

Maratha Vidya Prasarak Samaj's

# Karmaveer Adv. Baburao Ganpatrao Thakare College of Engineering, Nashik

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



#### "STRONG EDUCATIONAL FOUNDATION TO ADVANCE YOUR CAREER"

## **Department of Civil Engineering**

# **Newsletter**

### Volume 1 Issue 1

December 2018

#### Department Vision:

To be the leading department providing quality education to develop competent Civil Engineers, Entrepreneurs, and innovators to serve the nation.

#### **Department Mission:**

M1- To provide quality technical education.

M2- To prepare competent students for employment.

M3-To focus on developing values and professional skills.

### Program Educational Objectives:

- 1. To ensure that graduates will have a mastery of fundamental knowledge, problem solving skills, engineering experimental abilities, and design capabilities necessary for entering civil engineering career and/or graduate school.
- 2. To incorporate verbal and written communication skills necessary for successful professional practice.
- 3. Demonstrate knowledge of management principles and engineering techniques for effective project management.
- 4. To prepare graduates to deal with ethical and professional issues, taking into account the broader societal implications of civil engineering

### **June 2018**

1. FDP on Modern Techniques in Surface and Subsurface Surveying" from 28th May to and 1st June 2018.

The Civil engineering department of NDMVPS's KBTCOE organized a "One Week Faculty Development Programme On "Modern Techniques in Surface and Subsurface Surveying" from 28<sup>th</sup> May to and 1<sup>st</sup> June 2018. The one-week faculty development program received a tremendous response and a total of 11 resource persons who conducted training sessions for five

days. Er. Bhausaheb Khatale (Director MVP Samaj) did the inauguration of this FDP along with Dr. M B Nakil, Dr.K.S.Holkar (Principal KBTCOE), Dr. M P Kadam (HOD Civil Engineering) and Dr. K T Patil.



Lightning of lamp at an inaugural function



## Dignitaries on stage



Dr. M. B. Nakil giving a presentation on remote sensing on day 1st



Er. Santosh Wagh (MERI Nashik) addressing participants on Significance of GPS/GIS



Er. Prasad Kale addressing participants on Applications of Total Station and DGPS



Er. Amit Rathode demonstrating participants Field use of Total station and DGPS



Er. P D Ghumatkar is explaining Applications of Electrical Resistivity Meter.





Asst.Prof. S J Kadbhane demonstrating the use of total station





Er. Sanjay Dhongade presenting Land surveys and record of government agencies (Bhumiabhilekh)



Dr. Jaydeep Nikam presenting Applications of Electrical Resistivity Meter

The Day 5 Resource Person was Mr. Vikrant Patil. He has given a presentation on Applications of QGIS software and Significance of Google engine. The Valedictory function conducted on the last day at the end of all the sessions; the following guest was present for the function.

Mr. Nanasaheb Mahale Director MVP samaj

Principal KBTCOE Dr.K.S.Holkar Sir.

HOD Civil Dr.M.P.Kadam Sir.

Covener Dr. K T Patil



Mr. Nanasaheb Mahale addressing participants in the valedictory function



All participants along with guest, principal, and HoD

## 2. Students Achievement



Students of the second year ME Civil at PGCON

All students from second-year ME Civil have presented their papers in PGCON held at JSPM College of engineering, Wagholi on 11<sup>th</sup> June 2018. Mr. Shijo Thomas awarded the best paper award for his paper on 'Reduction of Greenhouse Gas Emissions by Clean Development Mechanism for Nashik Waste Management.'

#### 3. Alumni interaction



Ms. Vaishnavi Shingote interacting with students of Civil Engineering

One of our alumni from the first batch Ms. Vaishnavi Shingote have visited the department on 15<sup>th</sup> June 2018. She has interacted with the students of civil engineering and shared her views about careers in civil engineering and experiences about her college life. She is working as Assistant Professor in symbiosis institute of technology in Pune and pursuing her Ph.D. in Ocean Engineering from the same institute.

