairperson/Judge/Reviewer/Resource Person Activities

Name	Activity	Title	Venue
Sunita Dhumale	paper setter BEE FYBTECH 22/4/2024	Paper Setter	PCE, PANVEL
Sambhaji. N. Patil	paper setter Physics	Paper Setter Letter No.: T2023-24/84272 30/04/2024	UNIVERSITY OF MUMBAI
Srinivas Patil	Paper setter for 1T00734 / / S.E.(Computer Engineering)(SEM-IV)(Choice Base Credit Grading System) (R- 19) ('C' Scheme) Subject (Paper Code) 40521 / / Engineering Mathematics-IV	Paper Setter Letter No.: T2023-24/74503	UNIVERSITY OF MUMBAI [examinations to be held in the Second Half (Winter) 2023.]
Srinivas Patil	1T00733 / / S.E.(Computer Engineering)(SEM-III)(Choice Base Credit Grading System) (R- 19) ('C' Scheme) Subject (Paper Code) 50921 / / Engineering Mathematics-III	Paper Setter Letter No.: T2023-24/74498	UNIVERSITY OF MUMBAI [examinations to be held in the Second Half (Winter) 2023.]

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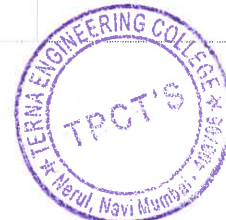
Srinivas Patil	1T00734 / / S.E.(Computer Engineering)(SEM-IV)(Choice Base Credit Grading System) (R- 19) (C Scheme) Subject (Paper Code) 40521 / / Engineering Mathematics-IV	Letter No.: T2023-24/84099	Mumbai University examinations to be held in the First Half (Summer) 2024.
Srinivas Patil	1T00733 / / S.E.(Computer Engineering)(SEM-III)(Choice Base Credit Grading System) (R- 19) (C Scheme) Subject (Paper Code) 50921 / / Engineering Mathematics-III	Letter No.: T2023-24/84094	Mumbai University examinations to be held in the First Half (Summer) 2024.

Achievements of the Departments:

- List with Events details

Sr. No.	Event	Date	Event details
1	Fe Orientation	22 August 2023	TEC
2	Induction	22 August 2023	GE depart
3	Personality Transformation	23 August 2023	Mr. Prathamesh Veling, a versatile professional with a background in Market Research and Analytics. Mr. Veling's extensive skill set encompassed various areas, including Consumer Insights, Social Media Analytics, and Business Strategy.The
4	Seminar on "Anxiety and Depression Among Youth"	24 August 2023	Dr. Amol Bhusare, a distinguished psychiatrist with extensive expertise in the field.
4	Yoga	25 August 2023	Yoga teacher Dr. Sushma Kale Principal, Terna Trust's Padmayog Sadhana College, Mumbai and her team

5	Indoor and outdoor sports	25 August 2023	sports like kabaddi, badminton, table tannins, cricket, volleyball, khokho, carom and chess
6	Proficiency Modules:	22 August 2023	AMCAT test which was non-credit test based given to students to overcome some critical lacunas that students might have, for example, English, Mathematics, computer familiarity etc. The test was carried out through google. Question paper include questions of Maths &CS.
7	Creative Arts, Cultural and Literary Activity:	22 August 2023	Cultural and creative art activities like painting, sketching were conducted in their respective class by Qualified instructors for arts. Drama and Dance and a photography workshop was conducted .
8	Guest lecture	Recent trends in mathematics	Dr. Bhatia Ph.D.
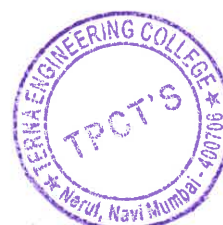
Students Achievements (if any): Publications by the students

Name	Paper Title	Journal	Indexing
Sahil Kolte FE, Comp, GE	Profile of Solar Panel Recycling Technology	IJCRT (www.ijcrt.org) Volume 12 Issue 3 March 2024	UGC approved 7.97 Impact Factor by Google Scholar https://drive.google.com/file/d/1UVas KN_4SR6u7qtvX3ZZR5l-EsNXOgI9/view?usp=drive_link
Nishad Sutar FE, Comp, GE	Profile of Solar Panel Recycling Technology	IJCRT (www.ijcrt.org) Volume 12 Issue 3 March 2024	UGC approved 7.97 Impact Factor by Google Scholar https://drive.google.com/file/d/1UVas KN_4SR6u7qtvX3ZZR5l-EsNXOgI9/view?usp=drive_link
Sarthak Pawar FE, Comp, GE	Profile of Solar Panel Recycling Technology	IJCRT (www.ijcrt.org) Volume 12 Issue 3 March 2024	UGC approved 7.97 Impact Factor by Google Scholar https://drive.google.com/file/d/1UVas KN_4SR6u7qtvX3ZZR5l-EsNXOgI9/view?usp=drive_link

SWOT Analysis

Strengths:

The General Engineering Department seems to have a solid foundation to provide a comprehensive first-year experience for students, balancing theoretical learning with practical skills development and support programs.

Experienced Faculty: The presence of experience and Ph.D.-qualified faculty members suggests a strong academic foundation and potential for high-quality instruction.

Comprehensive Facilities: Access to labs for BEE, EM, Chemistry, Physics, and language skills ensures that students have the necessary resources to explore different facets of engineering education.

