V R SIDDHARTHA ENGINEERING COLLEGE
(Autonomous)
Department of Civil Engineering

Dt: 22.10.2021

Circular

This is to inform all the students who are the members of Indian Concrete Institute (ICI) student Chapter of this college that the details of the student Executive Council formed after scrutiny are as under:

Details of Student Executive Council, ICI-VRSEC-Student Chapter:

S.No.	Name & Roll. No	Year of Study & Section	Position in Student Executive Council
1	Goda tejaswini (188W1A0113)	IV/IV Sec-A	President
2	Jaya chandra sai prakash yerra (188W1A 0117)	IV/IV Sec-A	Vice President
3	M.Likitha (188W1A01E3)	IV/IV Sec-C	Secretary-1
4	Dasari geethika (188W1A0108)	IV/IV Sec-A	Secretary-2
5	V.Naga venkata meghana sree (188W1A01H4)	IV/IV Sec-C	Joint Secretary-1
6	Mohammed raashid hussain (188W1A0196)	IV/IV Sec-B	Joint Secretary-2
7	Yamini athota (188W1A0158)	IV/IV Sec-A	Treasurer-1
8	Vemulapalli sweasitha sree (188w1A0155)	IV/IV Sec-A	Treasurer-1
9	Kollati harshini (188w1A0122)	IV/IV Sec-A	Student-Coordinator
10	Atla geethika (188W1A0103)	IV/IV Sec-A	Student-Coordinator
11	Damera gautham kumar (188W1A0107)	IV/IV Sec-A	Student-Coordinator
12	Konala kathyayani (188W1A0124)	IV/IV Sec-A	Student-Coordinator
13	Ponnaganti venkata sai rahul (188W1A01A5)	IV/IV Sec-B	Student-Coordinator
14	Sattu radhika (188W1A01A9)	IV/IV Sec-B	Student-Coordinator
15	Kari jayasri (188W1A0182)	IV/IV Sec-B	Student-Coordinator
16	K. SANDEEP (188W1A01G4)	IV/IV Sec-C	Student-Coordinator

The above committee members are requested to meet the faculty coordinator (Dr. K.Hanuma) for further proceedings.

(Dr.Ch. Srinivas)
Prof. & Head, CE Dept.

CC: To
1. N.B
2. To be read in all CE Classes
3. ICI File

DEPARTMENT OF CIVIL ENGINEERING

V R SIDDHARTHA ENGINEERING COLLEGE

Indian Concrete Institute (ICI)-Student Chapter-VRSEC -Activities AY 2021-2022

S.No	Professional Chapter	Type of Event	Date	Event Name	Participants	International/ National/State	Outcome/Impact
1	ICI-VRSEC	Webinar	09-07-2021	Virtual Tour of India's Largest Cement Manufacturing Plant	150	State	The virtual industrial visit has given the students good exposure with regard to the mixing and making of cement, which is an essential requirement for the construction of structures at the site.
2	ICI-VRSEC	Webinar	07-09-2021	"The Importance of Civil Engineers in Making the World a Better Place to Live"	100	State	Civil engineers make use of the principles of civil engineering to design the many structures we see around us. They are responsible for planning and overseeing different construction efforts and applying civil engineering principles to ensure that constructed structures are safe and sturdy.
3	ICI-VRSEC	Student Poster	12/10/2021	"Smart Materials and Techniques for	10	State	This competition presents the latest research advances and findings in the field of Smart

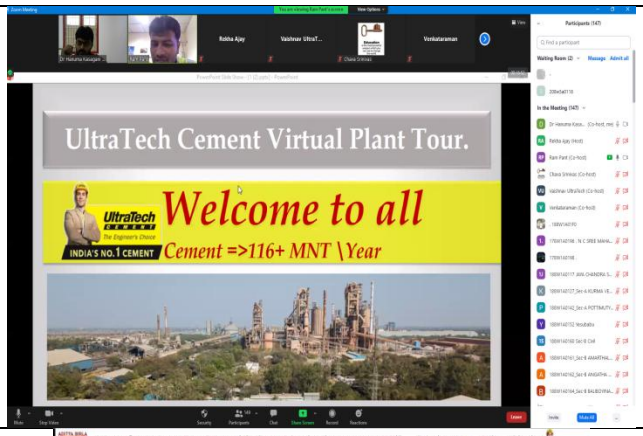
		Competiti		Sustainable Development"			Materials and Techniques for Sustainable Development, focusing on the principles, design and fabrication, test and characterization, performance and mechanism, and their applications in infrastructures.
4	ICI-VRSEC	Short Term Training Program	31/01/2021	"Building Information Modeling in Construction Project Management“	77	State	BIM provides us with the opportunity to drive efficiency in our project management processes, and I hope this training progrgam inspires the students about how we can achieve this. By seeing the future today, through the effective use of BIM, we can improve the planning and delivery of projects to achieve better outcomes for our clients and the public at large.

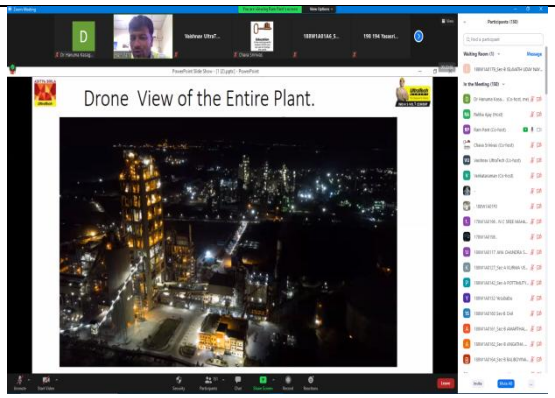
DEPARTMENT OF CIVIL ENGINEERING
V R SIDDHARTHA ENGINEERING COLLEGE

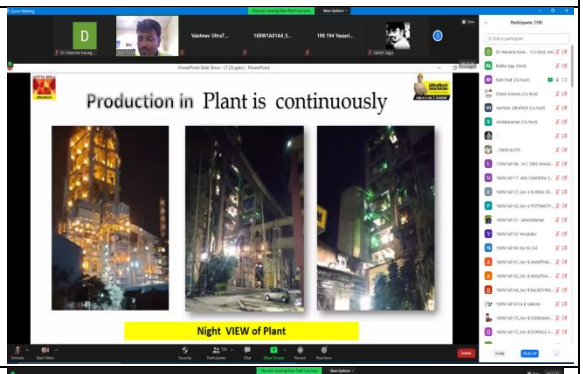
A webinar on Virtual Tour of India's Largest Cement Manufacturing Plant

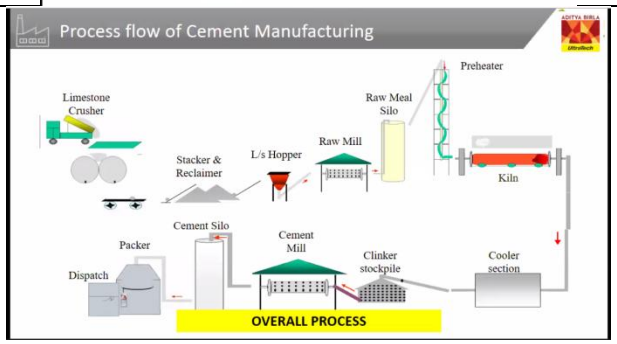
Event Type	Online Webinar
Date / Duration	09-07-2021
Resource Team	**Dr. Ram Pant**,RCM-Ultra Tech Cement Ltd
Name of Coordinator	Mr.Ajay- Ultra Tech Cement Ltd Dr.Hanuma Kasagani-Assistant Professor-CED-VRSEC
Target Audience	B.Tech-students, Faculty members of Civil, Research scholars
Total no of Participants	150
Objective of The-event	Students have an opportunity to learn practically through interaction, working methods, and understanding of the practical aspects of the production of cement and other activities managed by industrial sectors.
Outcome of The-event	The virtual industrial visit has given the students good exposure with regard to the mixing and making of cement, which is an essential requirement for the construction of structures at the site.
Feedback / Suggestions	B.Tech students and faculty gave positive feedback on the webinar and requested more webinars in this manner.

