

NIRMAAN

HALF YEARLY MAGAZINE



SANDIP
FOUNDATION



CIVIL ENGINEERING



MAY 2024
VOLUME 07/ ISSUE 02

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CIVIL ENGINEERING DEPARTMENT,
SANDIP INSTITUTE OF TECHNOLOGY AND
RESEARCH CENTRE, NASHIK
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422213





SANDIP
FOUNDATION

NIRMAAN



Vision of Institute

“To be an acclaimed Institution for learning and research.”

Mission of Institute

- ❑ **M1:** To impart in-depth technical knowledge
- ❑ **M2:** To create conducive environment for research, innovation & entrepreneurship
- ❑ **M3:** To instill the social & cultural values

Vision and Mission of Department

VISION:

To impart value-based state of the art knowledge in civil engineering and to serve the society by nurturing research, innovation and entrepreneurship.

MISSION:

M1: To build a concrete bond with all stakeholders for holistic development of society

M2: To develop an ecosystem to emulate research in civil engineering domain

M3: To nurture innovative approach and entrepreneurship skills to pursue excellence in all facets



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Leading Engineering College in Nashik

Sandip Foundation established in 2005 as a Charitable Trust under the Chairmanship of Hon'ble Dr. Sandip Kumar Jha with a vision to render selfless, dedicated service to higher education in the fields of Engineering, Management and Paramedical Sciences. The trust has proved its proficiency in education for last twelve years. Under the umbrella of Sandip Foundation, Sandip Institute of Technology and Research Center was established in the year 2008.

