

# CIVIL INSIGHT

2019-20 I



**Pimpri Chinchwad Education Trust's**  
**Pimpri Chinchwad College of Engineering & Research**



## Vision of the Institute

To be a premier Institute of technical education and research to serve the need of society and all the stakeholders.

## Mission of the Institute

To establish state-of-the-art facilities to create an environment resulting in individuals who are technically sound having professionalism, research and innovative aptitude with high moral and ethical values.

## Department of Civil Engineering

To be the spearhead of Civil Engineering Education, imparting exhaustive know-how to create proficient and accomplished global technocrats.

### Vision:

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### Mission:

**M1:** To upgrade continuously, to develop state-of-art laboratories and advanced computational facilities and be ever resourceful to disseminate contemporary knowledge.

**M2:** To inculcate the zeal for research and innovation and to improve the quality of education and research.

**M3:** To enforce rigorous appraisals so as to identify strengths and key competencies.

**M4:** To enhance industry interaction to develop competent entrepreneurs and employable professionals.

**M5:** To cultivate ethics, social awareness, soft-skills and appreciation for cultural diversity to evolve a truly global community.

## Program Educational Objectives (PeOs):

**PEO1:** To develop accomplished technocrats, who are competent to provide Sustainable solutions to civilian issues.

**PEO2:** To impart state-of-the-art education to the aspirants so that they are capable of achieving a very rewarding occupation.

**PEO3:** To evolve technically sound graduates, skilled to succeed in competitive Examinations for higher education and employment.

## Program Specific Outcomes (PsOs): Civil Engineering Graduates will be able to:

**Ps01:** Know the architectural, technical, social, cultural heritage of the nation, to remain connected to the roots of civilization and design the solutions which are based on ancient wisdom and modern technology.

**PSO2:** Use contemporaneous software to find solutions to various engineering problems and become well-versed and skilled to face competitive examinations without qualm.

# HOD Desk



**Dr. Sameer S. Sawarkar**

HOD of Civil Engineering Departments PCCOER

Civil Engineering has to do with Civilization! With Civilization has developed Civil Engineering and with Civil Engineering has prospered Civilization! It is easily the oldest branch of Engineering. When the first human form thought of taking refuge in a cave, Civil Engineering was borne. Every man-made structure in this world is conceived, designed, constructed and maintained by Civil Engineers. A Civil Engineer is thus Vishwakarma of the modern world!

Civil Engineering is very versatile and diversified. It has many sub-disciplines such as; Structural Engineering, Water Resources Engineering, Environmental Engineering, Transportation Engineering, Foundation Engineering, Earthquake Engineering, Construction Engineering, Project Management etc. Civil Engineers could be entrepreneurs, offering consultancy to projects on varied scales. Civil Engineers could seek employment in Government, Semi-government and Private sectors, contributing to the growth of nation with their skills and services.

Civil Engineering Department at PCCOER has experienced, dynamic and dedicated faculty and state-of-art laboratories. We nurture our students with strong scientific and technical know-how and impart critical thinking skills on which, are founded their careers or higher studies. We endeavour to inculcate in our students, professional attitude, ethical values, creativity, leadership, innovative thinking, effective communication, team work, multidisciplinary approach and social awareness. The Department is committed to fostering a stimulating and intellectual environment in which both faculty and students excel in their professions.

*- Dr. Sameer S. Sawarkar*

## MAGAZINE CO-ORDINATORS



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## Site Visit to “Lavasa”

13/07/2019

Under the subject of Building Technology & Materials, the students of SE Civil went to Lavasa site Temghar Pune.

The main aim behind this site visit was that the students got an idea about how construction sites are getting developed. Students could observe and study different architectural buildings Also some geological features along the route. Students could learn Geotechnical Components like soil types, etc



## Site Visit to “Pune Junction”

15/07/2019

Under the subject of Infrastructure Engineering & Construction Technology, the students of TE Civil went to Pune Junction.

Our main purpose of the visit was that the Students could study different components of Railway and could see different operations such as Changing of Track and applying brakes etc. Station is very nearby to College and it is very helpful to correlate Theory and Practical applications.



## Tree Plantation at Dehuroad Police Ground

13/08/2019

Plantations of trees is important as they improve the life and fulfil essential needs of mankind. it renders a good feeling and makes the place worth living. It is the easiest way to beautify the surroundings. Trees are often planted on the parks, gardens, roadside, societies, and garden of our home for the purpose of reforming. Besides, it does not only make the surroundings beautiful but also provides various other benefits and helps in beating the heat. On the Occasion of the Teachers day we have plant the trees at Dehuroad Police Ground.



## Site Visit to "Prathamesh Exotica"

17/08/2019

Civil Department Faculties arranged Industrial Visit & workshop for Civil Students on 17 th August. This workshop help new students to adjust and feel comfortable in the new environment, encourage student's confidence and helps the students adapt faster to civil engineering Environment.



## Site Visit to "Pawana Dam"

27/08/2019

Under the subject of Fluid Mechanics-I, the students of TE Civil went to Pawana Dam Pune. Our main purpose of the visit was to be familiar with the experience of field work and to get practical knowledge of routing of canal and directing water through dams and distribution of water. Students of civil branch will get the idea of dams and canals and their purposes. Students will also get familiar with catchment area, hydraulic gates, and level of water, wing wall and body wall.



## Education Tour to South Central Metro Rail at Nagpur

19/09/2019

Nagpur Metro is a rapid transit system for the city of Nagpur, India. It is estimated to cost ₹8,260 cr. In February 2014, the Government of Maharashtra gave approval for the Metro Project, while the Government of India's Ministry of Urban Development had given Prime Minister Narendra Modi laid foundation stone on 21 August on his visit to the city. Construction on the project began on 31 May 2015, with trial run beginning on 30 September 2017. Nagpur Metro becomes 13th Metro system in India to be operational. It is also being touted as the greenest metro rail in India.