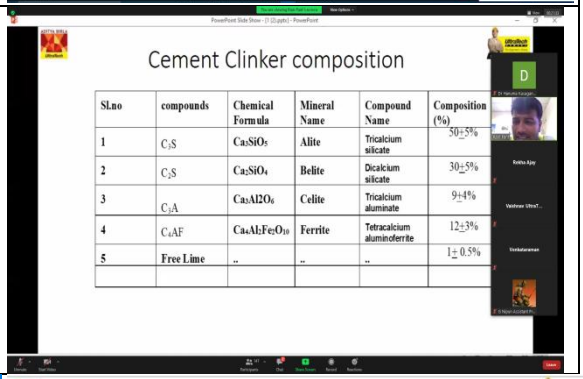
Photos



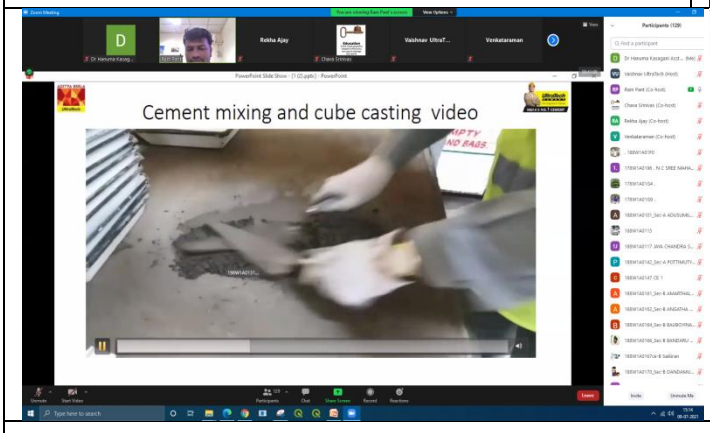


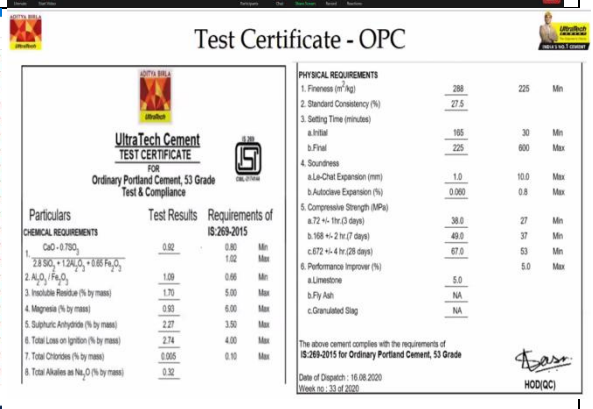






Sl.no	compounds	Chemical Formula	Mineral Name	Compound Name	Composition (%)
1	C_3S	Ca_3SiO_5	Alite	Tricalcium silicate	50±5%
2	C_2S	Ca_2SiO_4	Belite	Dicalcium silicate	30±5%
3	C_3A	Ca_3Al2O_6	Celite	Tricalcium aluminate	9±4%
4	C_4AF	$Ca_4Al_2Fe_2O_{10}$	Ferrite	Tetracalcium aluminoferrite	12±3%
5	Free Lime	..	..	..	1± 0.5%



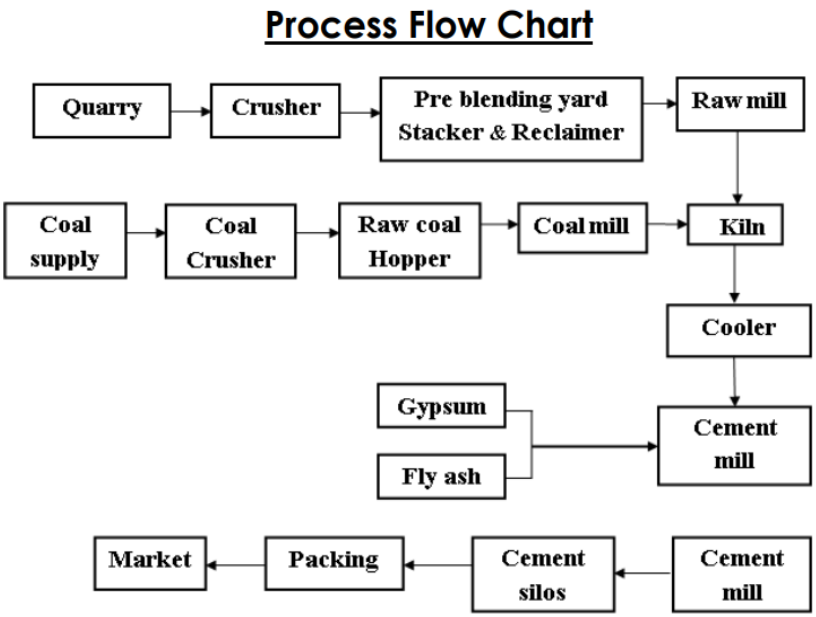


Summary:

A webinar on "Virtual Tour of India's Largest Cement Manufacturing Plant (Rajashree Cement Works-Malkhed-Gulbarga) is organized in the Civil Engineering Department on 09-07-2021 with Dr. Ram Pant, RCM-Ultra Tech Cement Ltd under the ICI VRSEC student chapter banner.

Senior engineer Dr Ram Pant addressed the students and explained the process of cement manufacturing, which includes the various steps involved in the process, beginning with the mining and transporting of raw materials to the plant. The process of manufacturing cement here involves a dry process. The raw material is heated up to 1500°c while calcination occurs, then clinker is formed. Common materials used to manufacture cement include limestone, shells, and chalk or marl combined with shale, clay, slate, silica sand, and iron ore.

The virtual industrial visit comprises photographs and video footage of several installations and operations in the plant. It was very useful to the students, since the manufacturing and production process were clearly shown during this session.