#### 4. Orientation Program



Principal Dr. K. S. Holkar addressing the students

The orientation program began on 25<sup>th</sup> June 2018 with the welcome of the students, faculty members, and Principal Dr. K. S. Holkar, who graced the occasion with his presence. Next, a brief description of the institute, which included the motto, history, and reputation of college along with recent achievements given by HoD Dr. M. P. Kadam. The students were acquainted with the opportunities they will be receiving under the Student Mentorship Program and all the support and guidance that they will be getting from the departmental activities. Then the students were addressed by Mr. S.J. Kadbhane, who welcomed the students and gave them an introduction regarding the library facility available in the department as well as in institute. Mr. A. M. Bhoi next discussed the opportunities in civil engineering and various courses like MPSC and GATE held in the department. Followed by the distribution of certificates to the students who have completed the course on AutoCAD, orientation programme ends with the national anthem.

#### 5. Faculty training

Department has organized a hands-on training session on LATEX software for faculty on 23<sup>rd</sup> June 2018. This session was taken by Ms. Madhuri Malode from computer engineering department. This session will be helpful to faculty as well as students to prepare project reports in latex programming.



Ms. Madhuri Malode is demonstrating latex software to the faculty of civil engineering.

## **July 2018**

#### 1. Kaushalya Din (Skill Day)

Department of Civil Engineering has organized Kaushalya Din on Tuesday, 17<sup>th</sup> July 2018. Various programs are being implemented in our nation to provide excellent and quality skillful training to the youth. In the coming days, skill development and entrepreneurship will be the critical factor to work on, said of Mr. Avinash Shirode, former aerospace engineer, ISRO. Principal Dr. K. S. Holkar, head of the department Dr. M. P. Kadam, and all civil engineering faculty were also present. This program was very fruitful to civil engineering students.



Mr. Avinash Shirode addressing to students

### 2. Expert Lecture on Civil Engineering Software

Mr. Garvit Devide from Civil Engineering Software Academy, Pune has delivered an expert talk on Civil Engineering Software used in practice on 26<sup>th</sup> July 2018. He is a practicing RCC consultant and has nine years of experience in structural engineering. He has mainly focused on stadd pro, e tabs and AutoCAD software which are being used commonly in practice. All third-year students have attended this session and given positive feedback.



Mr. Garvit Devide delivering an expert talk

#### 3. Visit Wastewater treatment plant

Students of BE Civil along with subject teacher Mr. Manoj Patil visited a wastewater treatment plant at Tapovan on 13<sup>th</sup> July 2018.Mr. Matale has guided students about process and working of the plant. Primary objectives of this visit were to understand various processes of the plant, working of UASBR type treatment plant and use of wastewater for different purposes.



BE Civil students observing the wastewater treatment plant

#### 4. Visit to Concrete Pavement Construction site

The site visit was conducted to show the construction stages of permanent road pavement on 13<sup>th</sup> July 2018. The students got to see the site conditions first hand, the problems which are faced on day to day working. The special features which makes this road a smart road are - underground ducts for passage of utilities. Smart pavement, digit signals, solar powered street lamps etc among other things.



## **August 2018**

1. Step Ahead Study Abroad Consultancy (Branch of Impel Training Overseas Education) Nashik Carrier Guidance Program – 21st August 2018

Step Ahead Study Abroad Consultancy Nasik, help student to fulfill the aspiration in overseas education at various countries like New Zealand, Australia, U.K, USA, Canada, Singapore, Germany, etc & career advancement for the students.

## **Topics covered**

- 1. Study abroad (Admission, Scholarship, loan, Visa Guidance)
- 2. GRE Coaching
- 3. IELTS/TOEFL Coaching
- 4. Study at to 100 world ranked universities
- 5. German language coaching



2. GTT's Training - Barclays CSR Program in association with NASSCOM Foundation 28th, 29th & 30th July.

#### Queries covered and discussion on

- 1) Address the assumptions such as "Study Abroad" is possible
  - a) only by rich people as need huge funding
  - b) Only studious and scholar student get admission for the same
  - c) GRE is Mandatory for taking admission to Masters
- 2) Merits and demerits of various countries.
- 3) Post Study Work Search visa rules of various countries.
  - 3. Workshop under Entrepreneurship Development Cell of Civil Engineering
    Department

