M. S. P. Mandal's



Deogiri Institute of Engineering and Management Studies



Deogiri Campus, Railway Station Road, Aurangabad 431005

## NEWSLETTER JANUARY 2022 TO JUNE 2022

#### **INSTITUTE VISION & MISSION**

#### VISION

Nation of building by creating opportunities for rural and urban students through excellent engineering and management.

#### **MISSION**

1. To develop the student for best academic and industrial practices by implementing new innovation teaching learning methodology, promoting all-round development by giving exposure to series activities

2. To prepare the to face global challenges by equipping them with requisite technical expert and developing entrepreneurship skill among them

3. To promote research attitude among faculty and student



We shape our buildings; thereafter they shape us.

- WINSTON CHURCHILL

## **Civil Engineering Department**

#### **MESSAGE FROM HOD**



Dr.G.R.Gandhe

On behalf of all our faculty, staff, and students, I would like to welcome you to the Civil Engineering Department at Deogiri Institute of Engineering and Management Studies, Aurangabad.

As a Head of the department, I am extremely proud of our role in providing high quality education and hands-on experience to our students. Right from its inception in 2009, the Civil Engineering Department has earned tremendous reputation for qualitative teachinglearning process, meaningful teacher-student interactions, state-of-theart laboratories, and well qualified faculty; positively contributing to the community through teaching, research and consultancy activities.

With a well-planned mission and untiring efforts of our highly committed faculty, staff and students, the department is striving hard to develop proficient Civil Engineer with technical competency and managerial ability so as to contribute in Nation Building. Our department is constantly working towards all-round skill development of our students by organizing Expert talk by Industry persons, Industrial Visits, Seminars, Inspire talks, workshops, conferences.

Apart from this, Civil Engineering Department is providing Engineering Consultancy services for various Government as well as private construction projects. I am very proud to inform you that DIEMS is the First Engineering Institute in the Marathwada region having **NABL accreditation for Civil Engineering laboratories.** 

#### VISION OF DEPARTMENT

Develop proficient Civil Engineer with technical competency and managerial ability so as to contribute in Nation Building.



#### **MISSION OF DEPARTMENT**

- To impart technical proficiency in Civil Engineering through quality teaching learning process
- To mentor Civil Engineering students for competitive services, higher studies, and allied research to meet societal needs.
- To inculcate managerial skills in students to evolve as an entrepreneur.

#### FACULTY PUBLICATION

- A.S. Pathan, G.R.Gandhe, S. D. Shinde "Design of Hydraulic Condition for Urban Storm water drainage under climatic change impact" Climate Change Impacts, Mitigation and Adaptation in Developing Countries, Springer Climate,2022
- S. D. Shinde, A.S. Pathan" Sewerage System of Aurangabad : Review" IJIRT, Volume 8 Issue 9, Feb-22, ISSN: 2349-6002.
- S. D. Shinde, A.S. Pathan" Permeable Reactive Barrier Technology for Contaminated Remediation: Review" IJIRT, Volume 8 Issue 9, Feb-22, ISSN: 2349-6002.
- Prof.R.S.Patil, Dr.G.R.Gandhe "Earthquake Response Study of Multistoried RCC Building with FVD on Sloping Ground", IJSREM, Vol 6, Issue:1, Jan-22, ISSN: 2582-3930.
- S.B.Salve "Comparative Study of Cold Form Steel Sections and Hot Rolled Sections" IJIRT, Volume 8 Issue 8, Jan-22, ISSN: 2349-6002.
- Sachin B Salve "Sustainable Design of Cold Form Steel in the Context of Life Cycle Cost" IJREAM, Volume 8 Issue MAY-22, ISSN: 2454-9150.

## **INDUSTRIAL VISIT**

Sr. No.	Name Of Company	Class	Date Of Visit	No. Of Beneficiaries
1	Water Treatment Plant, 392 MLD, Kanchanwadi, Aurangabad	B Tech A	19-05-2022	43
2	Maharashtra Engineering Reseach Institute, (MERI), Nashik	Sy - A& B	07-01-2022	149



# **GLIMPS OF INDUSTRIAL VISIT**



#### Maharashtra Engineering Reseach Institute, (MERI), Nashik







# **PLACEMENT DETAILS**

Sr. No.	Major Recruiters	No of students Placed
1	Aurangabad Municipal Corporation,	1
	Aurangabad	
2	HS Infra, Aurangabad	3
3	HI TECH BEEDCON PVT. LTD.	1
4	SANVEO Arch Pvt. Ltd, Aurangabad	2
5	Qubatic Engineers Pvt. Ltd,	1
	Aurangabad	
6	Wipro	3
7	Wealthian Pvt. Ltd, Gurugram,	1
	Haryana	
8	Pratibha Construction, Nanded	1
9	Built In Architects, Aurangabad	1
10	JP Structural Engineer, Nashik	1