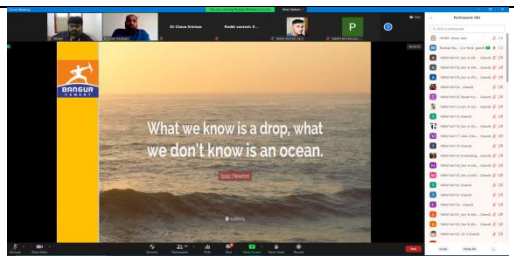


DEPARTMENT OF CIVIL ENGINEERING
V R SIDDHARTHA ENGINEERING COLLEGE

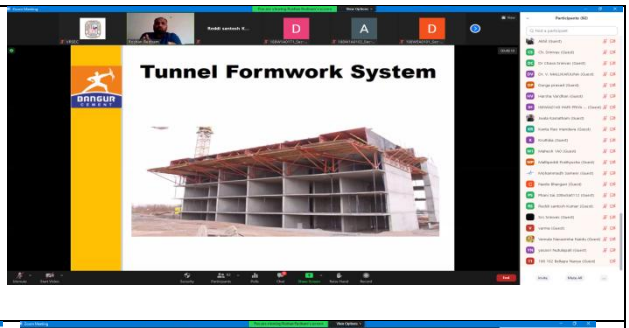
A webinar on "The Importance of Civil Engineers in Making the World a Better Place to Live"

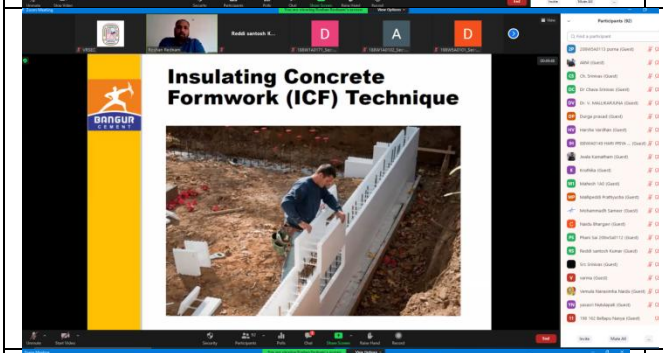
Event Type	Online Webinar
Date / Duration	07-09-2021
Resource Team	**Mr.Roshan Rednam**, State Head – Manager (Technical) for Andhra Pradesh and Telangana Shree Cement Limited
Name of Coordinator	**Dr.Hanuma Kasagani**-Assistant Professor-CED-VRSEC
Target Audience	B.Tech-students, Faculty members of Civil, Research scholars
Total no of Participants	100
Objective of The-event	The main aim is to create awareness among the students about what makes civil engineering important to human society, how it has shaped human civilizations, and how it continues to influence our lives in more profound ways. Just a century or two ago, we all were living in a society where there was a shortage of everything. From mud blocks to no-roads, the society was living a life away from the comfort of a home. The architect of today or the civil engineers have changed that all. They suggest changes, alternate designs, and incorporate new elements to make the building a reality. They are playing a great role in protecting us from large-scale disasters like earthquake or hurricanes by erecting structures that could withstand the calamities.
Outcome of The-event	Civil engineers make use of the principles of civil engineering to design the many structures we see around us. They are responsible for planning and overseeing different construction efforts and applying civil engineering principles to ensure that constructed structures are safe and sturdy.
Feedback / Suggestions	B.Tech students and faculty gave positive feedback on the webinar and requested more webinars in this manner.