Date of Workshop – 30<sup>th</sup> August 2018

**Under The Government of India Initiative on Plastic Ban – Making of Paper Bags** 



4. National Institute of Building Technology [NIBT] Training

 $Carrier\ Guidance\ Program-31^{st}\ August\ 2018$ 

## **Topics covered**

- 1. Training in Revit Architecture (Basics)
- 2. Revit MEP





# 5. Social Activity:

Department of Civil Engineering has contributed towards chief minister's distress relief fund rs. 5500.



# September 2018

## 1. Meteorological Station Visit

Third-year Civil Engineering students visited Meteorological Station Indira Nagar, Nashik road on 7<sup>th</sup> September 26, 2018. The students got the opportunity to see different weather parameters (Anemometer, Automatic recording rain gauge station-float type, Dry and Wet thermometer, maximum and minimum thermometer, etc.) and working at this station. 74 students from Third Year Civil Engineering took the benefit of this visit. Mr. Pawar and Mr. Nemade sir from Irrigation Department, the government of Maharashtra, Nashik has guided to the students.



Third-year civil engineering students with faculties and staff of irrigation dept.

#### 2. Nilwande Dam and Hydropower Plant Visit

Department of Civil Engineering has organized a visit for TE Civil students to Nilwande Dam and Hydropower station located at downstream of the dam on 11<sup>th</sup> September 2018. The students visited the Hydropower plant first and then Dam structure. The turbine used in this plant is Kaplan which rotates vertically with a capacity of 8 MW. At the end of the visit, students shared that it has been very informative to see the different components of the dam structure and hydropower plant working. Mr. Kiran Rahane has guided students at hydropower plant.



TE Civil students at a hydropower plant

## 3. Sahyadri Farms Visit



TE Civil students at Sahyadri Farms

Department of Civil Engineering has organized site visit for TE civil Engineering students for the subject Employability skill development on 14<sup>th</sup> September 2018. A Sahyadri farm located in Mohadi, Nasik. Sahaydri farms work for farmers.it is an agricultural product based company. The company has many outlets in Nasik as well as in Mumbai. The company also works for the

welfare of farmers. After the visit, students come to know different soft and employability skills required in corporate sectors and how to manage various resources in the company.

## 4. Central Engineering Workshop Visit

TE Civil students have visited the central engineering workshop, Manmad on 22<sup>nd</sup> September 2018. This visit conducted under the subject of structural design –I. Objectives of this visit to visualize actual steel structural design and fabrication of these structures. Er. Jivan Chaudhary, the Senior Sectional Engineer, gave information regarding the design and manufacturing of trusses. Mr. A.V. Nanware, Chief workshop manager, has provided administrative help during the visit.



TE Civil students at a central engineering workshop

#### 5. Hot Mix Plant Visit

The BE Civil site visit arranged at the Hot Mix Plant located near ramshej fort. The purpose of the visit was to the understand the working of bitumen hot mix plant which is a part of the Cold mix asphalt pavement. The students were explained the operation of different components of the plant and method of functioning and the sequence of working along with

the capacity of the plant and its advantages. Stone crushing mechanism and operation of the stone crushing plant were also shown at the crushing plant adjacent to it. 65 students along with two faculty members were present for a visit.



BE Civil students at hot mix plant

#### 6. Residential Building Project by Vimal Constructions Visit

We have organized site visit for SE civil Engineering students for the subject Building Technology and Materials. The sites of Vimal construction firm are located at Gangapur road and Pandit colony, Nasik. Both sites undergo the construction of Residential apartments. After the visit, the students come to know the different materials used in construction, various stages in buildings, Different finishing items used in development such as flooring, plastering, painting, and plumbing.