Hands-On Learning: Emphasizing workshop practice early on helps students develop practical skills alongside theoretical knowledge, preparing them for future engineering challenges.

Weaknesses

1. **Resource Allocation**: Limited resources such as laboratory equipment, computing facilities, and research funding can constrain the department's ability to provide hands-on learning experiences and conduct cutting-edge research.
2. **The lack of a sufficient number of faculty members** in a first-year engineering department can significantly impact various aspects of the educational experience and the department's overall effectiveness.

Opportunities

First-year engineering departments have several opportunities to enhance their educational offerings, improve student experiences, and contribute positively to their institution and the broader community. Here are some opportunities for first-year engineering departments:

1. **Enhanced Curriculum Development**: There's an opportunity to design and implement innovative and updated curricula that integrate emerging technologies, interdisciplinary studies, and industry-relevant skills. This can better prepare students for future challenges and careers.
2. **Hands-On Learning Experiences**: Increasing opportunities for hands-on learning through labs, projects, and internships can provide students with practical skills and industry exposure early in their academic careers.
3. **Research Opportunities**: Encouraging undergraduate research initiatives and collaborations with faculty can engage students in cutting-edge research projects, fostering critical thinking and innovation.
4. **Professional Development for Faculty**: Providing opportunities for faculty development, such as workshops, conferences, and grants for research and teaching innovations, can enhance teaching quality and promote academic excellence

Challenges

1. **Large Class Sizes**: Class sizes in first-year engineering courses can be large, limiting opportunities for personalized instruction, interaction with faculty, and hands-on learning experiences.
2. **Resource Constraints**: Limited funding and resources for laboratories, equipment, and facilities can hinder the ability to provide practical, hands-on learning experiences that are essential in engineering education.

PLACEMENT
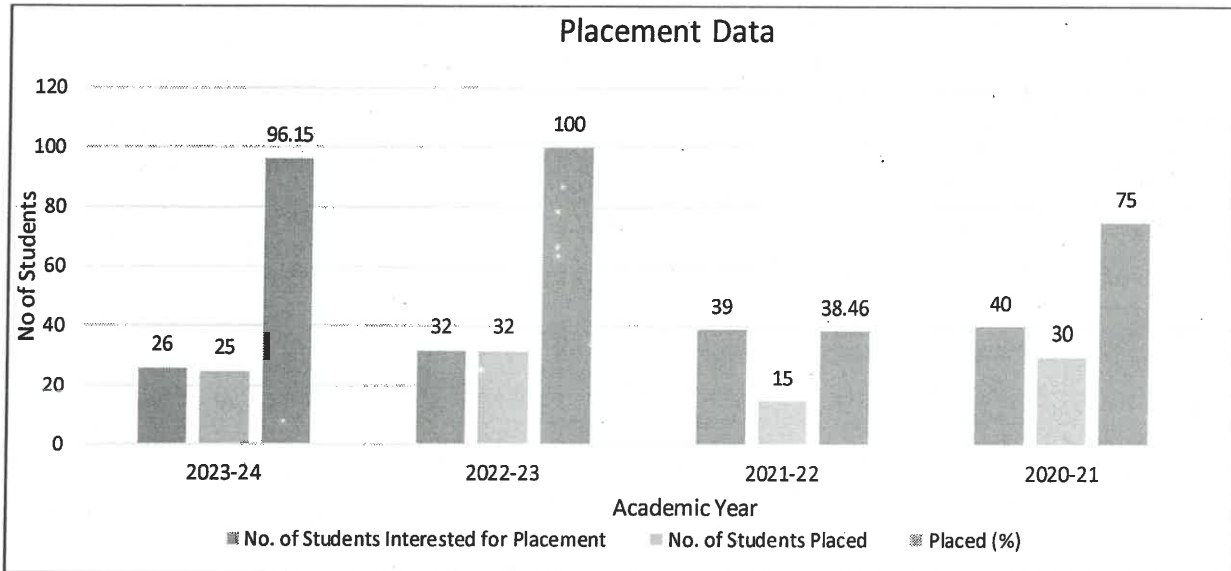
Placement Data

| Academic Year	2023-24	2022-23	2021-22	2020-21
No. of Students Interested for Placement	26	32	39	40
No. of Students Placed	25	32	15	30
Placed (%)	96.15	100	38.46	75

EXTRA CURRICULAR ACTIVITIES

TRAININGS: for students

Sr. No	Name of the workshop/ seminar	Number of Participants	Year	Date From – To
1.	Basics of Staad-Pro	44	SH23	July – Oct 2023
2	Water Gems and Primavera	52	SH23	July – Oct 2023
3	Application of GGBS in concrete by JSW cements.	149	SH23	7th August 2023
4	Preparation Strategies for ESE & GATE Exam	116	SH23	28th August 2023
5	Geotechnical Challenges in urban Infrastructure	84	SH23	26th September 2023
6	Basics of Staad-Pro	55	FH24	Jan – Apr 2024
7	AOC	72	FH24	Jan – Apr 2024
8	Staad-Pro	35	FH24	Jan – Apr 2024
9	Structural Audit & NDT for building	55	FH24	5th April 2024
10	Effect of Admixture on Properties of concrete	86	FH24	10th April 2024
11	Etabs	77	FH24	Apr – May 2024
12	Tekla	30	FH24	Apr – May 2024

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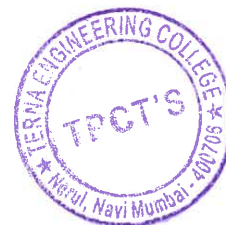
SPORTEC EVENTS
2023-24
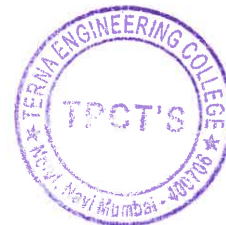
Terna Engineering College

Address: Plot No. 12, Sector-22, Opp. Nerul Railway Station, Phase II, Nerul West, Navi Mumbai, Maharashtra 400706.