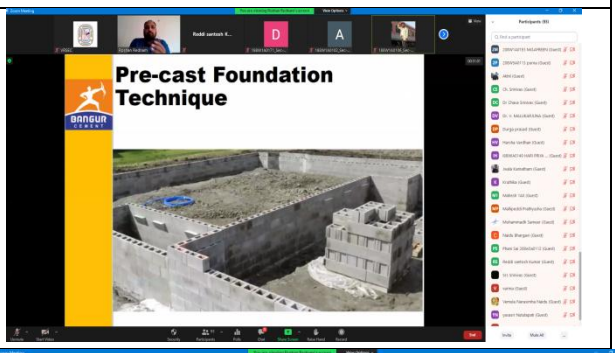
Photos

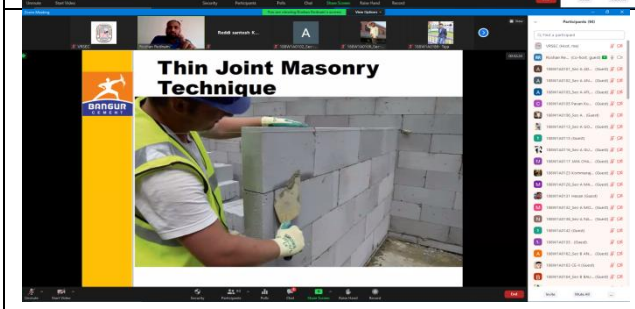


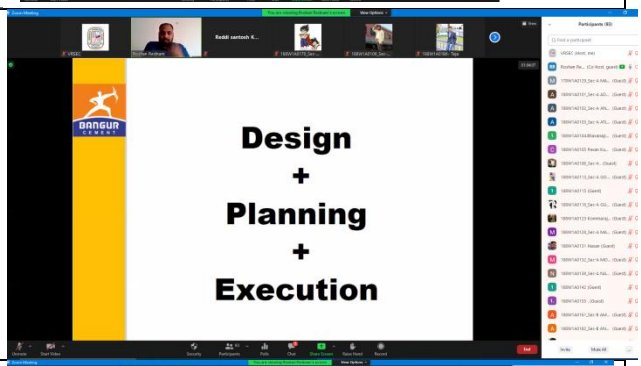

3D Volumetric Construction

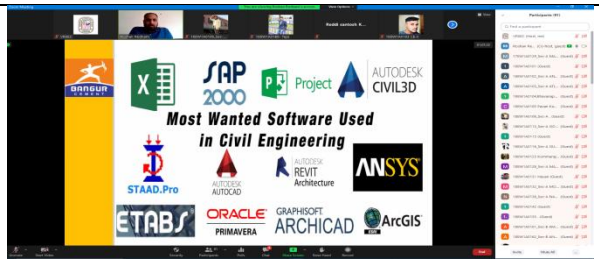

Tunnel Formwork System


Insulating Concrete Formwork (ICF) Technique

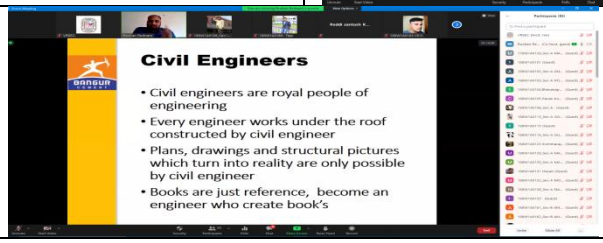

Pre-cast Foundation Technique


Thin Joint Masonry Technique


Design
+
Planning
+
Execution

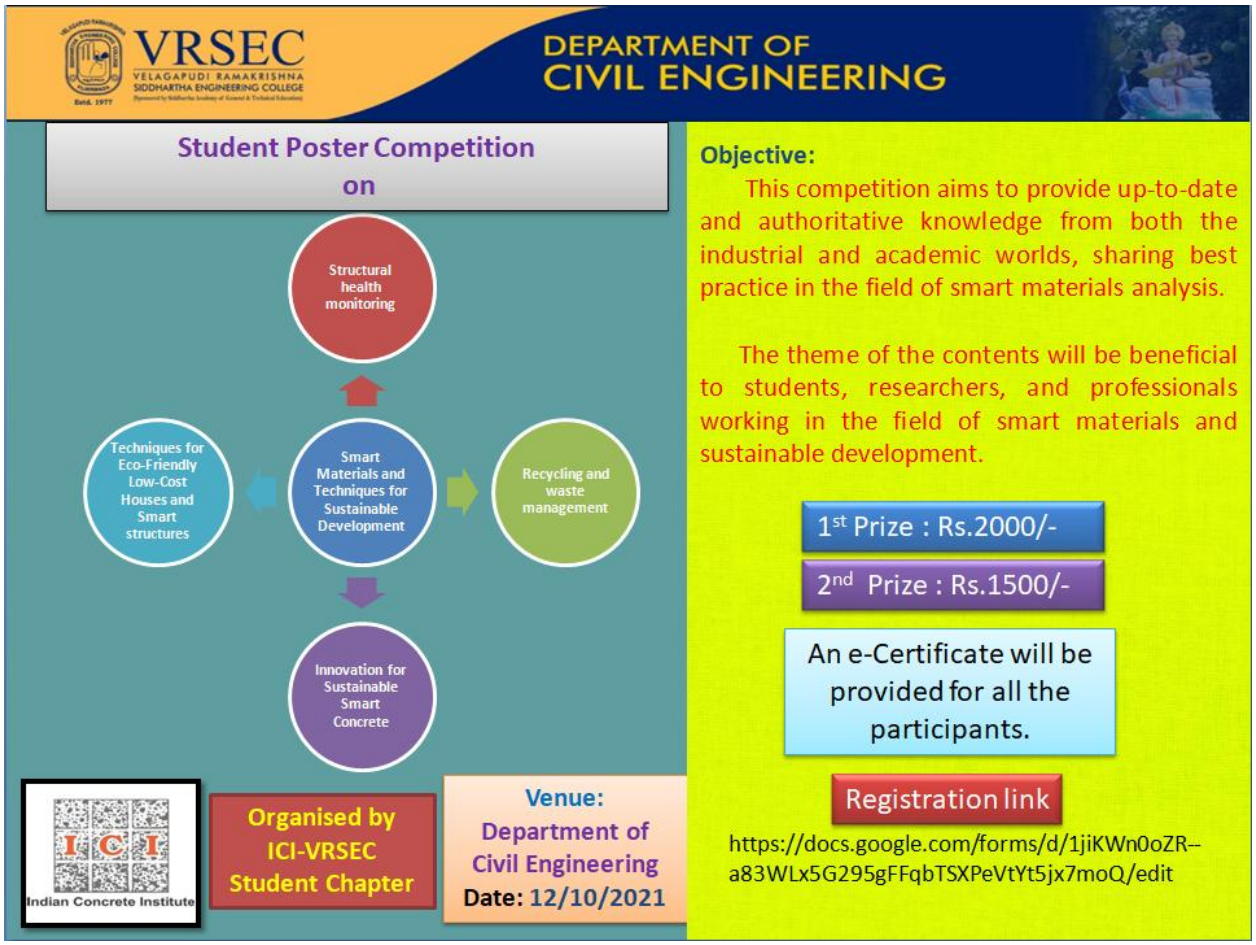

SAP 2000
Project
AUTODESK CIVIL3D
Most Wanted Software Used in Civil Engineering
STAAD.Pro
AUTODESK AUTOCAD
AUTODESK REVIT Architecture
ANSYS
ETABS
ORACLE PRIMAVERA
GRAPHISOFT ARCHICAD
ArcGIS


Employee
VISION
KNOWLEDGE
NEW
innovation
Leadership
ENTREPRENEUR
VENTURE
owner
solutions
Plan
ENTERPRISE
Startup
BUSINESS
Risk
MANAGEMENT
ideas


Civil Engineers
• Civil engineers are royal people of engineering
• Every engineer works under the roof constructed by civil engineer
• Plans, drawings and structural pictures which turn into reality are only possible by civil engineer
• Books are just reference, become an engineer who create book's

DEPARTMENT OF CIVIL ENGINEERING
V R SIDDHARTHA ENGINEERING COLLEGE

Student Poster Competition on "Smart Materials and Techniques for Sustainable Development"



Objective:

The contents focus on a wide range of methods and techniques related to sustainable development fields like smart structures and materials, innovation in water resource development, optical fiber communication, green construction materials, optimization and innovation in structural design, structural dynamics and earthquake engineering, structural health monitoring, nonmaterial's, nanotechnology and sensors, materials for energy conversion and storage devices, and IoT in sustainable development. This completion aims to provide up-to-date and authoritative knowledge from both industrial and academic worlds, sharing best practice in the field of smart materials analysis. The contents of this book will be beneficial to students, researchers, and professionals working in the field of smart materials and sustainable development.

Judging:

Judges for the student poster competition will be selected by the Competition Rules and based on rubrics of the presentation. Competitors should review the Poster Evaluation Form to become familiar with the evaluation criteria. To prepare for questions from the judges, competitors should keep in mind the diverse background/fields of specialty of the judging panel.

Competition Rules:

The poster must include the following:

- Title
- Names of author(s) and affiliated organization(s)
- Abstract (brief summary of objectives, methods, results, and conclusions)
- Background Information
- Project Objectives
- Materials and Methods
- Results (tables, graphs, charts)
- Conclusions
- Discussion of possible future directions or why project is complete

List of Participants and Evolution:

On the occasion of Innovation Day on October 12th, 2021, the Department of Civil Engineering organized a Student Poster Competition on the topic of "Smart Materials and Techniques for Sustainable Development" under the ICI-Student chapter-VRSEC. 10 students from 4 batches have participated in the competitions.

Batch. NO	Topic	Details of Participants'
1	Development of sustainable 3d printable concrete	188W1A0103,188W1A0108, 188W1A0113,188W1A0124
2	Housing in outer space	198w1a0103,198w1a0131 198w1a0157
3	Fly ash as a construction material in cc roads on black cotton soils	188W1A0161,188W1A01H7
4	Causes, Prevention and Repair of Cracks in Building	188W1A0168

The students made excellent use of this occasion and wowed the judges with their kept thinking presentation. The poster on display is vibrant and one-of-a-kind. The students' presentation impresses the department head, dean, and professors. All participants received e-certificates, and the prize winners received monetary awards.

Judging panel:

Dr. Chava Srinivas, HOD,CED-Versec

Mr. A.D.Kumar, Assistant Professor, CED-VRSEC

Dr.K.Hanuma, Assistant Professor, CED-VRSEC

After a detailed examination by the judging panel, Batch No.1 won the first prize, Batch No.3 won the second prize, and a consolation prize was given to Batch No.2.

Prize Winners:

1st prize: Batch No. 1

Ms. Atla Geethika (188W1A0103), Ms. Dasari.Geethika (188W1A0108), Ms. Tejaswini Goda (188W1A0113), and Ms. Konala.Kathayani (188W1A0124).

2nd prize: Batch No. 3

Mr. Amarthaluri Subramanyam (188W1A0161) and Mr. Melam Rahul (188W1A01H7).

Consolation Prize: Batch No. 2

Mr. B.v.saicharan (198w1a0103),Mr. Nagaraju .attili (198w1a0131), Mr.V.sai charan (198w1a0157).