Students of SE Civil at the site of a residential building

#### 7. Geological Study Tour at Rajasthan (09/09/2018 To 13/09/2018)

Under the guidance of Dr. K. T. Patil along with Ms. M. B Murkute and Ms. K. R. Sonawane, the Geological study tour arranged for the BE Civil Engineering students from 09/09/2018 to 13/09/2018. The trip was planned to visit various locations in Rajasthan state like Chittaurgarh Fort, Udaipur (Palace, lakes, saheliyonki Bari etc), Pushkar, Jaipur (Amer Fort, Pink city, Jantar-Mantar, Hawa-Mahal, Museum, Birla Temple etc), Bisalpur dam (Geology: rock types, structures), WTP at Bisalpur colony, Sawar (Marble mine). Total 46 (30 boys and 16 girls) students have been attended this study tour along with three staff members. The Journey was made by bus for the convenience of field observations.

#### **OBJECTIVES OF STUDY TOUR:**

To understand different geological aspects.

To study Geological formations and their setup at Bisalpur (Jaipur) Dam site and its significance.

To observe and understand mining activities.

To study historical planning, architecture, structures, construction techniques and material, WTP, etc.

To study the green building concept implemented at Fort, Jantar-Mantar, etc.

#### **Marble Mine Sawar (Jaipur)**



We visited marble mine located at Sawar, Kekri Tahsil Rajashtan. The process of mining activity of marble observed. Marble is metamorphic rock formed due to metamorphism of carbonaceous fine-grained sedimentary rock. Marble is favorite and favorite rock due its attractive color, brilliant look, and ease of polishing properties. There are abundant deposits of various limestone in Rajasthan.

#### Jantar-Mantar (Jaipur)



The Jantar Mantar monument in Jaipur Rajasthan is a collection of nineteen architectural astronomical instruments built by the Rajput king Sawai Jai Singh II and completed in 1734. It features the world's largest stone sundial and is a UNESCO World Heritage site. It is located near City Palace and Hawa Mahal. The instruments allow the observation of astronomical

positions with the naked eye. The monument expresses architectural innovations, as well as the coming together of ideas from different religious and social beliefs in 18th-century India. The observatory is an example of the Ptolemaic positional astronomy which was shared by many civilizations.

#### **Amer fort of Jaipur**



Five generations of raja man Singh constructed it. The fort built by using red sandstone and marble.

**Architecture -** the wall and ceiling of the hall carved with beautiful paintings and flowers which made of pure glass and precious stone. And the placement of ceiling glass is terrific. Because of this if someone burns two candles, then the reflection converts that small light into thousands of stars, and it looks fantastic and can get the idea of what was the level of architecture in that time in India.

**Steam bath system-** this system consisted of a steam bathroom whose ceiling carved in the form of diamonds. There is a separate compartment near this room where the water gets heated, and then the steam is let into the steam bathroom where the droplets fall from the corner of diamond caving.

**Rainwater harvesting-** small canals/ gutters were constructed all around the terrace of the fort which collected the water, and this water collected into an underground tank. It said that during the dry season around 4000 people could survive on this stored water for about two years.

**Air conditioning-** the water flows through separate channels and flows over U shaped grooves. The fragrance from the Kesar Bagh spreads throughout the room.

### Bisalpur Dam (Jaipur):



Bisalpur dam is a gravity dam on the Banas river near Deoli in Tonk district, Rajasthan, India. The dam completed in 1999 for irrigation and water supply. Various metamorphic rocks observed at the Dam site such as mica schist, quartzite, gneiss, etc. By visiting the dam site, students understood the geological features of the dam site and also the various constructional features of the Bisalpur dam.

#### **Water Treatment Plant:**



The Bisalpur Jaipur water supply project has been designed to deliver water from the current bisalpur dam head work suptobalwala on the south edge of Jaipur city to reduce the city's dependence on its groundwater resources and includes corresponding provisions for supplying water to other areas. The WTP has been designed to provide a total of 400 MLD with the

requirement of 360 MLD Jaipur city and 40 MLD for a rural area. At the time of visit students focused on the detailed information about the various units of WTP concerning their automatic operations and functions.