Sports Diary 2023-2024
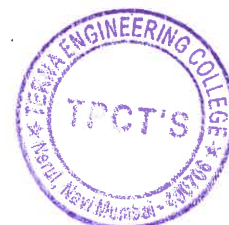
TERNA SPORTS COMPLEX

SPORTS - INDEX

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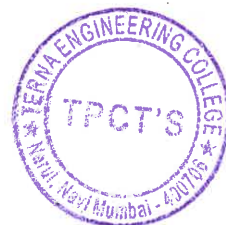
1. Sports Profile

1. **Committee member:- Mr. Deepak S. Kurule – Co-ordinator**

   Mr. Ravindra Shelkikar – Member

   Mr. Mahesh Kaware – Member

   Dr.. Shudhodhan Bokefode - Member

   Mr. Amit Deshmukh - Member

   Mr. Rajkumar Tekale Patil - Member

   Mr. Manoj Kshirsagar – Member

   Mrs. Sonali Dhamele - Member

   Mrs. Preeti Patil - Member

   Mrs. Ankita Mahamune – Member

   Dr. Shaikh Taiseen H. - Member

   Mrs. Rupali Thorat - Member

   Mr. Pradeep Sonawane - Member

   Mr. Shivaji Munde – Gymkhana Incharge

2. **Sports secretary:- 1. Mandar Jawalkar – EXTC Engineering**

3. **Deputy sports secretary:- 1.Tanmay Pawar – EXTC Engineering**

   2. Chetan Jagtap - EXTC Engineering

4. **Icon players / Event Heads :-**

Sr no.	Sport	Event Head Name
Outdoor		
1	Cricket Boys	Aryan bamburde,SE ETRX
		Aryan chalke,TE MTRX
2	Cricket Girls	Dhruv Warang, BE MXTR
		Aryan chalke,TE MTRX
3	Volleyball Boys	Atharva Aute, BE--A Mech
		Omkar Vanjari, BE-A Mech
4	Volleyball Girls	Priya Patil, BE-A Comps
		Jayesh Dandge, BE-A Mech
5	Kabbadi Boys	Pratham vaity, TE B MECH
		Ganesh parab,TE B MECH

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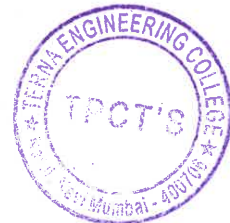
6	Kabbadi Girls	Shrutika d.BE IT
		Anuj mandlik,TE B MECH
7	Throwball Girls	Priti Patil, BEA IT
8	Football Boys	Arpan Desai, BE COMPS
		Om Nikam ,SE MECH
	Indoor	
9	Table Tennis	bhavik jain,PGDM
10	Carrom	niraj raul,BE MECH
11	Chess	Pankaj gautam,BE MECH
12	Badminton	Jaywant Holkar, TEA MXTR

Achievements :

Sr. No.	Name of Sport	Group / Individual	prize	N /I /S participation
1.	Baseball	Group	Runner Up	University
2	Softball	Group	Runner Up	University
3	Yogasana	Individual	Gold Medal & Silver Medal	37 National Event
4	Yogasana	Individual	Gold Medal & Silver Medal	4 National Event *Qulified for National Games 2024
5	Weight Lifting	Individual	Silver Medal	University
6	Weight Lifting	Individual	Silver Medal	University

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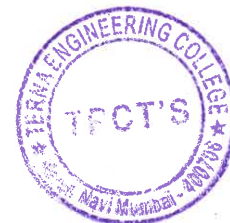
2. TERNA ENGINEERING COLLEGE TURF / GYMKHANA POLICIES:

- Terna Engineering College (TEC) official team will be allowed to play on turf on the regular basis for 2 hours.

- Students interested other than official team can collect the passes from gymkhana to play on turf.

- Turf will only be allotted for 1 hour for regular students other than official team.

- No permission will be given for any sports routine practice in the college campus other than turf.

- Timing for TURF & Gymkhana facility are 8.00 am To 4.00 pm. Except Public Holidays & Saturday, Sunday's

- For indoor games official teams can play for 2 hours in gymkhana and other than official team students will be permitted for 1 hour to play

- For inter college sports competition procedure should be followed through the proper channel for the authentication of the team for participation

- The above procedure should be followed prior to the 15 days before the event schedule.

- Without the authentication no team will be permitted officially to participate in any inter college sports event.

- For participating in inter college sports event the consent form is mandatory and it should be signed by the parents/guardian and should be reached to sports committee in charge before going to competition.

- Thrice in a year individual sports event team will be permitted to participate inter sports competition.