Highlights of the Evolution:

Prize Winners

1st Prize

2nd Prize

3rd Prize

Outcome:

This competition presents the latest research advances and findings in the field of Smart Materials and Techniques for Sustainable Development, focusing on the principles, design and fabrication, test and characterization, performance and mechanism, and their applications in infrastructures. It also discusses future challenges in the development and application of smart/multifunctional concretes, providing useful theory, ideas and principles, as well as insights and practical guidance for developing sustainable infrastructures. It is a valuable resource for students, researchers, scientists and engineers in the field of civil-engineering materials and infrastructures.

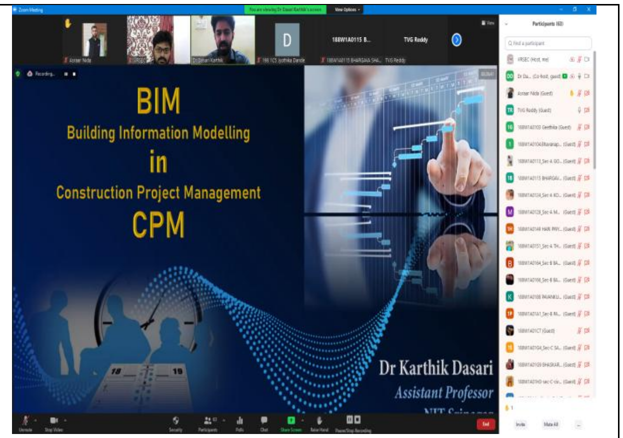
DEPARTMENT OF CIVIL ENGINEERING
V R SIDDHARTHA ENGINEERING COLLEGE

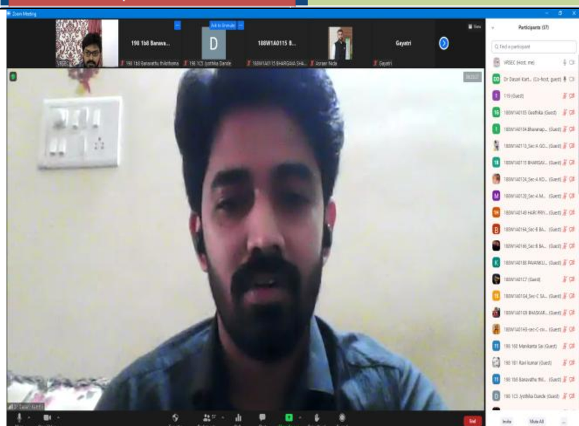
Short Term Training Program on "Building Information Modeling in Construction Project Management“

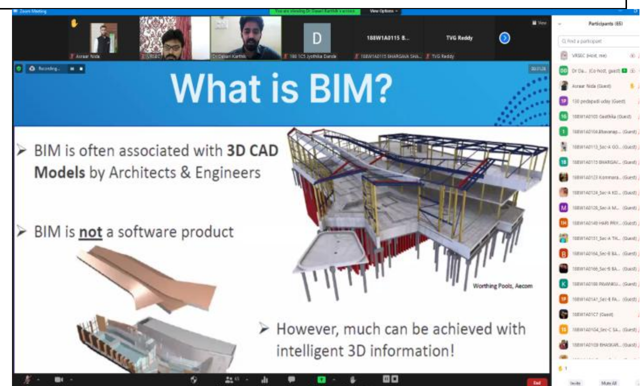
Event Type	Online Short Term Training Program
Date / Duration	31-01-2022 – 2PM to 5PM
Resource Team	**Dr. Karthik Dasari,** Assistant Professor, Civil Engineering Department, NIT Srinagar
Name of Coordinator	**Dr.Hanuma Kasagani**, Assistant Professor, CED-VRSEC
Target Audience	B.Tech-students, Faculty members of Civil and Research scholars
Total no of Participants	77
Objective of The-event	The main aim is to show the correspondence between BIM and project managers' roles on construction projects. It emphasises the importance of having proper BIM knowledge and experience for project managers to succeed and discusses the requirements for BIM knowledge and experience enrichment for project managers. Project management plays an important role in the successful execution of the project. Selection of the proper project management tool for the project is the key to success in completing the project at a specified time and in a standard manner. It is an emerging project management tool that utilises different resources for construction planning and monitoring of the outcomes of these methods to speed up the development cycle, visualization, 3D coordination, resource allocation, effective budget management, 4D simulation of the construction schedule and cost as the fifth dimension (5D). It helps engineers and architects visualise what needs to be designed in a virtual environment and to recognise possible design, construction, or operational problems. “A BIM is a digital representation of physical and functional characteristics of a facility. As such it serves as a shared knowledge resource for information about a facility forming a reliable basis for decisions during its lifecycle from inception onward.”
Outcome of The-event	BIM provides us with the opportunity to drive efficiency in our project management processes, and I hope this training progrgam inspires the students about how we can achieve this. By seeing the future today, through the effective use of BIM, we can improve the planning and delivery of projects to achieve better outcomes for our clients and the public at large. BIM integrates different disciplines by effective communication, analyzes the project systems for constructability, estimates the cost and time of projects at any time using quantity takeoffs, draws a big picture of projects using visualization and builds collaborative teams. All these are what a project manager does in a different scale during a project life cycle.
Feedback / Suggestions	B.Tech students and faculty gave positive feedback on the STTP-BIM in CPM and requested more training programmes in this manner.

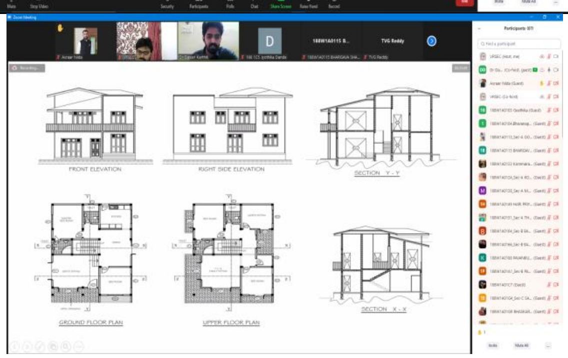
Photos

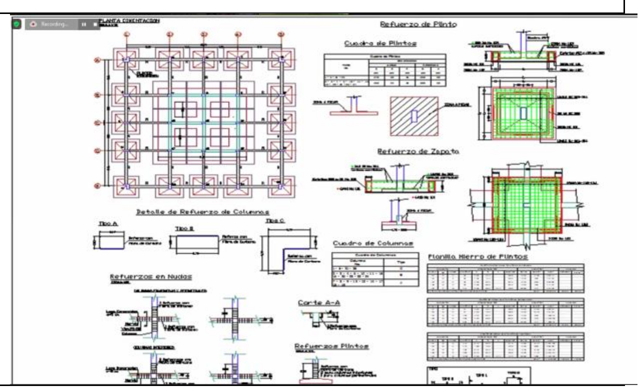

VRSEC
VELAGAPUDI RAMAKRISHNA SIDDHARTHA ENGINEERING COLLEGE
DEPARTMENT OF CIVIL ENGINEERING
Short Term Training Program
on
"Building Information Modeling in Construction Project Management"
Time: 2-5 PM, 31st Jan 2022
Meeting ID: 912 8690 3393
Passcode: 978464
Indian Concrete Institute
Organised by
ICI VRSEC Student Chapter
An e-Certificate will be provided for all the participants.
Registration link
Dr. Hanuma Kasagani
Assistant Professor,
CED, VRSEC, Coordinator,
ICI-VRSEC-Student-Chapter
Dr. Ch. Srinivas
Professor & HoD
CED, VRSEC
Dr. Karthik Dasari
Assistant Professor
Civil Engineering Department, NIT Srinagar
Research Areas:
Building Information Modeling, Construction Planning and Management, Alternate Dispute Resolution, Arbitration and Conciliation, Construction Productivity, Labour Efficiency, Human Factors and Ergonomics, Work Measurement Techniques, Lean Construction, Prefabrication Technology