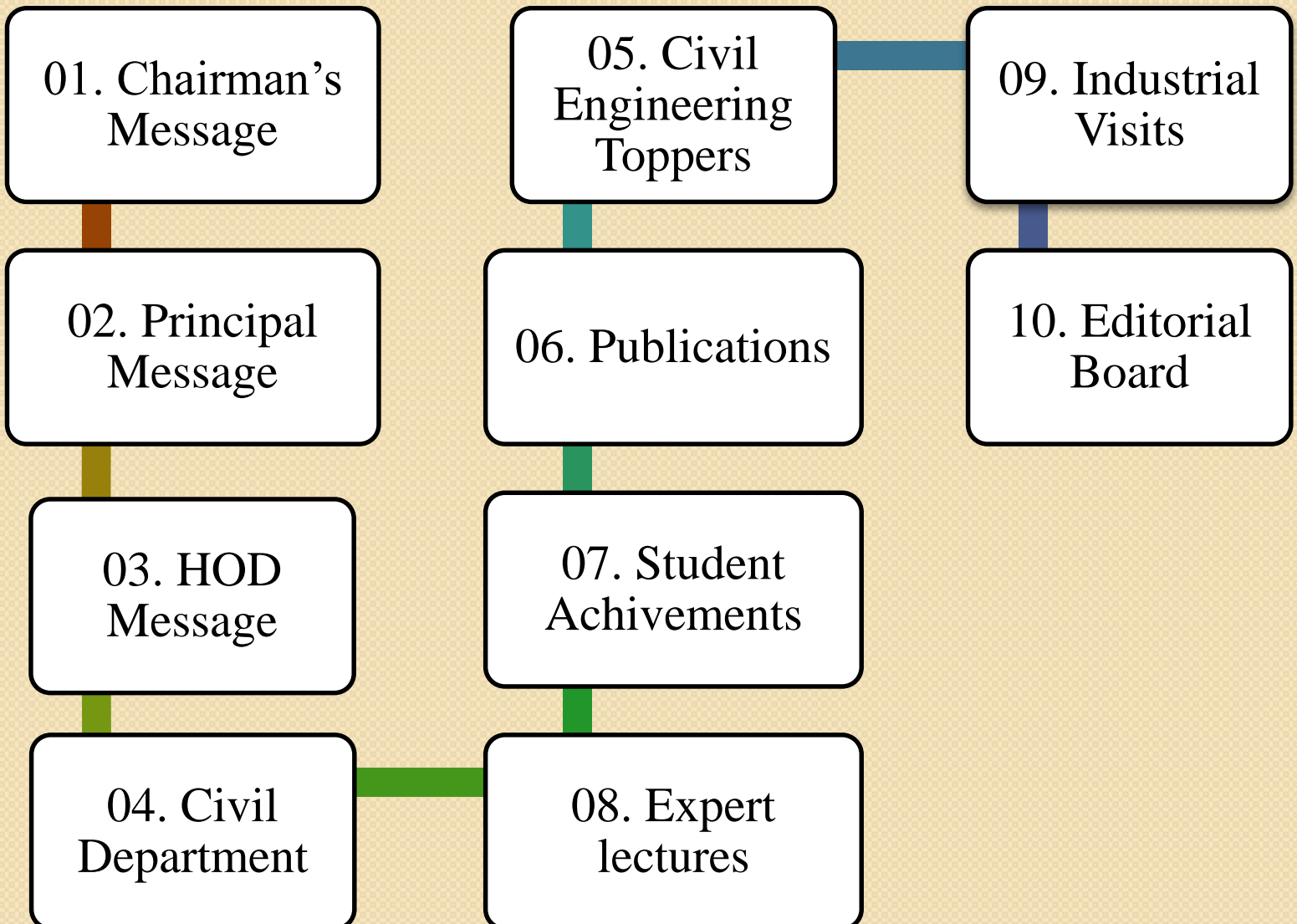
Vision of Department

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Mission of Department

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WHAT'S INSIDE



Vision of Department

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Learn from your experiences for these is no greater tutor than life itself.

From Chairman's Desk

Learn from your experience, for there is no greater tutor than life itself. I am happy to pen down a few words as prologue to our Newsletter which is exclusively meant for churning out the latent writing talent which bears immense potentiality of sharpening our students' skills as part of their overall personality development. I congratulate all the team members and contributors of this Newsletter for bringing out such a beautiful Newsletter. Walk with those who feed your mind with motivation to further your mission. Wake up hungry for success every day; your drive for success must match the ferocity of a hungry lion attacking his prey every morning. An educated person without morals is like a room without windows. I think that morals are what ground us as a society, and without morals we would have no light to guide our educated minds. We, at Sandip Foundation, strive to make our students reliable technocrats and trustworthy citizens of India. My staunch faith and conviction is that our students would carve a niche in their career and life by going lineage and heritage through this temple of learning. I would like to take this opportunity to reiterate that there is no substitute to hard work in any venture. Therefore, it should be our endeavor to give our best in our areas of responsibilities and aim at achieving excellence for our institution. I wish all success to this venture.

HON'BLE DR. SANDIP N. JHA
Chairman, Sandip Foundation

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Principal, SITRC, Nashik

From Principal Desk

“A dream is not that which you see while sleeping, it is something that does not let you sleep! “Dr. A.P.J. Abdul Kala. We, at SITRC, Nashik believe in the same philosophy. SITRC, Nashik started its journey to produce world class technocrats with competent skills in various technologies for serving the society. Our every effort ensures that we achieve our goals. Competent faculty is our asset. Each and every team member is passionate in achieving our goal. We always motivate our faculties to be an active part of our team. Nature is our friend here in the pleasant environment of Sandip Foundation. It rejuvenates the body, mind and intellect of our students as well as staff members. The aim behind all our co-curricular and extra-curricular activities is to provide an impetus to our young minds to explore new dimensions of life and to do innovation in their field. Some people think in terms of problem, some people think in terms of solution. We, at SITRC, Nashik, insist our students to be a problem solver. Students are motivated to make some mini and micro projects to utilize their knowledge practically. This is a platform to showcase their creativity. To increase employability of our students, certain Skills Development Programs have been introduced and implemented effectively by our institute. Due to globalization, liberalization and privatization, there is a cut throat competition in the market. We, by imparting practical knowledge to our students, make them industry ready. So the skill set gives them confidence to withstand the competitive world. Come, feel the difference. Rejuvenate mind and intellect. We assure quality education at its best at SITRC, Nashik and Sandip Foundation.

SITRC, Nashik

Prof. (Dr.) Amol Potgantwar, Principal, SITRC, Nashik

Vision of Department

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Message from HOD Civil Engineering Department

From HOD's Desk

I welcome you all to Civil Engineering Department, the institution which has set the benchmark for quality teaching learning process. The institute strives to provide the world class faculties and facilities so that we will see you all blossom into empowered and sensitive human being. Education is the manifestation of love and my most cherished possession. It drives away the ignorance and through illumination it emboldens a man to a righteous thought and action. It energizes a society and enables a man to earn his living with respect and praise. In order to accomplish our vision and mission, we are prepared to take as much effort as possible for the betterment of academic scenario in India. Our institute cares for the individual development of each and every student. We follow the mentor system under which each class is put into multi-prolonged web of a teacher. We accord prime importance to the behavioral discipline, moral integrity and cognitive developments of our students. Our faculties strive to teach not only academic programs but also life skills needed for students.

