Sipna College of Engineering and Technology, Amravati

Department of Civil Engineering

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Vision of the Department

To provide quality professional education for creating reputed civil technocrats and entrepreneurs for the sustainable infrastructure development and cater the need of the society.

Newsletter 2021

Volume I | Issue I

About Department

Civil engineering is a professional engineering discipline that deals with the design, construction and maintenance of the physical and naturally built environment, including works like roads, bridges, canals, dams, and buildings. Civil engineering is the oldest engineering discipline after military engineering, and it was defined to distinguish non-military engineering from military engineering. It is traditionally broken into several sub-disciplines. Civil engineering takes place on all levels: public sector from municipal to international companies.

To cater the needs of the society, Sipna College of Engineering & Technology, Amravati is obliged to impart quality civil engineering education by making available all requisite contemporary infrastructures, books, equipments and facilities along with well qualified faculty members.

Vision of the Department

To provide quality professional education for creating reputed civil technocrats and entrepreneurs for the sustainable infrastructure development and cater the need of the society.

Mission of the Department

- To provide state of the art resources that contributes to a competitional learning environment.
- To contribute to advancement of knowledge through regular interaction with industries and offer solution to their problems.
- To remains updated with contemporary technology and develop managerial skills.
- To inculcate moral and ethical values among the students to fulfil society's needs.

Program Educational Objectives

Engineering Graduates will be able to:

PEO1 Acquire the fundamental knowledge in basic sciences and civil engineering to solve real life problems.

PEO2 Succeed in getting engineering positions in government, public and private construction sector.

PEO3 Succeed in the pursuit of higher studies and continue with life-long learning.

PEO4 Get aware of social responsibility, ethical standards and environmental issues to serve the society.

Students' Activities

S.N.	Date	Activity & Guest	Number of Students present	Remark
1.	18/06/2020	Online Quiz on "Fluid Mechanics Lab" By- Prof. Ashwin S. Pand	219	Image based quiz was conducted that tested the laboratory experiments carried out for the subject Fluid Mechanics. Functioning of each apparatus was described in a puzzle format that the student/participant had to crack in order to proceed for the next question.