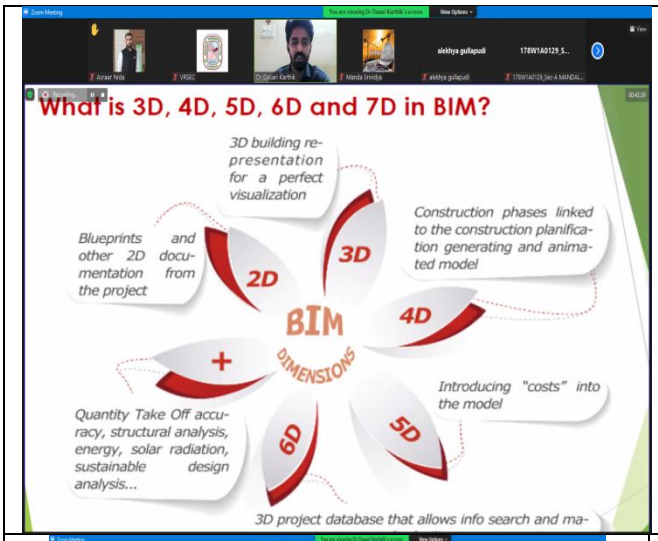

BIM
Building Information Modelling
in
Construction Project Management
CPM
Dr Karthik Dasari
Assistant Professor

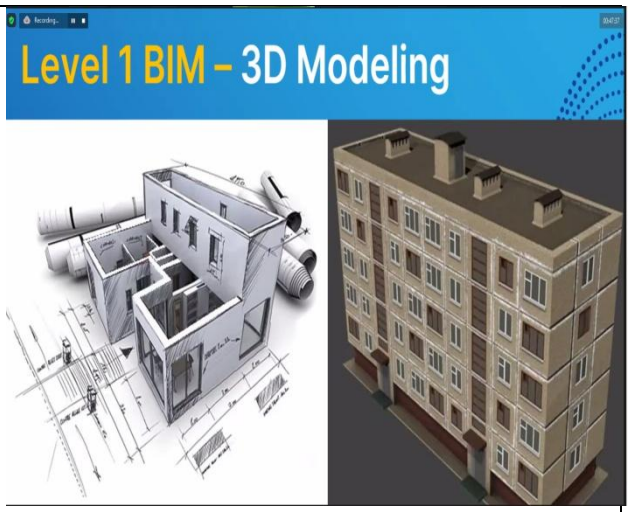


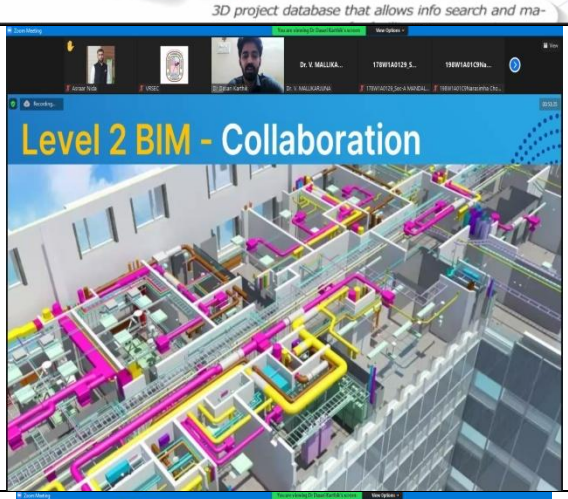

What is BIM?
BIM is often associated with 3D CAD Models by Architects & Engineers
BIM is not a software product
However, much can be achieved with intelligent 3D information!

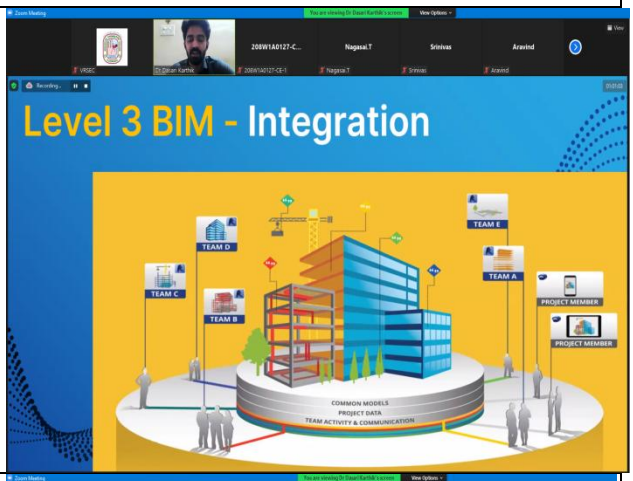

FRONT ELEVATION
RIGHT SIDE ELEVATION
GROUND FLOOR PLAN
UPPER FLOOR PLAN

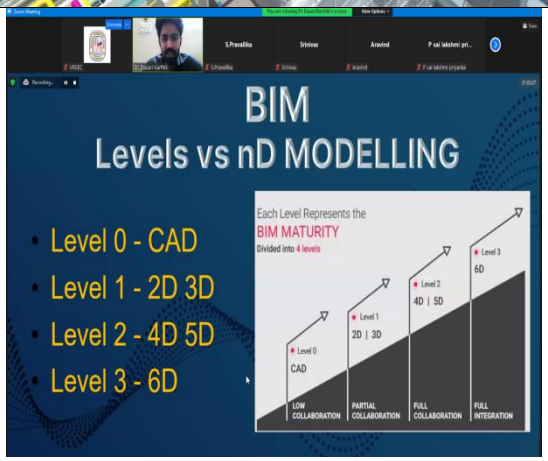

Refuerzo de Plinto
Cuadro de Plintos
Refuerzo de Zapato
Detalle de Refuerzo de Columnas
Cuadro de Columnas
Refuerzos en Nudos
Corte A-A
Refuerzos Plintos

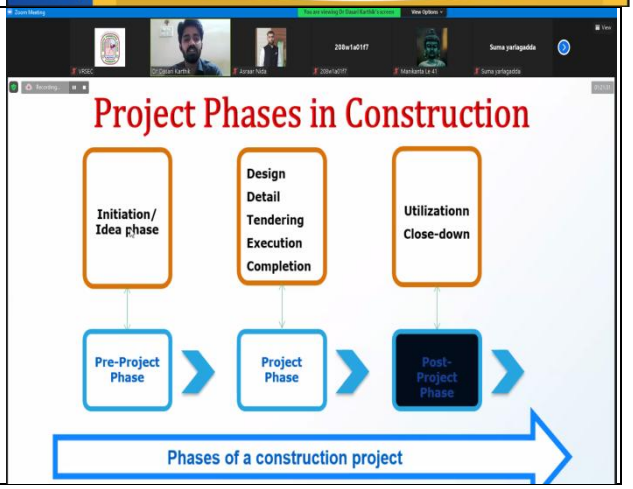

What is 3D, 4D, 5D, 6D and 7D in BIM?
3D building re-presentation for a perfect visualization
Blueprints and other 2D docu-mentation from the project
2D
3D
Construction phases linked to the construction planifica-tion generating and anima-ted model
BIM
4D
+
DIMENSIONS
Introducing "costs" into the model
Quantity Take Off accu-racy, structural analysis, energy, solar radiation, sustainable design analysis...
6D
5D
3D project database that allows info search and ma-