**Dr. Jyotiprakash G. Nayak,
HOD, Civil Engineering Department**

ABOUT CIVIL ENGINEERING DEPARTMENT

The department started its operation in the academic year 2014-15 and is instrumental in providing degree granting graduate level course in Civil Engineering with the intake of 60 students per academic year. Department proudly boasts the convergence of leading researchers from all over India in the teaching faculty pool. Corporates heavyweights have taken the initiative to act as advisor to faculty members and hence the curriculum is not only research-led and cutting edge but it's also aligned to the present day requirements in industries.

Department has well equipped laboratories with ultra-modern instruments. Students of the department are enriched by guidance of highly qualified and experience faculty members. Department having active consultancy cell providing consultancy facility for soil/building material testing, field testing for civil engineering projects.

This directly helps in producing industry ready graduates who can add value in the organization right from the day one.

Department Information

Programme:- Civil Engineering

Year of Establishment:- 2014-2015

Intake Capacity:- 60

CIVIL ENGINEERING TOPPERS

Sr. No	Name of Student	Class	SGPA	Grade
1	Gaikwad Sneha Bharat	SE	8.09	First Class with Distinction
3	Pawar Kiran Vithoba		7.61	First Class
5	Dandagaval Akanksha Arun		7.34	First Class
6	Tomar Lokesh Rajeshsigh	TE	9.05	First Class with Distinction
7	Nehete Jidyasa Jayant		6.81	First Class
8	Bhasme Samadhan Kalu	BE	8.87	First Class with Distinction
9	Sanap Ashitosh Dattu		8.76	First Class with Distinction
11	Nigal Anjali Ravindra		8.72	First Class with Distinction

PAPER PUBLICATIONS

Many Congratulation for Publications

- **Dr. Ramgopal T. Sahu** and Dr. Darshan J. Mehta (2024) “Impact of coastal inundation due to rise in sea level: A case study of Surat City, India” *Water Practice and Technology*
<https://doi.org/10.2166/wpt.2024.116>
- **Naga Seshu Babu T**, Sidharth Devang, Yash Salunke, Saurabh Donde, Sahil Parakh, Arjun Bangare (2024) “EXPERIMENTAL INVESTIGATION ON CHEMICAL ACTIVATION OF SUPPLEMENTARY CEMENTITIOUS MATERIALS FOR MAKING CONCRETE” *Industrial Engineering Journal* http://www.journal-iiie-india.com/1_june_24/6.5_june.pdf
- **Prashant sunagar** C. Raja Gopa Reddy, Vinod B R, Suchita Wali (2024) “Performance Of Polyacrylate-Based Super Absorbent Polymers In Recycle Aggregate Concrete” *Educational Administration: Theory and Practice* <https://doi.org/10.53555/kuey.v30i4.5825>
- **Prashant Sunagar**, HN Harsha, R Amar, R Devanand, BA Chethan, Guruprasad M Hugar, K Raghu, Basavaraja Simp, (2024) “Experimental Investigation Into The Mechanical & Durability Characteristics Of Alkali Activated Slag Concrete With Partial Replacement Of Waste Marble Powder And Bagasse Ash” *Educational Administration: Theory and Practice*
<https://doi.org/10.53555/kuey.v30i5.3568>

PAPER PUBLICATIONS

Many Congratulation for Publications

- **Virendrakumar Bhikajirao Patil** (2024) “Review of Groundwater Mapping and Water Quality Assessment Using GIS and Water Quality Index (WQI)” International Journal of Intelligent Systems and Applications in Engineering
- **S. W. Manjarwal**, Bodke Mayuresh Kishor, Matsagar Vishal Vasantao, Ugale Prasad Sunil (2024) “Risk Analysis of Precast Structure of Bridge” Industrial Engineering Journal
- **Prashant Sunagar** and Naveen Malammanavar (2024) ” Vibration Mitigation in Adjacent Buildings Using Selected Damper Types” African Journal of Biological Sciences (South Africa)
<https://www.afjbs.com/issue-content/vibration-mitigation-in-adjacent-buildings-using-selected-damper-types-5053>
- **Prashant Sunagar**, Lavanya Hegde, G Satish Kumar, Hema H, Basavaraja Simpi, Raghu K (2024) “Exploring the Geological Impact on Physical, Mechanical and chemical Properties of Concrete with Partial Replacement of Natural River Sand by waste Foundry Sand” Nanotechnology Perceptions <https://nanontp.com/index.php/nano/article/view/1465>