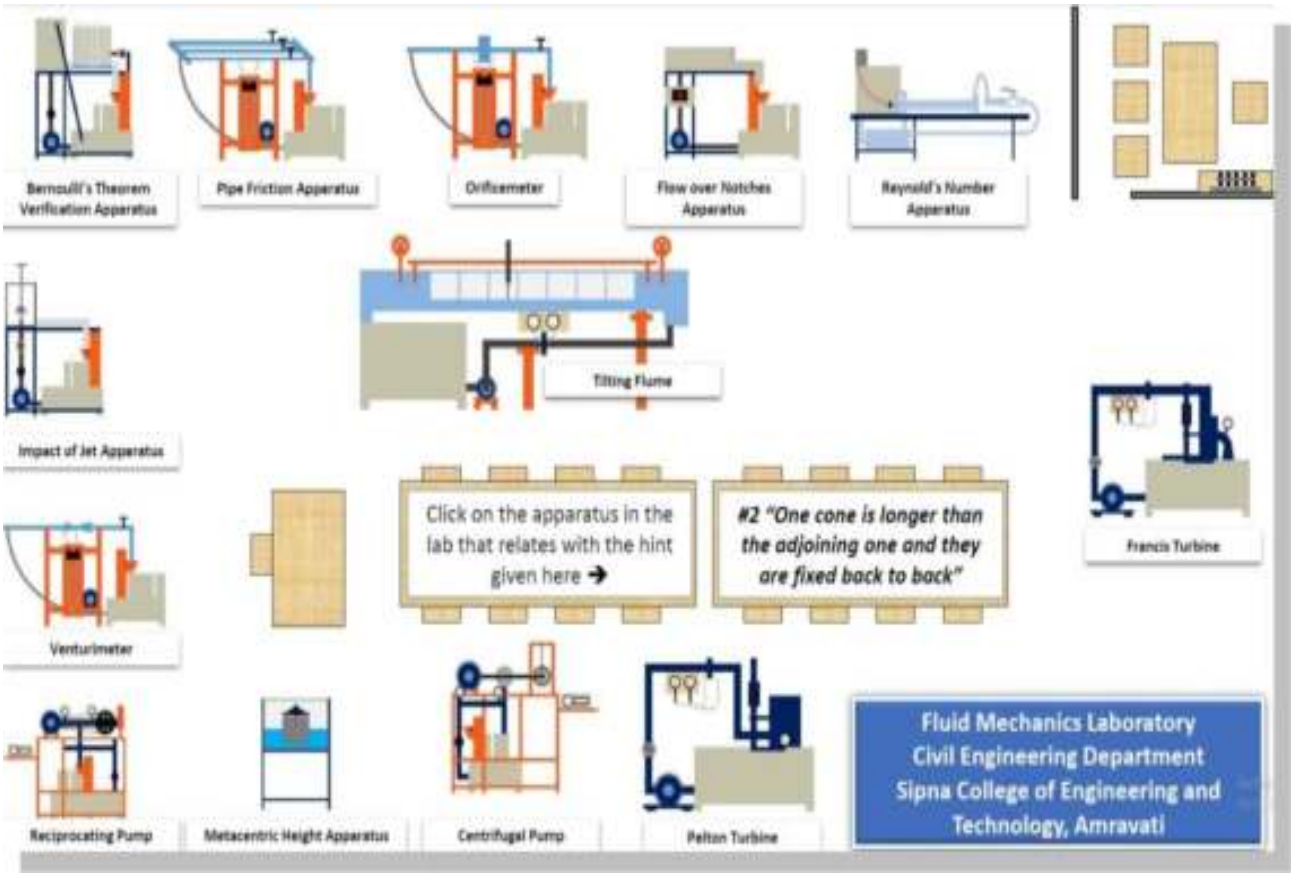
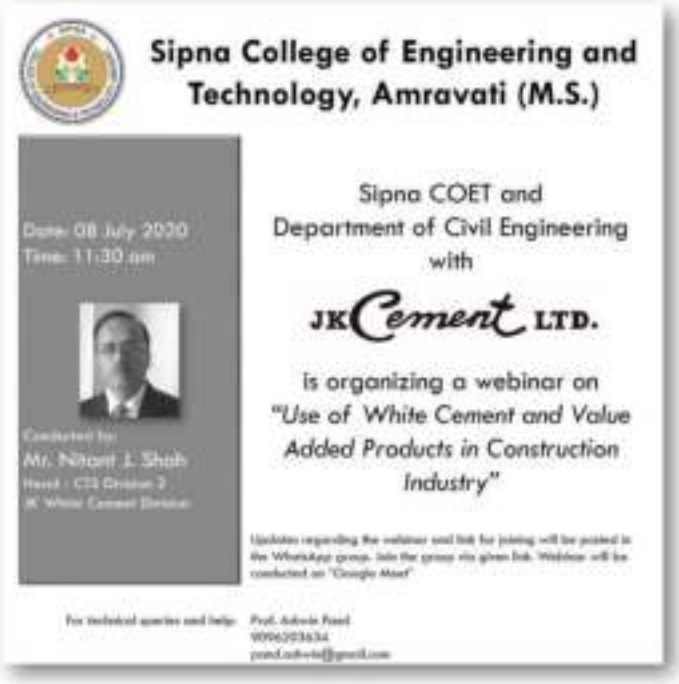