## Education Tour to NEERI at Nagpur

20/09/2019

The National Environmental Engineering Research Institute (NEERI), Nagpur was established in 1958 as Central Public Health Engineering Research Institute (CPHERI), when environmental concerns were limited to human health with a focus on water supply/sewage disposal/communicable diseases and to some extent on industrial pollution and occupational diseases. The chemical and biological solutions to address these problems were simple, though challenging.

However, slowly worldwide public awareness of the contamination of environment on regional to global scale started getting attention in the 1970's. Shrimati Indira Gandhi, the then Prime Minister of India, rechristened the Institute as National Environmental Engineering Research Institute (NEERI) in the year 1974. National Environmental Engineering Research Institute (NEERI), Nagpur is devoted to research and innovations in environmental science and engineering besides solving a range of problems posed by industry, government and public.



## Site Visit to "Sewage Treatment Plant"

20/09/2019

Under the subject of Environmental Engineering, the students of BE Civil went to STP Plant Akurdi. Our main purpose of the visit was to understand the practical knowledge regarding the functioning and process of municipal wastewater treatment plant, and also the visit was very beneficial to the students as they got a chance to have a practical knowledge of the whole procedure and various environmental testing, ethical and societal problems and other aspects. This visit covered the concepts and knowledge of core Civil Engineering subjects viz.- Water Supply Engineering, Environmental Engineering and Water Resource Engineering.



## Site Visit to “RMC Plant Moshi”

04/11/2019

Under the subject of Advanced Concrete Technology, the students of BE Civil went to RMC Plant Moshi.

Our main purpose of the visit was to understand the Technical exposure of Concrete Technology, Manufacturing Processes and other Engineering aspects of Concrete Technology Subject. Students have learnt Process of making concrete, Material used in the making of concrete, Test conducted over Concrete Blocks, Curing process for Concrete Blocks etc. With this kind of industrial visit, we gained more knowledge on Concrete Technology application aside from the theoretical aspect learned from the classrooms and laboratory



## Expert lecture on BIM Software

25/09/2019

Building Information Modeling (BIM) is an intelligent 3D model-based process that gives architecture, engineering, and construction (AEC) professionals the insight and tools to more efficiently plan, design, construct, and manage buildings and infrastructure.

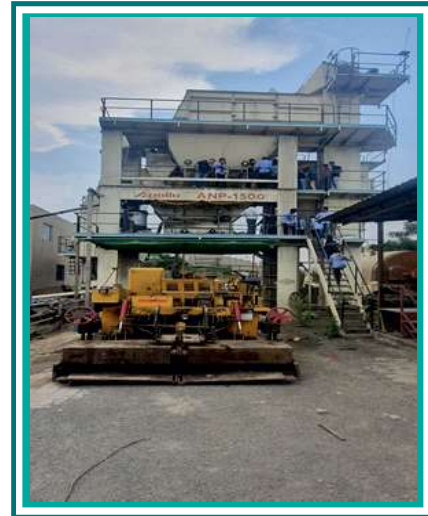




## Site Visit to “H.C Kataria Hot Mix Plant Moshi ”

04/11/2019

Our main purpose of the visit to the site of hot mix plant gives us a clear idea about the process of this plant. We learn about the types of hot mix plant such as batch mix plant & drum mix plant. We also learn about binder and filler material used in hot mix plant.



## Site Visit to “Sangamwadi Bridge”

25/09/2019

Under the subject of Structural Design-I, the students of TE Civil went to Pune Junction. Our main purpose of the visit was that the Students could learn about various factors affect planning , designing , and execution of bridge work . We also learn about Rail Over Bridge (ROB) crossing 18 m DP road. We also learn about various documentation required for construction of bridge.



## Site Visit to "Bhosari MIDC"

26/09/2019

Under the subject of Structural Design-I, the students of TE Civil went to Bhosari MIDC. Our main purpose of the visit was that the Students could learn about a gantry crane, which is a structure used to straddle an object or workspace. They can range from enormous "full" gantry cranes, capable of lifting some of the heaviest loads in the world, to small shop cranes, used for tasks such as lifting automobile engines out of vehicles.



## Expert Practical Session on Total Station and its uses

07/10/2019

Under the subject of Surveying, the students of SE Civil have the Expert Practical Session on the Total Station and its uses. Expert:- Prof. Kiran Shinde

Our main purpose of the session was that the Students could learn about the importance of total station and its uses in Civil Engineering.



## Expert lecture on Gantry Girder and its Problems

18/10/2019

Under the subject of Structural Design-I, the students of TE Civil has the Expert lecture on the Gantry Girder and its Problems Expert:- Prof. Akash Gunjal

Our main purpose of the lecture was that the Students could resolve their problems regarding the gantry girder.



## Expert Practical Session

05/10/2019

Under the subject of Geotechnical Engineering, the students of SE Civil has the Expert practical session on the Direct Shear Test & Unconfined Compression Test Expert:- Prof. Shailendra Banne

Our main purpose of the session was that to understand the both test and importance related to field works in the Civil engineering aspect.



## Workshop on Civil Engineering IPR Patents & Startups Building Ideas

28/11/2019

Mr. Ladkat explained to us the importance of patents related to Civil Engineering Aspects. He shared his own patents information and experience of filling the patents with us. He also encouraged all the faculty members about filling the Civil Engineering patents.



*A Civil Engineer is the Vishwakarma of the modern world!*

**Dr. Sameer Sawarkar**