- No permission will be given to any Sports participation before one week of university Examination or during University Examination

11. TEC sports Incharge, Gymkhana incharge & Students sports secretaries are taking care of all sports inter/intra sports activities organization & participation. All faculty sports members with coordination of above sports Member Event Incharges taking care of their individual sports events & procedure of participation of students in various sports events. All expenditure of all sports Inter & Intra event Registration, Travelling, Food, & Residence if required & TEC Sports Events Organising (SPORTEC) TEC management always takes care positively.

(Mr. Deepak S Karande)
SPORTS Coordinator

(Dr. Varsha Bodade)
IQAC Dean

(Dr. L. K. Ragha)
Principal

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TPCT'S
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Sports Activity & Responsibility Matrix – TPL 2024
(23 Feb. - 2024 to 26 Feb. - 2024)

TPL -2024: Dates: 23 Feb. - 2024 to 26 Feb. - 2024

Dt. 14. 02. 2024

Sr. No.	Date	Event Description	Responsibility
1	23.02.2024	Inauguration function of TPL & start of all indoor & outdoor sports events Activities performances	i. TEC Faculty Sports Co-ordinator ii. All TEC Faculty Sports Members iii. Gymkhana Incharge iv. TEC Students sports Secretaries Sports students events heads & Students council
2	24.02.2024	All indoor & outdoor sports events Activities performances	i. All TEC Faculty Sports Members ii. Gymkhana Incharge iii. TEC Students sports Secretaries, Sports students events heads & Students council
3	25.02.2024	All indoor & outdoor sports events Activities performances	i. All TEC Faculty Sports Members ii. Gymkhana Incharge iii. TEC Students sports Secretaries, Sports students events heads & Students council
4	26.02.2024	All indoor & outdoor sports events Activities performances.	i. All TEC Faculty Sports Members ii. Gymkhana Incharge iii. TEC Students sports Secretaries, Sports students events heads & Students council
5	01.03.2024	Sports Events Prize Distribution	i. TEC Faculty Sports Co-ordinator. ii. All TEC Faculty Sports Members iii. Gymkhana Incharge. iv. TEC Students sports Secretaries, Sports students events heads & Students council

INDOOR SPORTS EVENTS:

I. Badminton (Boys & Girls)
II. Table Tennis (Boys & Girls)
III. Carom (Boys & Girls)
IV. Chess (Boys & Girls)

OUTDOOR SPORTS EVENTS:

i. Over arm cricket (Boys)
ii. Box cricket (Boys & Girls)
iii. Football (Boys & Girls)
iv. Volleyball (Boys & Girls)
v. Throw ball (Girls)
vi. Kabbadi (Boys & Girls)
vii. Tug of War (Boys & Girls)
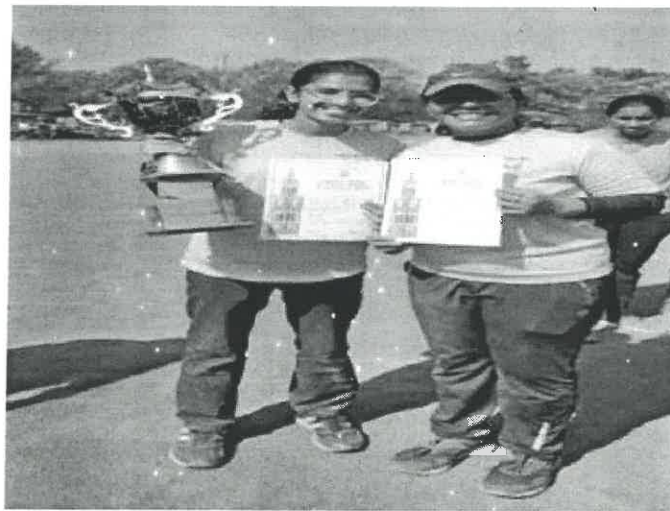
2/3

(Mr. Deepak Kinjle)
TEC - Sports Co-ordinator

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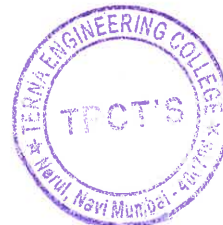
t rna   Terna Engineering College, Nerul

DATE : 14/02/2024

C.No. : TEC-2324-82

NOTICE
SPORTEC-2024

Following Teaching, Faculty Sports Members and non-teaching staff are required for smooth conduction of Sportec-24

Your co-ordination and motivation gives glaze to the event for best performance.

Sportec- 2024. (Feb. 23 to Feb. 26 - 2024)

Sr. No	Name	Department
1	Prof. R.P.Shelkikar	EXTC
2	Dr. Bokefode shudhodhan	Comp
3	Prof. Dhamele Sonali	Comp
4	Prof. Patil Preeti	IT
5	Prof. Mahamune Ankita	AIDS
6	Prof. Deshmukh Amit	ELX
7	Prof. Kshirsagar Manoj	GE
8	Prof. Kavre Mahesh	Mech
9	Prof. Thorat Rupali	GE
10	Dr. Shaikh Taiseen H.	GE
11	Prof. Patil Tekale Rajkumar	MTRX
12	Prof. Sonawana Pradeep	CIVIL
13	Mr. Rajendra Garje	EXTC
14	Mr. Kapase Mahesh	EXTC
15	Mr. Kolekar Dnyasheshwar	Mech
16	Mr. Vilas Lokhande	ELX

**CH will be calculated as per the Extra hours Stay.

(Mr. Deepak Kurule)

TEC-Sports Co-ordinator

Copy to:

1) Office Copy

2) All HoD's

3) Sports I/C, Avalon I/C

4) Dean Academics

(Dr. L. K. Ragha)
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TERNA ENGINEERING COLLEGE
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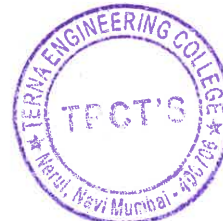
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Chaudhari Astha (EXTC) & Shedge Monica (Comp.) Runner Up & Third Place Inter Zonal Softball & Baseball Tournament Organized by University of Mumbai 2 Feb. 2024, 6 & 7 March - 2024 at Azad Ground Khopoli & Bhavana College Andheri, Mumbai.
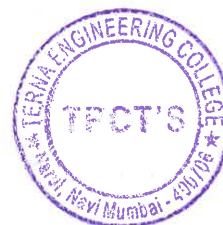
Purva Kinare (F.Y.) 4th Senior National Yogasana Sports Championship 2023-24, Amroha, Utter Pradesh.

*Artistic Single event- Bronze medal
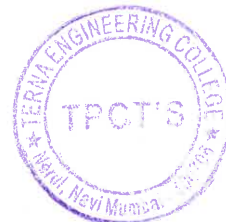*Rhythmic Pair event - Fourth rank
*Artistic Group event- Fourth rank

**Total 28 states participated from overall India.
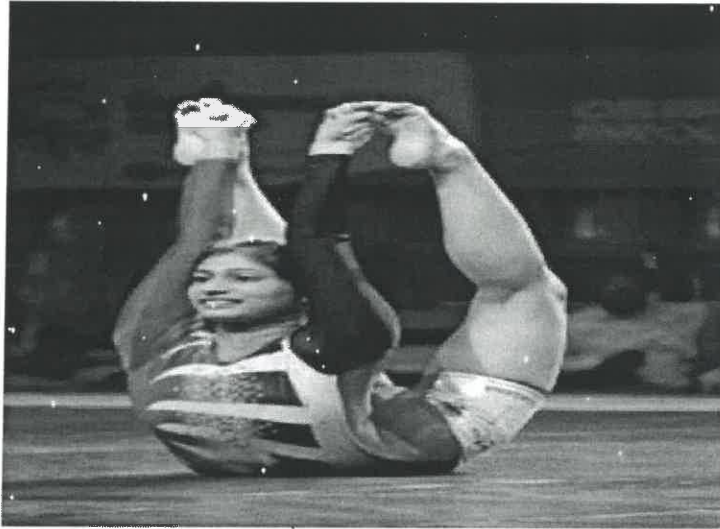
*Qualified for National Games, Uttarakhand, 2024.
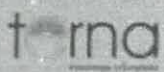
TERNA ENGINEERING COLLEGE
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SPORTEC 2K24 FIXTURES

Day 1 - 23/2/24

9pm - 11pm - Inauguration
Ceremony
12pm - 4pm - Crickef (girls)
12pm - 6pm - Volleyball (boys)
4pm - 6pm - Tug of War (girls)
6pm - 8pm - Football (boys)

Day 2 - 24/2/24

8am - 6pm - Cricket (boys)
8am - 1pm - Volleyball (boys)
9am - 6pm - Kabaddi (girls)
1pm - 6pm - Volleyball (girls)
6pm - 9pm - Football (boys)

Day 3 - 25/2/24

8am - 6pm - Cricket (boys)
8 am - 1pm - Throwball (girls)
1 pm - 5pm - Volleyball (girls)
8am - 6pm - Kabaddi (boys)

Day 4 - 26/2/24

10 am - 1pm - Cricket (staff)
1 pm - 6pm - Cricket(boys)
[semi and final]
9 am - 10am - Throwball (girls)
[finals]
10am - 11am - Volleyball (girls)
[finals]
11am - 1pm - Volleyball(boys)
[semi and finals]
1pm - 2pm - Musical chair (staff)
2pm - 6pm - Tug of War (boys)
6pm - 9pm - Football
[semis and finals]
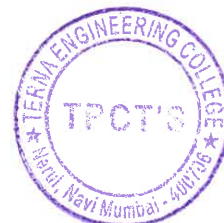
Event Executive Heads

Vaibhav - 8169438206
Shlok - 9619986656
Parth - 8828938094
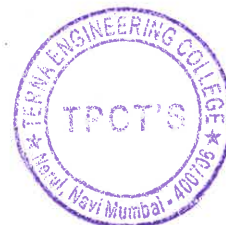
SPORTEC 2024 WINNERS AND RUNNER UPS LIST

SPORTS	WINNER	RUNNER UP
CRICKET	IT	EXTC
BOX CRICKET (GIRLS)	COMPS	EXTC
FOOTBALL	MECH	MTRX
VOLLEYBALL (BOYS)	COMPS	IT
VOLLEYBALL (GIRLS)	COMPS	EXTC
THROWBALL	COMPS	EXTC
KABADDI (BOYS)	EXTC	COMPS
KABBADI (GIRLS)	CIVIL	COMPS
Tug Of War (BOYS)	EXTC	CIVIL
Tug Of War (GIRLS)	EXTC	IT
TABLE TENNIS (BOYS)	COMPS	MTRX
TABLE TENNIS (GIRLS)	AIDS	COMPS
CHESS	MTRX	EXTC
CARROM SINGLES (BOYS)	COMPS	AIDS
CARROM SINGLES (GIRLS)	COMPS	COMPS
CARROM DOUBLES (BOYS)	MTRX	EXTC
CARROM DOUBLES (GIRLS)	CIVIL	EXTC