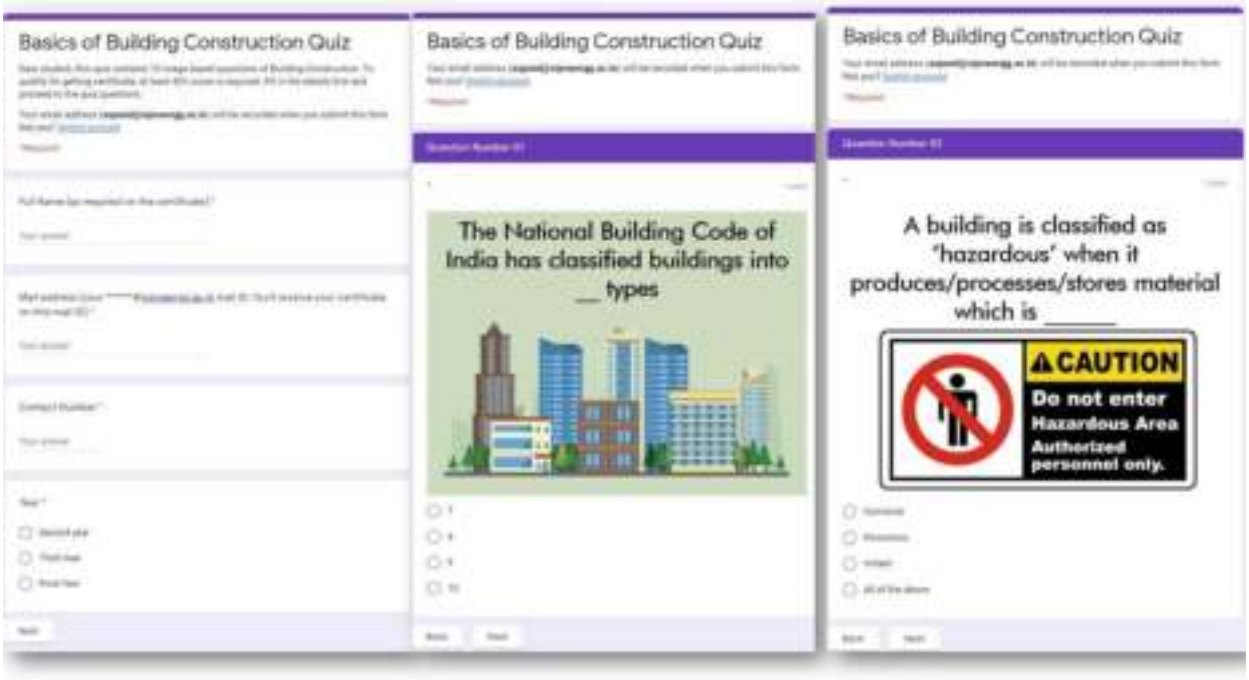
Image: Fluid Mechanics Lab Quiz

S.N.	Date	Activity & Guest	Number of Students present	Remark
2.	20/06/2020	Webinar on "Abroad Education after Engineering" By – Mr. Ameya Phadke, FACT, Mumbai	199	The speaker discussed with the audience regarding the scope, opportunities after abroad education. Necessary paperwork, expenditure, job opportunities and scholarships were the key highlights of the webinar.

S.N.	Date	Activity & Guest	Number of Students present	Remark
3.	08.07.2020	Webinar on"Use of White Cement and Value Added Products in Construction Industry" ByMr. Nitant J. ShahHead-CTS Division 2J K White Cement	88	The speaker spoke about the recent trends in material uses in civil engineering construction field along with emphasis on use of white cement in construction industry. Various site photographs were shown that actually adapted the newer trends and materials in the construction industry.



S.N.	Date	Activity & Guest	Number of Students present	Remark
4.	31.08.2020	Image based quiz for "Basics of Building Construction" [An image based quiz with certification, only for 2nd, 3rdand Final Year students of Civil Engineering Department of Sipna COET] ByA. S. Pand	57	In this quiz, practical knowledge of the students was checked. Construction materials and their application, construction methodology were the key points in the quiz.

