

Yashoda Shikshan Prasarak Mandal's

Yashoda Technical Campus, Satara

Faculty of Engineering



CONSTROMATIX MAGAZINE

JULY-DECEMBER 2022

DEPARTMENT CIVIL ENGINEERING







CONSTROMATIX

JULY-DECEMBER 2022

OVERVIEW OF DEPARTMENT

Welcome to the Department of Civil Engineering at YSPM's Yashoda Technical Campus, Satara. The department has been immensely successfully working from 2011 in the field of Professional Knowledge and advanced technical world. The department offers 4 years Bachelor of Technology in Civil Engineering. The department undergoes several curricular and extra-curricular activities throughout the year. The department is having mixture of well experienced and young, enthusiastic faculty members who are involved in industry institute interaction besides their day to day teaching activities. The Department of Civil Engineering at Yashoda Technical Campus (YTC) delivers latest knowledge in Civil Engineering. It prepares students for careers in industry, academia, and also create young entrepreneurs.

STRENGTH OF DEPARTMENT

- ·Well Qualified, Experienced staff
- ·Good infrastructure, Well-equipped laboratories
- ·Excellent academic performance
- Departmental Library facility for students.

Vision of the Department

To become a center of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society.

Mission of the Department

M1: To impart quality technical education through interactive teaching learning methods.

M2: To promote research and development activity by encouraging creativity and exposure to real world problems.

M3: To mentor students for innovative thinking with relevance to entrepreneurship.

M4: To develop social awareness in graduates to serve society.

Program Educational Objectives (PEOs)

PEO1: Demonstrate technical expertise, leadership and ethical qualities to design & execute Civil Engineering Projects.

PEO2: Exhibit qualities of teamwork with effective communication, life long learning to address real world civil engineering problems.

PEO3: Develop sensitivity towards environment and society for sustainable development including disaster management.

Program Specific Outcomes (PSOs)

PSO-1: The graduates will analyse and mitigate the natural disasters for the effective disaster management.

PSO-2: The graduates will be able to acquire sound technical knowledge to analyse and work on critical civil engineering issues.

PSO-3: The graduates will be enhancing professional abilities to meet industrial need.

Vision of the Department

To become a center of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society.

Mission of the Department

M1: To impart quality technical education through interactive teaching learning methods

M2: To promote research and development activity by encouraging creativity and exposure to real world problems.



CONSTROMATIX

JULY-DECEMBER 2022

OVERVIEW OF DEPARTMENT

1. STUDENT ARTICLES 2. FACULTY ARTICLES 3. FACULTY STUDENT CORNER 4. Art Gallery

Editor-in-Chief

Prof Sayali S. Jadhav

Academic co-ordinator
Prof. Sunil S. Lembhe

Head of the Department Prof. Prashant G. Borate

Principal Prof. Dr. D. S. Badkar

CONTRIBUTORS

Prof. Alfaj N. Shaikh

Prof. Ajinkya S. Shah

Mr. Tejas D Kulkarni

Miss. Rutuja S Hol

Miss. Dnyaneshwari Vanjari

Vision of the Department

To become a center of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society.

Mission of the Department

M1: To impart quality technical education through interactive teaching learning

M2: To promote research and development activity by encouraging creativity and exposure to real world problems.



CONSTROMATIX

JULY-DECEMBER 2022

KAILASH MANDIR, ELLORA CAVES



The Kailash Mandir is an exceptional feat of ancient engineering and artistry. Carved out of single massive rock, the temple is designed to resemble a mountain, symbolizing Mou Kailash, the abode of Lord Shiva. The temple complex is about 33 meters (108 feet) in heigh 30 meters (98 feet) in width, and 45 meters (148 feet) in length. The structure is not only temple but also a vast complex with several shrines, courtyards, halls, and intricately carve pillars. The temple features a large central shrine with a Shiva Lingam and sculptures of Hind deities, making it both a religious and artistic marvel. The construction of the Kailash Mandrequired immense labor, skill, and time, and the carving was done from the top down. The means that the sculptors started from the top of the rock and worked their way downward, technique that allowed them to reveal intricate details in the temple's architecture are sculpture. The temple's most stunning features include the giant Nandi bull (a mount of Lo Shiva) in front of the temple, detailed carvings of various gods and goddesses, as well as exquisite relief work depicting Hindu mythology and stories. The Kailash Mandir at Ellora is remarkable example of rock-cut architecture and remains a significant pilgrimage site.

Miss. Rutuja Hol (B Tech Civil)

Vision of the Department

To become a center of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society.

Mission of the Department

M1: To impart quality technical education through interactive teaching learning

M2: To promote research and development activity by encouraging creativity and exposure to real world problems.