GENERAL CHAMPIONSHIP POINTS:

COMPUTER = 37

EXTC = 30

IT = 11

CIVIL = 11

MECHATRONICS = 10

MECHANICAL = 5

AI&DS = 4

ELECTRONICS = 0

MR. MANDAR JAWALKAR

(SPORTS SECRETARY)

MR. DEEPAK KURULE

(SPORTS COORDINATOR)

Dr. L.K. RAGHA

(PRINCIPAL)

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CULTURAL EVENTS
2023-24
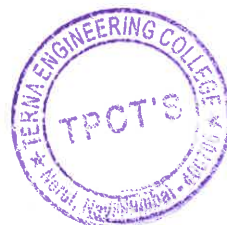
Sunita Dhumale
Faculty Co-ordinator

PARMESHWAR AVHAD
Deputy Secretary

SIDDHI
DEORUKHA
Cultural Secretary

SEJAL DESAI
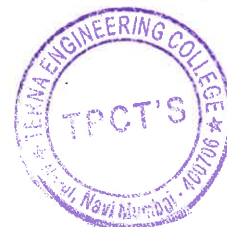**Deputy Secretary**

Sr. No.	Name of the Event	Event Date
1	Youth Festival	02/08/2023
2	Dholida	16/10/2023
3	NAAC	2023-24
4	Republic Day	26/01/2024
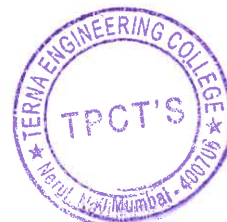
AVALON-2024

"National Level Hackathon (Hackformers) and Prototype Prodigy"

AVALON is the annual Technical Festival of Terna Engineering College. It provides students from different streams over the nation with a perfect stage to showcase their technical expertise. The main goal of "**Hackathon (Hackformers) and Prototype Prodigy** "is to acknowledge students with emerging ideas in this fascinating and expanding world of science and engineering. Thus, this festival manifests the conglomeration of talent, intellect, innovative and competitive spirit of the students.

Event Date	Event Name
26th Feb. 2024	Event 1: - Project Competition
	Event 2-Design Competition
27th Feb. 2024	Event 3-Innov8 Hackathon 2.0 (24 Hrs.)

Name of the Post-holder	Name of the Post
Prof. D. M. Bavkar	Avalon Co-ordinator
Prof. Dakshata Argade	Avalon Member
Prof. Dattatray Shinde	Avalon Member
Prof. Ritesh Tandekar	Avalon Member
Prof. Ashutosh Shingare	Avalon Member
Prof. Tahsin	Avalon Member
Shreyas Thakur	Student Council Member (Technical Secretory)
Karan Thorat	Student Counsil Member (CO-Technical Secretory)

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| Event wise Participation Details	Number of participation
Project Competition	15 Groups
Design Competition	43
Innov8 Hackathon 2.0 (24 Hrs.)	111
Selected for Hackathon	27

**List of Selected and participated Teams in Hackathon event:**

1. Arogya Rakt
2. Town Talks
3. Forge Fincance
4. markINSIGHTS
5. StreamWave
6. GamifyLang
7. Shiksha Chakra
8. Assist Ease
9. Trendify
10. ActiveAlly
11. Cinemate
12. Versify
13. Vital Sync
14. What tudu
15. WebFlix
16. Omni-seg-ment
17. E-Calculator
18. Health Manager
19. Carbonara
20. SweatFflix
21. Blood Donation
22. Adaptify
23. FitQuest
24. KrishiSahayak
25. NFT Gallery
26. NewsLy AI
27. Fraud Detection System
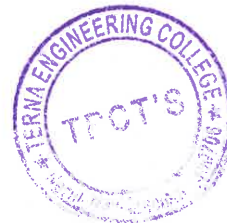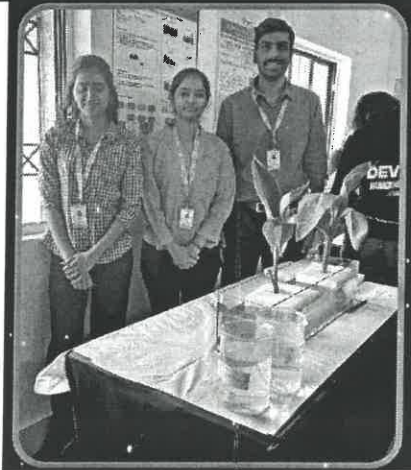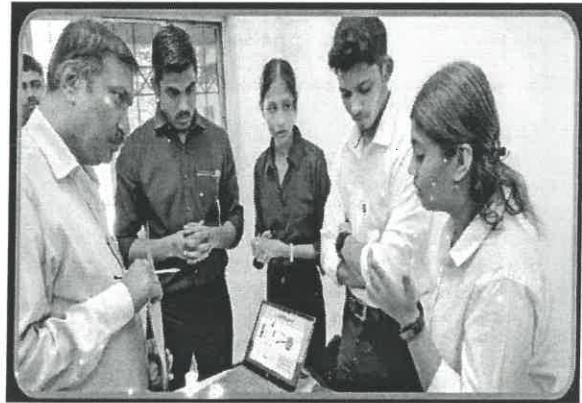
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NSS
2023-2024