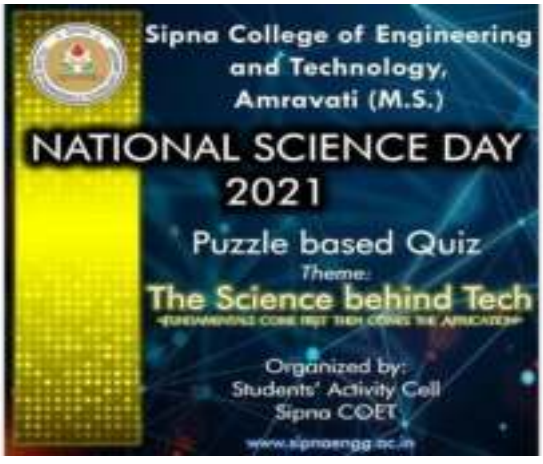


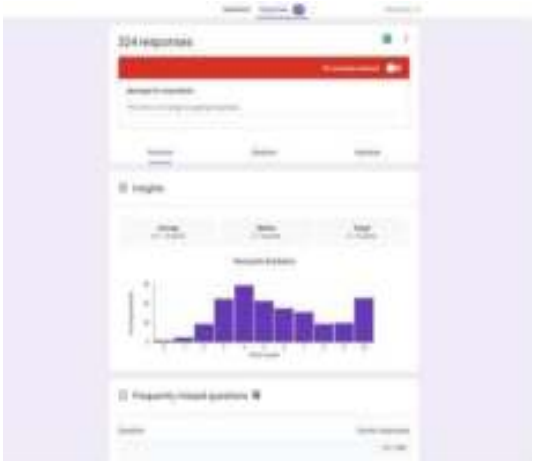
S.N.	Date	Activity & Guest	Number of Students present	Remark
5.	15.09.2020	"Digital Poster Making Competition" on Engineer's Day 2020 By Student's Activity CellDept. of Civil Engineering	11	On the occasion of Engineer's Day, Department of Civil Engineering with Student's Activity Cell had organized online poster competition for the students. Theme of the poster competition was "Building Construction and Materials". Prizes were given for 3 positions, [1st, 2ndand 3rdposition] by judge panel

S.N.	Date	Activity & Guest	Number of Students present	Remark
6.	09.10.2020	Introduction to **"Google Digital Garage"** [Initiative by Google for free courses with certification] ByA. S. PandDept. of Civil Engg.	40	Introduction to 46 different free courses offered by Google under its initiative "Google Digital garage" was given to students of second year civil engineering. Google digital garage offers free certificate courses in 3 modules viz. Digital Marketing, Soft Skills Development and Programming.

S.N.	Date	Activity & Guest	Number of Students present	Remark
7.	27.10.2020	**"Ask the Expert"**[Site Visit and Discussion with Site Engineer] ByStudent's Activity CellDept. of Civil Engineering	25	Students individually searched a construction/maintenance site in their neighbourhood and had a talk with site engineer/contractor regarding the construction process, materials, costing and other relevant aspects. Students then prepared a report for the same. The activity was carried out for students of second year civil engineering.

S.N.	Date	Activity & Guest	Number of Students present	Remark
8.	02.03.2021	**Online Quiz on "The Science Behind Technology"** On the occasion of National Science Day 2021	318	On the occasion of National Science Day 2021, an online quiz was conducted. In the quiz, the fundamental concepts of science behind their applications of engineering were formed as image based objective questions.





S.N.	Date	Activity & Guest	Number of Students present	Remark
9.	24th, 25thand 26thof May 2021	***Future Training*by JCI Amravati** Workshop [Personality Development]	159	In this 3 day training program, the speakers from JCI interacted with students on topics such as Relationship Building (by JC Mahendra Chandak), Time Management (JC Neeta Mundhada) and Decision Making (JC Vijay Kakani).*The 3 day – 3 session workshop was held online and students from all branches of Engineering of our college participated in the workshop*

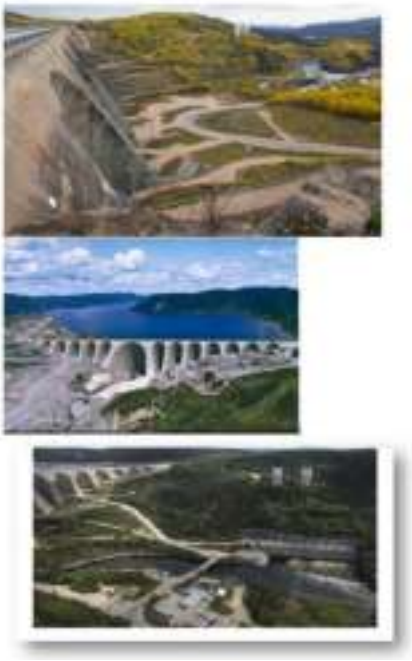
S.N.	Date	Activity & Guest	Number of Students present	Remark
10.	08.06.2021	***Virtual Visit [360ºonline visit]to Daniel Johnson Dam, Quebec, Canada***	81	A 360o virtual visit (online visit) to Daniel Johnson Dam, Quebec, Canada was conducted for the students of second year civil engineering suing the virtual reality footage. *Structural Components of dam, hydroelectric power stations, details of reservoirs, dam instrumentation details were discussed during the visit.*

Site Visit Report

Visit to Daniel – Johnson Dam, Quebec, Canada [Virtual 360º Visit]