CONSTROMATIX

JULY-DECEMBER 2022

FILLER SLAB



A filler slab is a type of reinforced concrete slab used in construction that incorporates the use of lightweight materials or voids (such as hollow bricks, ceramic tiles, or polystyrene blocks) to reduce the weight of the slab without compromising its strength and functionality. This slab system is commonly used in floor construction, especially in buildings with multiple stories, as it helps to minimize the overall weight of the structure and reduce the quantity of concrete required, thus making the construction more cost-effective and efficient. Advantages of Filler Slabs:

- 1.Reduced Dead Load: filler slabs significantly reduce the dead load
- 2.Cost-Effective: Since less concrete is used in the slab construction, the material cost is reduced.
- 3.Thermal Insulation: Many filler materials provide good thermal insulation, helping to maintain comfortable indoor temperatures and improve the energy efficiency of buildings.
- 4.Sound Insulation: The voids created by the filler materials can improve the acoustic properties of the floor, providing sound insulation between floors in multi-story buildings. 5.Quicker Construction: The use of filler slabs speeds up construction due to the ease of placing lightweight filler materials and reduced concrete usage, making it a popular choice for large-scale residential and commercial projects.

Prof. Ajinkya S Shah

Vision of the Department

To become a center of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society.

Mission of the Department

M1: To impart quality technical education through interactive teaching learning methods.

M2: To promote research and development activity by encouraging creativity and exposure to real world problems.



CONSTROMATIX

JULY-DECEMBER 2022

SAFETY IN CONSTRUCTION



- weather conditions
- Versatile, suitable for various surfaces & structures
- Longer drying duration compared to gypsum
- Generally more economical for large-scale projects
- finer finish
- Quick setting, shorter drying duration
- Lighter, reducing structural stress in some cases
- Less prone to shrinkage cracks than cement

Cement plaster is made by mixing cement, sand, and water, usually, the ratio of cement and sand s 1:4. The thickness of plaster depends on the surface to be plastered and could be around 12 to 20 milliliters. Sometimes, plasticizers are also mixed in the plaster to protect walls from parasites.

Advantages:

The best thing about cement plaster is that it can be used both for external as well as internal plastering.

Cement plaster is the best bet when it comes to olastering exterior walls because it is moistureresistant and will protect the wall against climate changes as well as environmental pollution.

Benefits Plastering What Does Offer?

Plastering offers multiple benefits to walls and ceilings. Both external and internal plastering is essential to lend the required strength support. Plaster serves protective cover on stones and bricks and extends durability to ceilings as well as walls.

Plastered walls are also protected against climate damage including rain, heat, and humidity. It is also easier to repair plastered walls in case if they get damaged in any way! Plastering also helps the levelling of the surfaces, and such walls are also finish-friendly as different finishes can be applied to it to enhance its look and appeal. Your home could also be less polluted as plastered walls tend to attract and create less dust.

Different materials are used plastering, but the most commonly used plastering materials are cement and gypsum. The answer to which material is best for your home will depend on an analysis of the advantages and disadvantages of each.

=Prof. Alfaj N Shaikh

Vision of the Department

To become a center of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society.

Mission of the Department

M1: To impart quality technical education through interactive teaching learning

M2: To promote research and development activity by encouraging creativity and exposure to real world problems.



CONSTROMATIX

JULY-DECEMBER 2022

ACHIEVMENTS

Sr. N	0	Class	Name of Industry Visited	Date
1		T.Y.B.Tech.& Final Year	Railway Station, Satara	19/12/2022
2		T.Y.B.Tech.& Final Year	RMC Plant & Stone Crusher Nagewadi, Satara	03/12/2022









Vision of the Department

To become a center of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society.

Mission of the Department

M1: To impart quality technical education through interactive teaching learning methods.

M2: To promote research and development activity by encouraging creativity and exposure to real world problems.



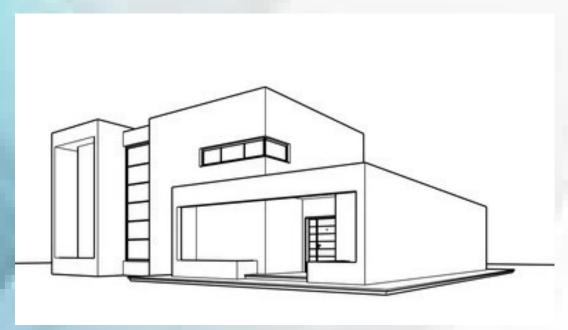
CONSTROMATIX

JULY-DECEMBER 2022

ART GALLERY

चालणारे दोन पाय कती वसंगत एक मागे असतो एक पुढे असतो पुढ याला अ भमान नसतो माग याला अपमान नसतो कारण यांना माहीत असतं णात सारं बदलणार असतं याचच नाव जीवन असतं...

> Miss. Dnyaneshwari Vanjari (B Tech Civil)



Tejas D Kulkarni (TY Civil)

Vision of the Department

To become a center of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society.

Mission of the Department

M1: To impart quality technical education through interactive teaching learning methods.

M2: To promote research and development activity by encouraging creativity and exposure to real world problems.