EXPERT LECTURES

Faculty Development program on “Innovative Inventions in Civil Engineering (IICE-2024)

Title: Faculty Development program on “Innovative Inventions in Civil Engineering (IICE-2024)

Date: 13th May 2024 to 18th May 2024

Venue: Online google meet platform, Department Of Civil Engineering

Event Resource Person Details: As per list attached (FDP Broucher)

Event Objective:

- 1) Recent Invention in Civil Engineering
- 2) To equip participants with the necessary skills for conducting high quality research, including research methodology, proposal and funding opportunities, research papers and publication process.
- 3) To provide participants with the latest advancements, trends, and best practices in civil engineering research and innovation to keep them abreast of current developments in the field.

Event Summary: Around 80+ faculty members across the various college of India were register and attended the FDP Attended the session. This programme is tailor made for PG, PhD student’s faculty members, and also for Industrial Professionals and Scientist from R&D organizations helping them to learn recent inventions in civil engineering. Also, this FDP gave more insights to young researcher to explore new innovation in various sectors of civil engineering.



Chief Patron
Hon'ble Dr. Sandip N. Jha
Chairman, Sandip Foundation

Patron
Hon'ble Prof. Pramod Karole
Academic Facilitator, Sandip Foundation

Program Chair
Prof. (Dr.) M. M. Patil
Principal, SITRC, Nashik

Convener
Dr. Jyotiprakash G. Nayak
Associate Professor & Head,
Department of Civil Engg.

Coordinator
Dr. Sagar D. Turkane
Assistant Professor,
Department of Civil Engg.

Coordinator
Dr. Ramgopal T. Sahu
Assistant Professor,
Department of Civil Engg.

Organizing Committee
Prof. (Dr.) B. S. Chandra
Mr. Sachin W. Manjarwal
Mr. Aniket S. Patil
Mr. Vitendra B. Patil
Mr. Naga Seshu Babu T.

Objectives of FDP

There is a tremendous emphasis on infrastructure creation in the country and projects such as National High Speed Rail, National Highways Development and High rise structures demands stability for long terms. Such projects requires optimized civil engineering work, materials, manpower and money. In view of, in this FDP detail information on different techniques, methodology, theories and practical applications involved in civil engineering constructions will be provided.

This programme is tailor made for PG, PhD student's faculty members, and also for industrial Professionals and Scientist from R&D organizations helping them to learn recent inventions in civil engineering. Also, this FDP will give more insights to young researcher to explore new innovation in various sectors of civil engineering. This FDP facilitates exposure to industrial applications of various materials and techniques used in civil engineering, wherein getting an opportunity to discuss and resolve queries with the industrial experts.

Keynote Speakers

Experts are from IITs, NITs, and reputed institutions and industries (List is attached)

Highlights of FDP

- Recent Invention in Civil Engineering
- To equip participants with the necessary skills for conducting high-quality research, including research methodology, proposal and funding opportunities, research papers and publication process.
- To provide participants with the latest advancement trends, and best practices in civil engineering research innovation to keep them abreast of current development in the field.

EXPERT LECTURES



Sandip Foundation's

SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE, NASHIK

Approved by AICTE, New Delhi and
Permanently Affiliated to Savitribai Phule Pune University, Pune

(An Autonomous Institute)



SANDIP FOUNDATION



Department of Civil Engineering

Organizes

One Week Online

Faculty Development Program

On



13th May 2024 to 18th May 2024

INNOVATIVE INVENTIONS in Civil Engineering (IICE-2024)



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Chairman, Sandip Foundation



Patron

Hon'ble Prof. Pramod Karole
Academic Facilitator, Sandip Foundation



Program Chair

Prof. (Dr.) M. M. Patil
Principal, SITRC, Nashik



Convener

Dr. Jyotiprakash G. Nayak
(HOD, Civil Engg.)