Details: –

1. Location – Manicouagan Regional County Municipality, Quebec, Canada
2. Name of the river – Manicouagan River in Quebec
3. Name of the reservoir – Manicouagan Reservoir
4. Reservoir details: –
   i. Catchment area – 19,241 km2 (11,390 sq. mi)
   ii. Surface area – 1,930 km2 (753 sq. mi)
   iii. Volume – 142 km3 (115,000,000 acre-feet)
5. Type of dam – Concrete, multiple-arch buttress
6. Dimensions of Dam: –
   i. Length – 1,314 m (4,311 feet)
   ii. Width – 5 m (15 feet)
   iii. Height – 214 m (702 feet)
7. Details of Hydroelectric power stations: –
   i. Operator is of Hydro- Quebec
   ii. Commission date is 1970-71 (Manic-5) 1989 (0) (Manic-5PA)
   iii. Turbines is of 8 x 180.5 MW Francis type (Manic-5) 4 x 360 MW Francis type (Manic-5PA).
   iv. Installed capacity is 1,596 MW (Manic-5) 1,044 MW (Manic-5 PA).
8. Photographs –



Teacher - Guardian Scheme

The Teacher- Guardian Scheme allocation for the academic year 2020-21 is as follow:

Sr. No	Student ID	Name Of Student	Year of Admission	Status FY/DSY	Name of TG
1	20BE0581	AGADE VIKRAM GUNVANT	2020	FY	Prof. R.V. Rothkar
2	20BE0582	ASHITKAR VEDANT KISHOR	2020	FY	
3	20BE0583	BHAGAT ADITYA SANJAY	2020	FY	
4	20BE0584	BHAGWAT PRAPTI SUNIL	2020	FY	
5	20BE0585	BHOMBE SAYALI GAJANANRAO	2020	FY	
6	20BE0586	BHURUMDE PRINCY SANJAY	2020	FY	Prof. Y.S. Khandekar
7	20BE0587	BITNE NARENDRA TULSHIRAM	2020	FY	
8	20BE0588	CHAVHAN SHAILESH SAHEBRAO	2020	FY	
9	20BE0589	DONGARDIVE AMAN JITENDRA	2020	FY	
10	20BE0590	GATHEKAR PRASAD GAJANAN	2020	FY	
11	20BE0591	GAWAI ROHAN SANJIV	2020	FY	Prof. S.P. Mahajan
12	20BE0592	GAWANDE ANURAG RAJESH	2020	FY	
13	20BE0593	GAWANDE SHWETA SANJAY	2020	FY	
14	20BE0594	GUDADHE JAYUSH PRAMOD	2020	FY	
15	20BE0595	GUPTA VYANKATESH MANOJ	2020	FY	
16	20BE0596	GURNULE ROHINI ARUN	2020	FY	Prof. A.S. Attal
17	20BE0597	HOLEY ANUJ NARENDRA	2020	FY	
18	20BE0598	HUTKE PURVA SHAILENDRA	2020	FY	
19	20BE0599	JADHAO KARTIK SANTOSH	2020	FY	
20	20BE0600	JADHAO RUTUJA PANJAB	2020	FY	
21	20BE0601	JADHAV SHUBHAM RAVINDRA	2020	FY	
22	20BE0602	JAISWAL SANIDH UDAYKUMAR	2020	FY	Prof. R.B. Wath
23	20BE0603	KACHARE ROHIT HARIDAS	2020	FY	
24	20BE0604	KALHANE UJWAL DILIP	2020	FY	
25	20BE0605	KALMEGH HARSHAL NANDKISHOR	2020	FY	
26	20BE0606	KAMBLE SANVIDHAN BABARAO	2020	FY	
27	20BE0607	KHAPRE ADITYA PRATAP	2020	FY	Prof. S.M. Patil
28	20BE0608	KHUNE PRATHAM SANJAY	2020	FY	
29	20BE0609	KOKATE YASHODIP PRAMODRAO	2020	FY	
30	20BE0610	KORDE SAKSHI SANJIV	2020	FY	
31	20BE0611	LOKESH BARDE	2020	FY	