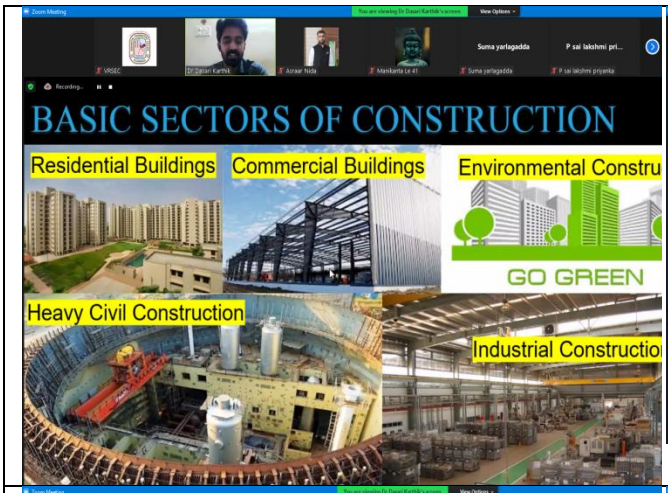

Level 1 BIM – 3D Modeling


Level 2 BIM - Collaboration

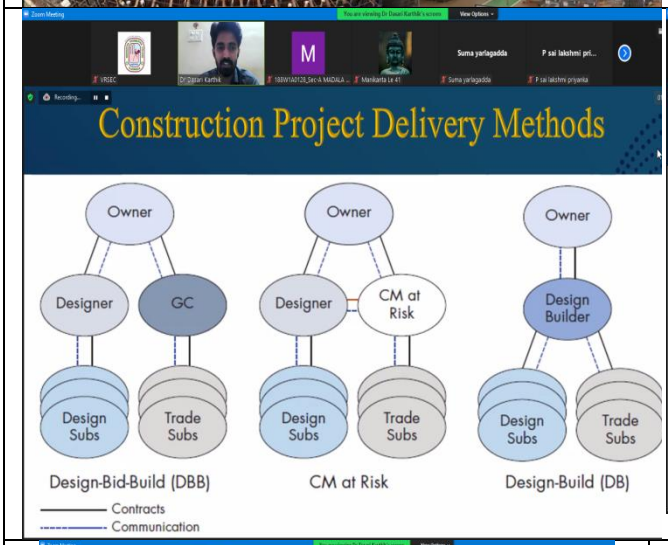

Level 3 BIM - Integration
TEAM D
TEAM E
TEAM C
TEAM A
TEAM B
PROJECT MEMBER
PROJECT MEMBER
COMMON MODELS
PROJECT DATA
TEAM ACTIVITY & COMMUNICATION


BIM
Levels vs nD MODELLING
Level 0 - CAD
Level 1 - 2D 3D
Level 2 - 4D 5D
Level 3 - 6D
Each Level Represents the
BIM MATURITY
Divided into 4 levels
Level 0
CAD
Level 1
2D | 3D
Level 2
4D | 5D
Level 3
6D
LOW COLLABORATION
PARTIAL COLLABORATION
FULL COLLABORATION
FULL INTEGRATION

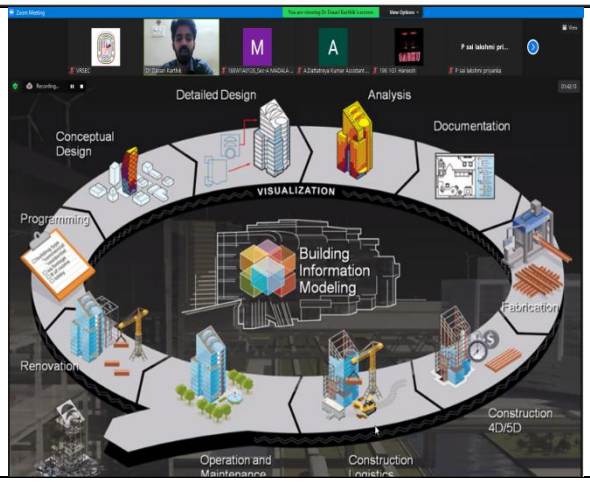

Project Phases in Construction
Initiation/ Idea phase
Design
Detail
Tendering
Execution
Completion
Utilizationn
Close-down
Pre-Project Phase
Project Phase
Post-Project Phase
Phases of a construction project

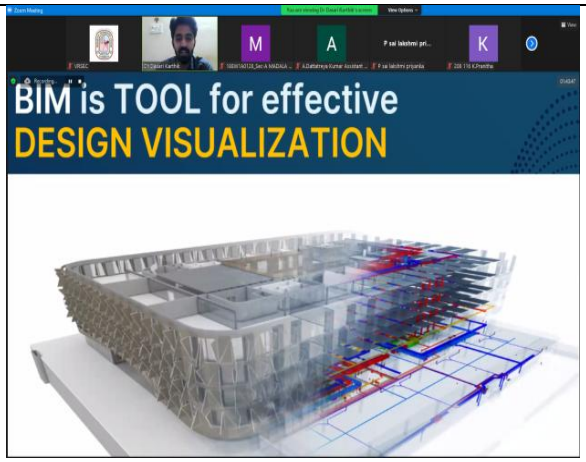

BASIC SECTORS OF CONSTRUCTION
Residential Buildings
Commercial Buildings
Environmental Constru
GO GREEN
Heavy Civil Construction
Industrial Constructio


Construction Project Stakeholders
Owner (Client)
Design Professionals
Architect
Engineer
Engineering-Construction Firm
Construction Professional
Project Manager & Construction Manager

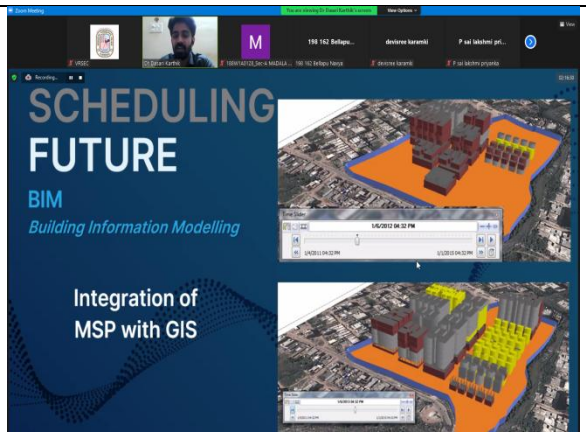

Construction Project Delivery Methods
Owner
Designer
GC
Design Subs
Trade Subs
Design-Bid-Build (DBB)
Owner
Designer
CM at Risk
Design Subs
Trade Subs
CM at Risk
Owner
Design Builder
Design Subs
Trade Subs
Design-Build (DB)
Contracts
Communication