Coordinator

Dr. Sagar D. Turkane
Assistant Professor
Department of Civil Engg.
Mob: 9970209432



Coordinator

Dr. Ramgopal T. Sahu
Assistant Professor
Department of Civil Engg.
Mob: 9998780784

Day 01
13th May 2024

09.00 AM- 09.30 AM
Inauguration



09.30 AM to 10.30 AM
Dr. Tarendra Lakhankar
Director & RemoteSensing Scientist,
CUNY-CREST Institute,
New York, USA



2.00 PM to 3.00 PM
Dr. Nitin Tiwari
Post-doc Fellow, Purdue University, Indiana, USA
Engineering Solutions for a Climate-changed World:
Towards Sustainable and Resilient Infrastructure

Day 02
14th May 2024



11.00 AM to 12.30 PM
Dr. S. M. Yadav
Professor, SVNIT, Surat
Ensemble Prediction Systems(EPS) in
Flood forecasting



2.30 PM to 4.00 PM
Dr. Anurag Sharma
OP Jindal University, Raigarh,
Chhattisgarh, India.
An Engineering Perspective on
Disaster Mitigation and Management

Day 03
15th May 2024



11.00 AM to 12.30 PM
Dr. K. Vijay
Vishnu Institute of Technology,
Bhimavaram, AndhraPradesh, India.
Contemporary Advances in Construction
Industry



2.30 PM to 4.00 PM
Dr. Mahesh Gadekar
SCGSIET Nanded.
Combined approach of Response
Surface Design and Artificial
Neural Network in Wastewater Treatment.

Day 04
16th May 2024



11.00 AM to 12.30 PM
Dr. Tarun K. Rajak
SSIPMT Raipur (C.G.)
Stability Analysis of Coal Mine Overburden
Dump Using Industrial By-Products



2.30 PM to 4.00 PM
Dr. Sagar R. Chavhan
IIT Ropar
Understanding the tail behaviour of
Precipitation datasets over India.

Day 05
17th May 2024



11.00 AM to 12.30 PM
Dr. Yogeshwar Nawandar
NIT Calicut
Applications of Drone in road Infrastructure



2.30 PM to 4.00 PM
Dr. Manikant Verma
NIT Raipur.
Community Engagement for Climate Resilient
Water Resource Management

Day 06
18th May 2024



11.00 AM to 12.30 PM
Dr. Sandeep Chouksey
NIT Raipur
Fundamental study of Shear Strength of Soil



2.30 PM to 4.00 PM
Dr. A. S. Sayyad
Sanjivani College of Engineering, Kopergaon,
Maharashtra, India
Multidisciplinary Application of Functionally Graded
Materials: An overview

4.00 PM to 4.30 PM
Valedictory

Online Platform -

Organizing Committee

Prof. (Dr.) B. S. Chandra | Mr. Sachin W. Manjarwal
Mr. Aniket S. Patil | Mr. Virendra B. Patil
Mr. Naga Seshu Babu T.

A/P – Mahirawani, Trimbak Road,
Tal & Dist. – Nashik 422213

sitrc.sandipfoundation.org

info@sandipfoundation.org

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Registration



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EVENTS

Women's Day

Title: Report on “International Women’s Day 2024 celebration”

Date: 0.7.03.2024

Venue: Seminar Hall, D Building, SITRC, Nashik.

Resource Person: Mrs. Shamali Nikumbh
Mrs. Seema Baji mam

Event Objective:

To celebrate International Women’s Day 2024.

To make aware girls students about financial literacy and women entrepreneurship.

Event Summary: Department of Civil Engineering and Civil Engineering Students Association (CESA) organized “International Women’s Day 2024 celebration” on 07/03/2024. This event had overwhelming response



INDUSTRIAL VISITS



Site Visit to Cross Drainage Works on 13.04.2024

Site Visit to Hydropower Station at Vaitarna Dam on 03.04.2024



Site Visit of TE Civil to Hydropower Plant on 03.04.2024

Site Visit to Ganagapur Dam Left Bank Canal
2. Event Date: 15/04/2024



INDUSTRIAL VISITS

Site Visit to Cross Drainage Works

Name of Event:

Site Visit to Cross Drainage Works

Date of Visit:-

13.04.2024

Visit Location:-

Cross Drainage Works, Near Hirawadi, Nashik

Participants:-

BE Civil engg. Students

Objectives:-

To study the various canal structures and their functions, suitability etc like Venturi flume, Cross Drainage works



Site Visit to Hydropower Station at Vaitarna Dam

Name of Event:

Site Visit to Hydropower Station at Vaitarna Dam

Date of Visit:-

03.04.2024

Visit Location:-

Vaitarna Dam, Nashik

Participants:-

BE. civil Students

Objectives:- To Visit Hydropower Station at Vaitarna Dam to understand the working of hydropower station and electricity generation.