Sr. No	Student ID	Name Of Student	Year of Admission	Status	Name of TG
32	20BE0612	LOKHANDE NEHA ANIL	2020	FY	Dr. A.V. Tiwari
33	20BE0613	MAHULKAR SUYASH SANJAY	2020	FY	
34	20BE0614	MEHARE VAISHNAVI RAJU	2020	FY	
35	20BE0615	MHALA JANHVI VINOD	2020	FY	
36	20BE0616	MOGHE GAYATRI SUNIL	2020	FY	
37	20BE0617	NATE TEJAS BABAN	2020	FY	Prof. M.D. Tare
38	20BE0618	NIKAM JAYESH MAHENDRA	2020	FY	
39	20BE0619	PATHARE SHIVAM CHANDRASHEKAR	2020	FY	
40	20BE0620	POHANE VAISHALI SANJAY	2020	FY	
41	20BE0621	RATHI BHARAT NANDKISHOR	2020	FY	
42	20BE0622	RATHI VEDANT ASHOK	2020	FY	
43	20BE0623	RATHOD HARISH SUBHASH	2020	FY	Prof. S.N. Kalbende
44	20BE0624	RATHOD ROSHAN VIJAY	2020	FY	
45	20BE0625	SHADI YASH VINOD	2020	FY	
46	20BE0626	SHEGOKAR PRATIK RAJENDRA	2020	FY	
47	20BE0627	SHEIKH FARMAN AHMAD SHEIKH BASHEER	2020	FY	
48	20BE0628	SHEWATKAR HARSHAD PRADIP	2020	FY	
49	20BE0629	SHIRBHATE ARYA KAILAS	2020	FY	Prof. A.S. Pand
50	20BE0630	SHRIWAS YASH SANJAY	2020	FY	
51	20BE0631	SONAR AMRUTA SANDIPRAO	2020	FY	
52	20BE0632	TAYADE SIDDHARTH MAHADEO	2020	FY	
53	20BE0633	UMARE SWAPNIL SANJAY	2020	FY	
54	20BE0634	UPRIKAR GAYATRI RAMKRISHNA	2020	FY	
55	20BE0635	VIRULKAR GOPAL ARUN	2020	FY	Prof. A.A. Pande
56	20BE0636	WANKHADE ADITYA KISHOR	2020	FY	
57	20BE0637	ZADE SWEETY AJAY	2020	FY	
58	20BE0638	AKSHATA KATHALKAR	2020	FY	
59	20BE0639	JAWANJAL ACHAL GOPAL	2020	FY	
60	20BE0640	SARVESH KORDE	2020	FY	

Sr. No	Student ID	Name Of Student	Year of Admission	Status FY/DSY	Name of TG
1	20BE0102	PETHKAR RUDRESH SHRIKANT	2020	DSY	Prof. R.V. Rothkar
2	20BE0103	DHANASHREE BHARSAKALE	2020	DSY	
3	20BE0104	PURAM VIKAS UDEBHAN	2020	DSY	
4	20BE0105	DATAR GAURAV UMESH	2020	DSY	Prof. Y.S. Khandekar
5	20BE0106	MISHRA KALYANI SANJU	2020	DSY	
6	20BE0107	KOTAMKAR RENU SANDIP	2020	DSY	
7	20BE0108	PACHGHARE VEDIKA KISHOR	2020	DSY	Prof. S.P. Mahajan
8	20BE0109	TAYDE SNEHAL PRAKASHRAO	2020	DSY	
9	20BE0110	RATHI RAKSHA RAJESH	2020	DSY	
10	20BE0111	AWATHEY KARTIK NARESHRAO	2020	DSY	Prof. A.S. Attal
11	20BE0112	BHERDE SWARAJ PRASHANT	2020	DSY	
12	20BE0113	JOGDANDE SUMEDH BABURAO	2020	DSY	Prof. R.B. Wath
13	20BE0114	KACHWE SAMRTH DINESHSINGH	2020	DSY	
14	20BE0116	JAGTAP PRIYA DIPAK	2020	DSY	Prof. S.M. Patil
15	20BE0117	DIWANALE SHUBHAM RAMESH	2020	DSY	
16	20BE0118	CHAVAN SHIVROHIT SANTARAM	2020	DSY	Dr. A.V. Tiwari
17	20BE0119	CHAVAN VEDANT AJAY	2020	DSY	
18	20BE0120	AJMIRE AYUSH PRASHANTRAO	2020	DSY	Prof. M.D. Tare
19	20BE0121	PARALE GAYATRI CHHATRAPATI	2020	DSY	
20	20BE0122	BORKAR TANU RAJU	2020	DSY	Prof. S.N. Kalbende
21	20BE0123	KHAROLE DEEPA LAXMAN	2020	DSY	
22	20BE0124	WARDHE VINAY SAMADHAN	2020	DSY	Prof. A.S. Pand
23	20BE0125	MOHD USAID HUSSAIN MOHD MUJEEBUL HUSAIN	2020	DSY	
24	20BE0126	KHAN YASSER IKRAM	2020	DSY	Prof. A.A. Pande
25	20BE0126	MUGAL DHAIRYA VINOD	2020	DSY	

Ethics in Civil Engineering

Ethics play a critical role in civil engineering, which involves designing and constructing infrastructure that affects people's lives and well-being. As such, civil engineers have a responsibility to ensure that their work is conducted ethically, with the utmost concern for public safety, health, and welfare.