## **Udaipur City Palace**



The City Palace in Udaipur was built in a flamboyant style and is considered the largest of its type in the state of Rajasthan. It was built atop a hill, in a fusion of the Rajasthan and Mughal architectural styles, providing a panoramic view of the city and its surroundings.

#### **Chittor Fort**



The Chittor Fort or Chittorgarh is one of the most massive forts in India. It is a UNESCO World Heritage Site. The fort was the capital of Mewar and located in the present-day town of Chittorgarh. It sprawls over a hill 180 m (590.6 ft) in height spread over an area of 280 ha (691.9 acres) above the plains of the valley drained by the Berach River. The fort precinct has several historical palaces, gates, temples, and two prominent commemorative towers

## 8. Wastewater Treatment Plant Visit



BE Civil students along with the staff of treatment plant and faculties

BE Civil students recently visited the Wastewater Treatment Plant, Panchak on 1<sup>st</sup> September 2018. This visit conducted under the curriculum of subject Environmental Engineering-II. Mr. K.V. Warale has guided students during the site and lab visits. Purpose of this visit is to study the various components of the Aerobic wastewater treatment plant, multiple processes involved in wastewater treatment and the working of the activated sludge process.

#### 9. Expert Talk on Docks And Harbour

Er. T.H.Sutar conducted expert Lecture session on the topic Docks and Harbours for TE Civil Class on 6<sup>th</sup> September 2018. The expert lecture constituted of explaining the importance of the docks and harbor and the practical experience of working on the Mumbai Port Trust. The talk also

included a brief explanation of the various components and the method of functioning of the Harbors, the safety measures.



Er. T. H. Sutar guiding students on Docks and Harbours

### 10. Expert talk on Management as Career

Time Institute, Nashik conducted a seminar on management as a career for TE Civil students as training and placement activity on 10<sup>th</sup> September 2018. They explained the importance of pursuing post-graduation courses in management after engineering. The scope of management in shaping s successful career also elaborated in the lecture. They also provided the details about the exam seats and no of candidates appearing for the exam even the top management institutes and discussed the exam pattern and the type of preparation needed to crack this exam. This programme was beneficial for deciding whether students should go for management studies or not.



11. Lecture on Career Opportunities in Civil Engineering



#### Er. Prabhakar Gunjal addressing students

A Guest lecture was organized in the Department of Civil engineering for students of SE, TE and BE students on 25<sup>th</sup> September 2018. At Civil Seminar Hall. The guest lecture was on the topic of "Career opportunities in Civil Engineering" presented by Er. Prabhakar Gunjal (Chartered Engineer). Er. Prabhakar Gunjal has explained the primary civil engineering activities and construction coordination for different types of structures. He explored a career in various aspects of civil engineering like valuation, law, contracts, and consultancy. The students were interactive on this topic and gained knowledge of multiple opportunities in the future.

### 12. Teachers Day

Civil Engineering department and CESA celebrated Teacher's Day on 5<sup>th</sup> September 2018 to express gratitude and appreciation to the teachers. Teacher's Day celebrated on 5th September in tribute to Dr. Sarvepalli Radhakrishnan, a great academic philosopher, well-known diplomat, scholar, the vice president of India and above all a teacher.

The students played the role of teachers for a day by preparing a timetable and delivering lectures from S.E. to B.E. In the felicitation programme; the students felicitated all the faculty. Principal Dr. K. S. Holkar and HoD Dr. M. P. Kadam guided the students on this occasion. On behalf of all Civil Engineering students; unique gifts presented to all the teachers. The celebration concluded with a musical drama, acted by students.



All faculties of Civil Engineering on Teachers Day

### 13. Engineers Day

Civil Engineering Department celebrated Engineers Day on 18<sup>th</sup> September 2018, which is observed every year on September 15 to mark the birth anniversary of Sir M Vishweshwaraiah. Sir Mokshagundam Vishweshwaraiah was a noted Indian Engineer of all times. He was also honored with India's highest honor Bharat Ratna in 1955. Vishweshwaraiah was the man behind the flood protection system. He served as a chief engineer during construction of Krishna Raja Sagara on the Kaveri River near Mysore. Several dams still functioning were built under Visvesvarayya.Ms. The department felicitated Apeksha Barhe, alumni of 2017-18 batch for her excellent record in university exams.Dr. M. P. Kadam addressed to the students.