Visit to wastewater treatment plant

Name of Event:

Visit to wastewater treatment plant

Date of Visit:-

03.04.2024

Visit Location:-

Tapovan Link Road Near Laxmi Narayan Bridge, Tapovan, Dwarka, Nashik

Participants:-

TE civil students

Objectives:- To study waste water treatment process.



STUDENT PLACEMENTS



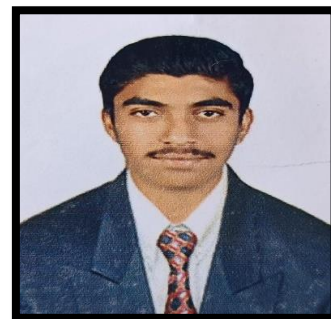
Pranav M Sanap
(5.25 LPA)

**Home First Finance
Company Pune**



Laxmi R Patil
(2.75 LPA)

**CORE PROJECT Engineering
and Consultancy Pvt.Ltd,
Amravati**



Ashitosh D Sanap
(4.75 LPA)

**Lixil Window Systems
Private Limited
Gurugram**



Rushikesh D Magar
(2.75 LPA)

**CORE PROJECT Engineering
and Consultancy Pvt.Ltd,
Amravati**



Nikita S Pawar
(1.80 LPA)

**Freevolt Green Energy
Technologies Pvt.Ltd.
Pune**



Bhushan S Salve
(2.5 LPA)

**RATNAA INDUSTRIES
Nashik**



Anjali R Nigal
(1.80 LPA)

**JPW Engineering Services
Pvt.Ltd. Nashik**



Krishna B Katela
(1.80 LPA)

**Formulaic Engineers
Pvt.Ltd Noida**



Nikita A Argade
(1.80 LPA)

**JPW Engineering
Services Pvt.Ltd Nashik**

STUDENT PLACEMENTS



Neha V Patil
(1.80 LPA)

Formulaic Engineers
Pvt.Ltd Noida



Aniket V Funde
(1.80 LPA)

Aniket V Funde
(1.80 LPA)



Madhuri M Wagh
(1.80 LPA)

Formulaic Engineers
Pvt.Ltd Noida



Sahil D Gaikwad
(1.62 LPA)

Ellora EPC Pvt. Ltd
Nashik



Apurva V Gawali
(1.62 LPA)

HD-BIM
Nashik



Siddharth V Devang
(1.62 LPA)

Ellora EPC Pvt. Ltd
Nashik

STUDENT PLACEMENTS



**Himani M
Mahajan
(1.62 LPA)**

**HD-BIM
Nashik**



**Laxmi S Gaikwad
(1.62 LPA)**

**HD-BIM
Nashik**

Program Educational Objectives (PEOs)

PEO1: To perform well in the Engineering profession as competent professionals, using contemporary technical knowledge and professional skills.

PEO2: To pursue higher education and demonstrate intellectual curiosity for lifelong learning.

PEO3: To communicate effectively and work in multi-disciplinary environments embedded with ethical values and social responsibilities.

Program Specific Outcomes (PSOs)

PSO1: Apply the knowledge of basic sciences, geology and environmental science along with the conceptual knowledge of engineering sciences to illustrate the process involved in planning, analysis and design of sustainable Civil Engineering systems.

PSO2: Conduct laboratory experiments/ field investigations and analyze/ interpret the experimental results for appropriate conclusions and recommendations to a real-world Civil Engineering problems with a significant perspective of economy, society and environment.

PSO3: Demonstrate professional ethics and implement the principles of project management, business and public policy to lead the project execution as per the design requirement, with the state-of-the-art technology and contemporary skills.

EDITORIAL TEAM

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Editor:- Dr. Sagar D. Turkane

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Mr. Raj R. Bhatade

Mr. Ajay S. Nichite

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SITRC INFRASTRUCTURE



SITRC Amphitheatre



SITRC Play Ground



Canteen