One of the primary ethical considerations in civil engineering is the need to prioritize safety. Engineers must design structures and infrastructure that are safe for the public to use and that can withstand natural disasters and other potential hazards. They must also consider the environmental impact of their designs, striving to minimize damage to ecosystems and natural resources.

Another critical ethical consideration in civil engineering is transparency and accountability. Engineers must be transparent about their methods and results, ensuring that their work is subject to review and scrutiny by other professionals in the field. They must also be accountable for their decisions, taking responsibility for any errors or oversights that may occur.

Finally, ethical considerations in civil engineering also involve respect for cultural and social diversity. Engineers must consider the cultural and social impact of their designs, working to ensure that infrastructure is accessible and inclusive for all members of the community.

Ethics play a crucial role in civil engineering, requiring engineers to prioritize public safety, environmental sustainability, transparency, accountability, and respect for cultural and social diversity. By adhering to these ethical principles, civil engineers can create infrastructure that benefits society while minimizing harm to the environment and promoting social justice.

Pratiksha G. Khade
17BE0154

Work From Home Culture – Is it possible for Construction Field?

The COVID-19 pandemic has drastically changed the way many industries operate, including the field of civil engineering. With remote work becoming more prevalent, civil engineering firms have had to adapt to a work-from-home culture. While working from home can offer some benefits, it also presents several challenges for civil engineers.

One significant challenge of remote work for civil engineers is the loss of face-to-face interaction. In-person collaboration is essential in the field of civil engineering, as it enables engineers to communicate ideas and concepts effectively. Remote work can make it difficult for engineers to collaborate in real-time, leading to delays and reduced productivity.

Another challenge of remote work in civil engineering is the need for specialized software and hardware. Civil engineers require access to specialized tools and software to perform their work, and these tools are often only available on office workstations. This can make remote work challenging for engineers, as they may not have the same access to the tools they need to perform their work.

Despite these challenges, remote work in civil engineering can offer some benefits. Working from home can provide engineers with more flexibility and work-life balance, as they can adjust their work schedules to better accommodate personal needs. Remote work can also reduce commuting time and expenses, allowing engineers to work from anywhere with an internet connection.

The shift towards a work-from-home culture has presented both challenges and opportunities for civil engineers. While remote work can offer greater flexibility, it also requires engineers to adapt to new methods of collaboration and access to specialized tools. As the world continues to adapt to the changes brought about by the pandemic, civil engineering firms will need to continue to innovate and find new ways to balance the benefits and challenges of remote work.

Shrawani S. Uthkhede
17BE0199

Automation in Civil Engineering Field

Automation is rapidly transforming the field of civil engineering, bringing new opportunities for efficiency, safety, and cost-effectiveness. By leveraging automation technologies, civil engineers can automate complex and repetitive tasks, reduce human error, and optimize project outcomes.

One of the primary areas where automation is being used in civil engineering is in construction. Automation technologies such as drones and robots are being used to perform tasks such as surveying, excavation, and material handling. These technologies can work faster and more accurately than human labor, reducing costs and improving safety.

Another area where automation is being used in civil engineering is in project planning and design. Advanced computer algorithms and machine learning technologies can analyze large datasets and identify patterns to help engineers optimize project designs for efficiency and sustainability. These technologies can also help engineers simulate and test different design scenarios, improving project outcomes and reducing the risk of errors and delays.

In addition to construction and project design, automation is also being used in infrastructure maintenance. Technologies such as sensors and Internet of Things (IoT) devices can collect real-time data on the performance of infrastructure, enabling engineers to identify potential problems before they become major issues. This approach helps reduce downtime and maintenance costs while ensuring that infrastructure remains in good working order.

In conclusion, automation is transforming the field of civil engineering, offering new opportunities for efficiency, safety, and cost-effectiveness. By leveraging automation technologies, engineers can automate complex tasks, optimize project outcomes, and reduce the risk of errors and delays. As automation continues to evolve, it will play an increasingly critical role in the future of civil engineering.

Gaurav W. Kurhade
18BE0475