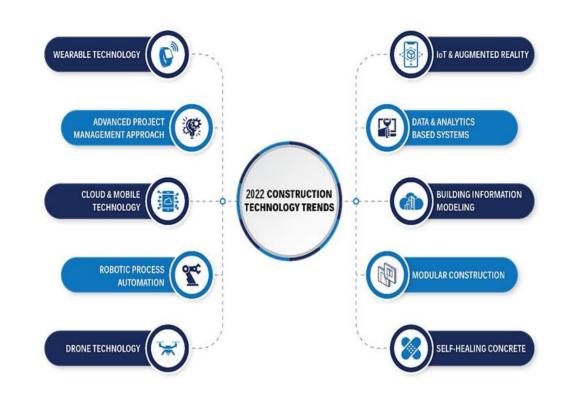








## 2022 CONSTRUCTION TECHNOLOGY TRENDS



2022 marks the beginning of a new era within the post-COVID times which most experts, academicians, scholars, researchers and scientists believe will be dominated by Industry 4.0 - an era of automation. The influx of digital technologies and modern methods of operations have disrupted all industry sectors, and construction is no exception. As we go further into this report, we will realize that transformation of processes, methods and tools will drive the realm of construction on its next trajectory of growth. Entities that fail to prepare for this evolution will constantly feel the threat of becoming irrelevant in the marketplace.

**1.** <u>Wearable Technology</u>: Integration of wearable technology in construction processes will go a long way in improving safety at the site, reducing injuries to the staff and workers, improving operational efficiencies and enhancing quality of life for construction workers.

**2.** <u>IOT & AR</u>: Advanced Internet of Things and Augmented-Reality technologies are enabling the construction professionals to digitally access the information about the surroundings and equipment of the site in an interactive way, thereby facilitation remote monitoring, operations and controllability.

**3.** Advanced Project Management: Approach With increased regulations as well as timeliness and cost-effectiveness becoming top priorities for the project owners, the industry is increasingly realizing the importance of on boarding Project Management experts in avoiding delays and cost-overruns.

## 2022 CONSTRUCTION TECHNOLOGY TRENDS

**<u>4. Data and Analytics Based Systems</u>** : Data Analytics and Business Intelligence tools and software applications have proved to be the game-changers for contractors who have found it difficult to manage huge amount of data being collected from various sources such as design and BIM data from the planning stages of a project, jobsite data collected by wearables, mobile devices and sensors on equipment/materials, accounting and job progress data from the office, project management data, etc.

**5.** Cloud and Mobile Technologies: Cloud and Mobile tech will see greater adoption in the construction industry, especially by the relatively smaller construction companies, as it gives them a competitive edge, and an opportunity to be on an enterprise-level of data storage, management, access and recovery. Coordination between the site-staff with the head-office professionals becomes better, data is readily available, and the relationship with key clients can be enhanced through actionable insights based on these technologies.

**6. BIM Advanced Building information modeling**: (BIM) technologies supported by various tools, technologies and contracts will further involve the generation and management of Digital representations of physical and functional characteristics of places, plans and projections

<u>. 7. RPA Robotics or Robotic Process Automation</u> :(RPA) has numerous advantages to offer to the construction industry in the coming years including but not limited to increasing accuracy, precision and efficiency in monotonous tasks, making the staff available for intellectual work, 3D printing of modules, parts and components, and promoting Lean construction practices.

**8.** Modular Construction : As mentioned in the previous point, modular construction practices will gain more momentum and significance as enterprises are leveraging technology integration to develop pre-engineered building units that can be delivered to site and assembled as large volumetric components forming sizeable elements of a structure. The Statue of Unity is an excellent example in which the landmark construction was completed along with the contractor and other agencies in remarkably short-time using the Modular Construction approach.

**9. Drone Technology** : Real-time data from the site, aerial insights available remotely, and progress tracking and just few of the numerous benefits that application of drones can bring to any construction entity. The drone technology is well poised to gain wider adoption especially because it facilitates early identification of issues which can be mitigated promptly without having to incur huge monetary and costs.

**10. Self-Healing Concrete** : Over a period of time, micro-cracks tend to develop on concrete structures which reduce its service life by allowing the ingress of water, carbon dioxide and chlorine ions into the structure. Earlier, patching, reinforcement, or even knocking the structure down were the only solutions for the concrete cracks. However, since the invention of 'smart' concrete, structures are able to self-heal the cracks that appear on it. Use of such self-healing concrete will not only make the structures more secure, but also save on rework and maintenance.

### :-NEWS LETTER-:

## **EDITING TEAM Civil engineering department**

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# **MARATHWADA SHIKSHAN PRASARAK MANDAL'S DEOGIRI INSTITUTE OF ENGINEERING AND MANAGEMENT STUDIES**

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