





# New Satara College of Engineering & Management (Polytechnic) Korti, Pandharpur

# News Letter VOL-1st



HOD's Desk

#### EDITION

Aug 2022 - Dec 2022

Editor in Chief Mr. V. H. Londhe Editor Ms.G.C.Kulkarni

# **INSIDE**

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Mr. V.M.Kumbhar Head
Of Department

I am very happy to bring out the first issue of the Civil Engineering Departmental Newsletter This newsletter outlines various activities that have taken place during the period of August to December, 2022 and the achievements of faculty and students. Various guest lectures and industrial visits are organized this semester to improve knowledge of the students. Preplacement training is offered to the final year students to make them prepared for the job interviews.

The Department of Civil Engineering is putting all efforts to ensure the overall progress of the students. Any suggestions for further improvement will be greatly appreciated.

# Vision

• "To be a leader in the field of civil Engineering by imparting quality Based technical education to serve industry and society."

# Mission

- To provide value based technical education in civil engineering.
- To train the student so enhance professional skills and competencies by Providing various training programs
- To mentor students in pursuit of higher education, entrepreneurship and global professionalism.

## EXPERT LECTURES

Expert lecturers provide an important educational experience for students based on their real-world life experiences. Students get to see the insight and perspective of the guest lecturers' specific field. The format can enable students to interact with professionals in formal and informal settings.



Guest lecture on AUTO CAD by Mr.R.B.Pawar

On 12th October 2022 we have arranged this guest lecture to Civil Engineering students by Mr.R.B.Pawar sir. on "importance of autocad". This lecture covered knowledge about Drawing and AUTOCAD.



Guest Lecture on Estimating & Costing by Mr.D.A.Raut

On 30th November 2022 we have arranged this guest lecture to Civil Engineering students by Mr.D. A.Raut. sir on "Estimating & Costing". This lecture covered Drawing& Detailed Process of Calculating Estimate & Its Application.

#### INDUSTRIAL VISIT

Industrial visits provide the students with an opportunity to learn practically through interaction, working methods and employment practices. It gives the students an exposure to current work practices as opposed to theoretical knowledge being taught at their college classrooms.



Industrial Visit at Bridge Construction, Velapur

On 03 November 2022 an industrial visit was organized by department of Civil Eng. To Bridge Construction at Velapur, for Second & third year students as a part of curriculum. The visit was helpful to enhance the knowledge about the Highway Engineering.



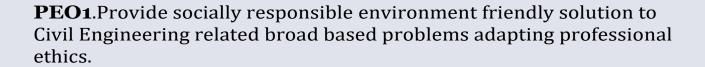
**Industrial Visit at Ready Mix Concrete Plant** 

On 3 November 2022 an industrial visit was organized by Civil Engg. to Ready Mix Concrete Plant for Second & third year students as a part of curriculum. During this visit sit Engineer introduced the information RMC Plant.

# Program Outcome's (PO's)

- **PO1**. Basic and discipline specific knowledge: Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.
- **PO2**. Problem analysis: Identify and analyze well-defined engineering problems using codified standard methods.
- **PO3**.Design/Development of solutions: Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.
- **PO4**. Engineering tools, experimentation and testing: Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.
- **PO5**. Engineering practices for society, sustainability and environment: Apply appropriate technology in context of society, sustainability, environment and ethical practices
- **PO6**. Project management: Use engineering management principles individually, as a team member or leader to manage projects and effectively communicate about well-defined engineering activities.
- **PO7**. Life-long learning: An ability to analyze individual needs and engage in updating in the context of technological changes. effectively in the world of work.

## **Program Educational Objectives (PEO's)**



**PEO2**. Adopt state of the art Civil Engineering broad based technologies to work in multidisciplinary work environments.

**PEO3**. Solve Broad Based Problems individually and as a team member communicating effectively in the world of work.



#### **Self-Healing Concrete: The Future of Sustainable Construction**

By: [Devmare Rohit], Diploma Civil Engineering

Date: December 2022

#### **Abstract:**

Concrete is the backbone of modern construction, but its tendency to crack remains a critical issue. *Self-healing concrete*—a material capable of autonomously repairing its cracks—offers a long-term solution for durability and sustainability.

#### **Introduction:**

Cracks in concrete reduce lifespan and compromise structural safety. Traditional repair methods are costly and time-consuming. The development of bio-concrete and chemical self-healing agents offers hope for long-lasting infrastructure.

#### Mechanism:

- **Biological agents:** Bacteria like *Bacillus subtilis* release calcium carbonate when exposed to moisture.
- **Chemical healing:** Capsules of healing agents burst to fill cracks when triggered by stress.

#### **Applications:**

- Underground tunnels
- Marine structures
- Highway bridges
- Nuclear facilities

#### **Advantages:**

- Increased lifespan
- Reduced maintenance cost
- Lower environmental footprint

#### **Conclusion:**

As infrastructure demands rise, self-healing concrete stands out as a revolutionary material for sustainable development.





Sr.	Name of Company	MOU Date	Period of MOU
No			
1	Sachita Pratisthan, Baramati	10-02-2020	05 Years
2	Shree Vasturachana Homes, panvel	26-02-2020	05 Years
3	Shree Vasturachana Realters, panvel	26-02-2020	05 Years
4	Shree vasturachana Creaters, Panvel	26-02-2020	05 Years
5	Sahakar Dwaraka, Panvel	26-02-2020	05 Years



This institute has started Entrepreneurship Development Cell in the Academic Year: 2020. The cell intends to encourage and provide training to the students who wish to become Entrepreneurs. This cell strives to inspire and generate a culture of Innovation to help doing entrepreneurs to realize their potential.

	CAY (2022-23)							
1	No. of Student - 43	Ms. Pavale Amrta Pratapsinh Coordinator Maharashtra Centre for Entrepreneurship Development Solapur	Entrepreneurship Awareness Program	2 Days	CE6I			

# Cultural Activities









IEEE Paper published on subject *Sisal fiber* reinforce concurrete, by ACCT publication

Author name: Mr.Kumbhar V.M., Mr. Nirmal. S.B



#### STUDENT ACHIEVEMENTS

Chess

Department Of Civil Engineering Second year						
1	Sarak Ganesh Kshiling	89.56				
2	Waghmmare Vishwajit Rajendra	86.44				
Third Year						
3	Rupnar Akshay Shavaji	77.44				
4	Priyanka Bajirao sakhre	73.15				

### **Editor's Desk**

Ms. G. C. Kulkarni

Lecturer in

Civil Engineering Department

Hello Everyone!



We are pleased to share with you Newsletter Edition (Aug 2022 - December 2022) Vol- 1 of Civil Engineering Department. This edition includes the various Technical, Cultural events, NSS activities, Student & Staff achievements & technical article by faculty The editorial desk is thankful to all those who contributed to publish this edition successful.