Sr. No	Name of the Activity	Organising unit/ agency/ collaborating agency	Name of Scheme	Year of the Activity	Number of students participated in such activities
1	Yoga Day Webinar	NSS, TEC		2023	44
2	Yog Asana Competition	Dr. Bhakti Pitale		2023	12
3	Mangroves Cleanup Drive	Environment Life Foundation		2023	10
4	Beach Cleanup Drive, Dadar	Beach Warriors		2023	14
5	Waste Segregation Survey, Prabhadevi	Beach Warriors		2023	10
6	Youth Skills day poster Making Competition	NSS, TEC		2023	10
7	Tactics Cyber Security	NSS, TEC & AMRITA C20 TST Working Group		2023	06
8	JJ Hospital Blood Donation	Dr. Shri Nanasaheb Dharmadhikari Pratishthan Foundation & JJ Hospital, Sandhurst Road, Mumbai		2023	10
9	Debate competition	NSS, TEC		2023	20
10	Blood Donation Drive Jaslok, Vashi	NSS, Jaslok Hospital and Blood Bank	Indian Swachata League	2023	20
11	Beach Cleanup, Dadar.	NSS, TEC		2023	14
12	Tree Plantation	NSS, TEC JSW Company		2023	14
13	Anti Ragging	NSS, TEC		2023	26
14	Sexually Transmitted Disease Awareness Session, Red Ribbon Club	NSS, TEC Red Ribbon Club		2023	40

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15	Mangrove Cleanup, Seawoods	NSS, TEC. Environment foundation		2023	60
16	Independence Day Celebration	NSS, TEC.		2023	16
17	Blood Donation Drive	Terna Blood Center, TSHRC		2023	102
18	Teachers Day Celebration, Terna Engineering College	NSS, TEC.		2023	78
19	Swatchta League 2.0, Nerul	NMMC		2023	67
20	Banner To Bag	Jeevan Jyoti Ashayalay Charitable Trust		2023	25
21	Bio-Waste Management, during Ganapati Visarjan	By Institute		2023	25
22	Post Ganpati Visarjan Beach Cleanup, Dadar	NSS, TEC		2023	20
23	Shramdaan For Swachh Bharat, Juinagar	NSS, TEC		2023	25
24	Bhajan Sandhya, CSMT	Mumbai University NSS, TEC		2023	15
25	Banner Bag Distribution, Nerul	NSS, TEC Jeevan Jyoti Ashayalay Charitable Trust		2023	20
26	Meri Matti, Mera Desh, Selfie Upload, online	University Of Mumbai		2023	35
27	Donation Collection IIT Bombay, College	NSS, TEC		2023	58
28	Vachan Prerna Diwas, online	NSS, TEC		2023	45
29	AARAMBH (NSS Orientation), College	NSS, TEC		2023	80
30	Donation IIT Bombay, College	NSS, TEC NSS, IITB		2023	10
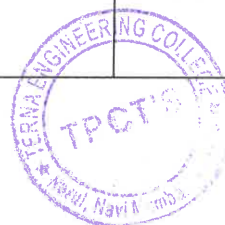
				2023	
31	Waste Segregation Survey, Worli Village	Beach Warriors		2023	50
32	Mangrove Cleanliness, Seawoods Diwali Donation Collection Day-1	Environment Life Foundation		2023	45
33	Meri Mati Mera Desh Award Ceremony	University Of Mumbai		2023	05
34	Diwali Donation Collection Day-2	NSS, TEC		2023	58
35	Constitution Day, Online	NSS, TEC		2023	40
36	Mangrove Cleanliness, Seawoods	NSS, TEC Mangrove Soldiers		2023	40
37	NMMC SEEDBALL, Seawoods	Mata Amritanandamyi Math, Nerul NMMC		2023	45
38	Mangrove Cleanliness, Seawoods	NSS, TEC Mangrove Soldiers		2023	26
39	Silent March, Post mangrove Cleanup	NSS, TEC Mangrove Soldiers		2023	25
40	Childrens Day Celebration, Anant Khushiyaan Ashram, Thane	NSS, TEC		2023	30
41	Maitri Mahotsav, Vashi	Chinta Mukta Bharat 2023		2023	23
42	Beach Cleanup Dadar	Beach Warriors		2023	25
43	Vikasit Bharat Sankalp Yatra Function	NMMC		2023	30
44	AIDS & HIV Awareness Rally	Red Ribbon Club		2023	40
45	Republic Day Celebration & Parade	NSS, TEC		2023	30
46	Road Safety Event	NGO United Way Mumbai		2023	80
47	Thane Blood Donation Drive	LTMG Hospital, Sion.		2023	226
48	UPHC Pawne Training Program	Urban Public Health Center		2023	30
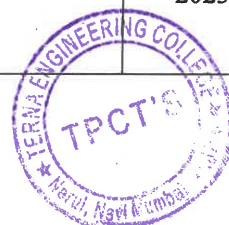
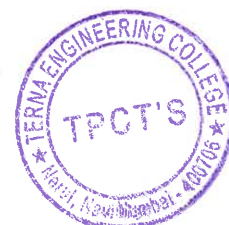| 49	Post Dipex Plastic Collection	NSS, TEC		2023	45
50	Training Program organised by NMMC, Vishnudas Bhave Natyagruha, Vashi	NMMC		2023	25
51	The Wild Run Marathon	NSS, TEC		2023	60
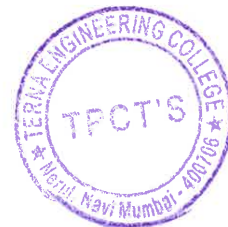
EQUINOX
2023-24