Dr. M. P. Kadam felicitating Ms. Apeksha Barhe

#### 14. Social Activities

Students and faculties of Civil Engineering Department donated clothes for Kerala people affected by flood disaster.

## October 2018

#### 1. Visit to EKA project by Amit Enterprizes

The industrial visit was arranged for ME I year students on 29/09/2018, Saturday to EKA Project, Pathardi, Nashik by Amit Enterprises Housing Ltd. The purpose of visit was to study and understand planning and management of resources on site, safety norms as per OSHA, use of new technology i.e. ALLU-FORM formwork for speedy construction and actual implementation of safety measures on site by using Personal Protective Equipment (PPE), preparing safety checklist, policies, incentives, housekeeping, etc. The information shared by the team member i.e. Er. Suryawanshi Sir and Er. Kombe Sir of Amit Enterprises Housing Ltd. was very effective. Er. Suryawanshi works as a safety officer on the site and explained the concept of safety on construction site and its importance. Er. Kombe Sir works as Senior Engineer and explained technical aspect on site and use of new technology ALLU-FORM formwork for speedy construction. The visit was concluded with distribution of certificates to students by Project Manager of Amit Enterprises Housing Ltd.



ME I year students at site of Amit Enterprizes.

#### 2. Visit To RMC Plant

The industrial visit was arranged for ME I year students on 23/10/2018, Tuesday to Ready Mix Concrete (RMC) Plant of Prism Johnson Limited, RMC Plant (India) Division, Ambad, Nashik. The purpose of visit was to study the layout of RMC plant, process and actual

working of RMC plant, quality control techniques, details of tests carried on concrete and its raw materials and safety measures followed on plant. The information shared by Er. Pooja Joshi Madam and Er. Samir Patkar Sir of Prism Johnson Limited, RMC Plant (India) Division, Ambad, Nashik. was very effective. Er. Pooja Joshi Madam (Executive CSG) conducted the study tour to plant and explained the various components of RMC plant. Er. Samir Patkar (Dy. Manager – QC) explained the types of advanced concrete based on application, quality assurance policy and test to be carried out on ingredients of concrete and concrete.



ME I year students and faculties along with staff of RMC plant

### 3.Expert talk on HEC RAC Software

The Department of Civil Engineering, NDMVP'S KBTCOE, had organized a guest lecture on HEC RAS Software for the students of T.E. Civil Student on 07th Oct 2018. The Speaker for the lecture was, Mrs. Harshita Ambre. In this lecture she has given information, application and Importance of HEC RAS in hydrologic routing, channel routing which is used in bridges, culvert ,dam's spillway etc. and also run one tutorial on the basis of software .Total number of student were presented for this lecture are 60.



Er. Harshita Ambre guiding students on HEC RAC software

## 4.Jalsamrudhhi Abhiyan

Students of Civil Engineering were guided for save water movement by Jalsamrudhhi Abhiyan, Nashik. Volunteers of this organization appealed students and staff of the department to participate in this program.



Awareness about save water movement by Jalsamrudhhi Abhiyan

#### 5.Swachh Bharat Abhiyan

NDMVPS'S KBT College of Engineering participated in a cleanliness drive during the month of October,2018 as in accordance with the Swachh Bharat Abhiyan launched on 2nd October 2014 by GOI. Students from the Department of Civil Engineering along with Dr. M. P. kadam of the department were actively involved in the cleanliness drive. They enthusiastically took up brooms and garbage bags to clean up every nook and corner of the outer edge of the college premises. The whole drive was quite inspiring and motivating for the staff and students. The students realized that any work is best done when it is carried out by a person himself. It also made the students aware of the dignity of labor. The campaign and the hard work of the students stood as an example and encouragement to all the students to keep the premises clean and green.



Dr. M. P. Kadam at parking

# **Editorial Team:**

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