CONFERENCE SUMMARY REPORT

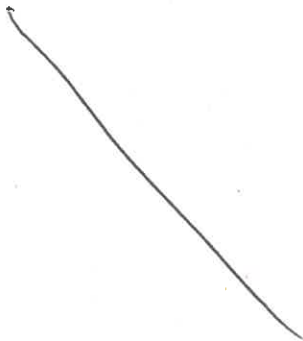|	Equinox 2023-8th International Conference on Engineering and Innovations -ICERI -2023	Event Date
1	Equinox-2023	21st and 22nd September 2023
2	Organized By	Terna Engineering College Nerul, Navi Mumbai
3	In Association	Institute for Engineering Research and Publication (IFERP)
4	ISBN	978-93-92105-03-6
5	Indexed by	Web of Science, Scopus
6	Venue	Online Zoom Platform
7	Email	info@iceri.in
8	Website	https://iceri.in/index.php
8	Publisher	IFERP Explorer
10	Copyright	IFERP-International Conference
11	Chief Patron	Hon. Dr. Padmasinhaji Patil (President)TPCT Hon. RanajagjitSinhji Patil (Managing Trustee) TPCT
12	Patron	Hon. Shri Ashok Aher (Trustee) TPCT Hon. P.T. Deshmukh (CEO) TPCT
11	Conference Chair	Dr. L.K. Ragha (Principal) TEC
	Conference Coordinator	Dr. Rajiv Gupta (Professor, ECTC) TEC
11	Conference Co-Chairs	Dr. Sachin Kamble (Professor, Mech) TEC Dr. Vrajesh Maheta (Associate Professor, IT) TEC Dr. Shaveta Malik (Asso. Professor, Comp) TEC Dr. Raghvendra Upadhyay (Asso. Prof, MTRX) TEC
	Keynote Speaker	Dr. Abdel Hamid Soliman, Professor of Signal Processing and Telecommunications, Staffordshire University, United Kingdom.
		Mr. Cap. Arivanthan Muniandy TEDx Speaker, Owner and Master Trainer (WIN)
	Total Number of Papers	114

EQUINOX-2023, the 8th International Conference on *Engineering Research and Innovations* (ICERI-2023), was successfully organized on **September 21st and 22nd, 2023** by Terna Engineering College (TEC), Nerul, Navi Mumbai, in collaboration with the Institute for Engineering Research and Publication (IFERP). The conference served as a dynamic interdisciplinary platform, fostering collaboration among researchers, academicians, industrialists, and practitioners from diverse fields like Electronics, Mechanical, Information Technology, and Communication Systems.
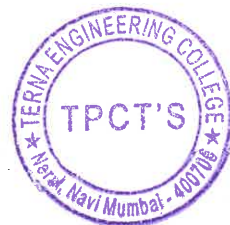
Keynote addresses were delivered by distinguished speakers, including **Dr. Abdel Hamid Soliman** (Staffordshire University, UK) and **Mr. Capt. Arivananthan Munianly** (TEDx Speaker, Malaysia). The event aimed to address contemporary challenges, highlight advancements in *Automation, Robotics*, and *ICT*, and promote sustainable development through digital transformation and innovation.

The conference received **220 paper submissions**, of which **114 papers were registered**, including **42 papers** from Terna Engineering College and **8 international contributions**. Researchers explored critical themes such as IoT integration, artificial intelligence, machine learning, smart systems, renewable energy, and sustainability.

EQUINOX-2023 underscored TEC's academic excellence and global collaborations, further cementing its role in advancing engineering research and education. The event reinforced TEC's commitment to fostering innovation and addressing global challenges through technology and sustainable practices.

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TPCT'S

SUMMARY

Sr. No	Content	Count
1.	Number of Class Rooms and Seminar Halls	41
2	Number of Laboratories	60
3	Number of Computers	840
4	Bandwidth of Internet Connection	300MBPS
5	Number of students	3011
6	Number of Full-Time teachers	214
7	Number of Add On courses conducted	07
8	Number of Mentors	126
9	Number of full-time teachers with PhD	27
10	Number of Seminar/Conference/Workshop conducted by the institution	30
11	Number of Research Papers in the journals on UGC website	79
12	Number of Books and chapters in edited volumes/books published and papers published in national and international conference proceeding	21
13	Number of Extension and outreach programmes (NSS)	29
14	Number of functional MOUs with institution of national/international importance, other universities, industries, corporate house etc	29
15	Number of students benefited by scholarship, freeship provided by government	1871
16	Number of students benefited by scholarship, freeship etc provided by institution/ non-government agencies	48
17	Number of students benefited by competitive exams ans career counselling offered by institute	923
18	Number of places students	271
19	Number of students progression to Higher Education	05
20	Number of students qualifying in state/national/international level examinations and state government (JAM/CLAT/GATE/CAT/GRE/TOEFL/CIVIL SERVICES)	24
21	Number of cultural events/competitions organized for students	38
22	Number of teachers provided with financial support to attend conference/workshop and professional bodies membership	Amount is 7080/ ()
23	Number of teachers attending professional development Programmes viz. Orientation/ Induction Program/ Refresher Course/ Short Term Course	18

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