Construction Project Team
Design/Engineer Organization
Architect/ Structural Designer
Engineer
Owner Organization
Owner
Facility Users
Facility Managers
Construction Manager
Outside Organizations (not typically part of AEC team, but sometimes participants in meetings)
Community
Insurer
Financial
Government Agencies
Scheduler
Estimator
Building Organization
Contractor
Subcontractor
Fabricator
Manufacturer
Supplier
Subcontractor

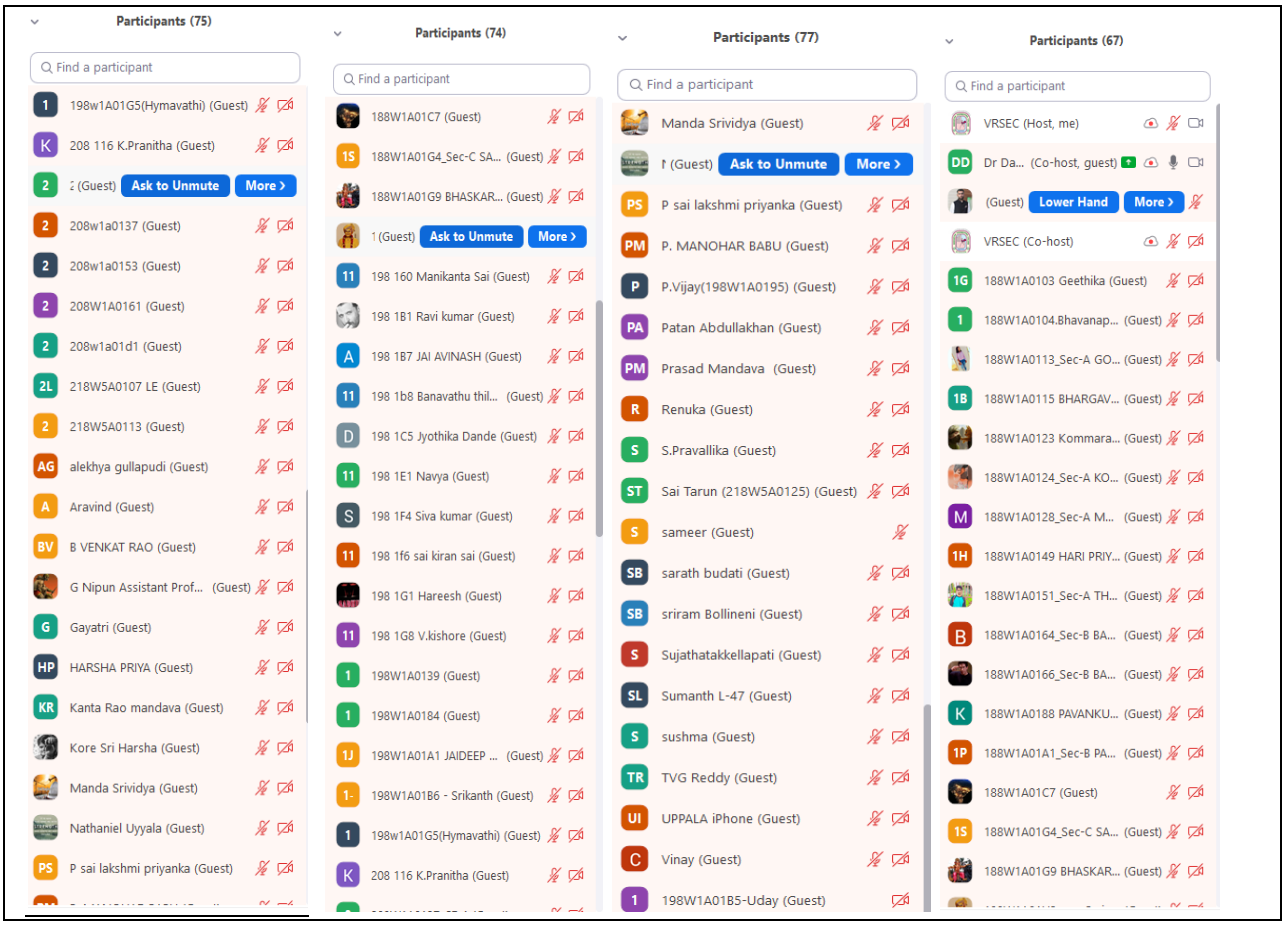

Detailed Design
Analysis
Documentation
Conceptual Design
VISUALIZATION
Programming
Building Information Modeling
Fabrication
Renovation
Construction 4D/5D
Operation and Maintenance
Construction Logistics


BIM is TOOL for effective
DESIGN VISUALIZATION

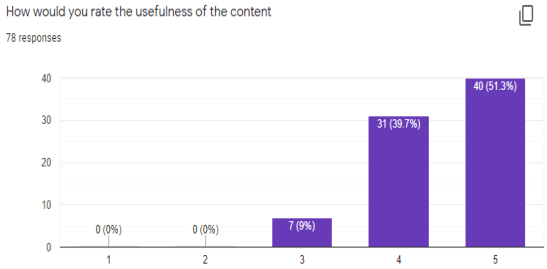

SCHEDULING
TECHNIQUES
NETWORKING
PDM
activity
Interdependencies
Brick work
1
Finish-Start
Plastering
2
Formwork
1
Start-Start
Reinforcement
2
Tap fittings
1
Finish-Finish
Piping work
2
Electricity Supply
1
Start-Finish
Electrical Fixtures
2

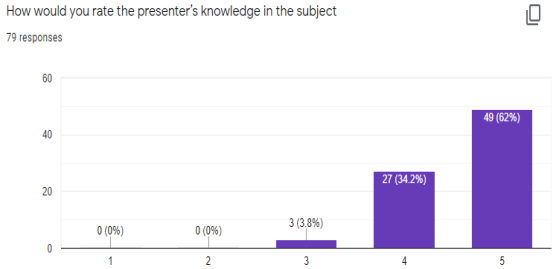

SCHEDULING
FUTURE
BIM
Building Information Modelling
Integration of
MSP with GIS

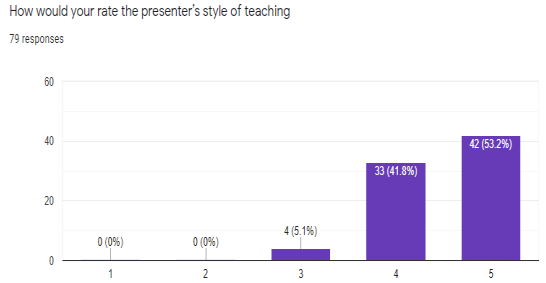
Attendance:

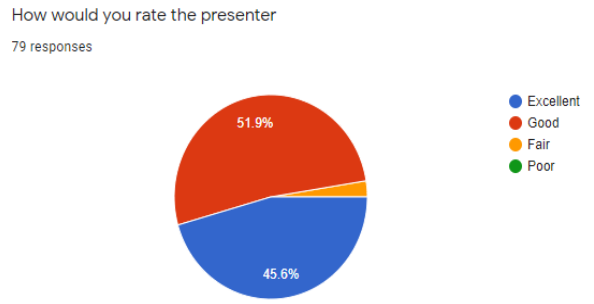

Participants (75)
Find a participant
198w1A01G5(Hymavathi) (Guest)
208 116 K.Pranitha (Guest)
(Guest) Ask to Unmute More
208w1a0137 (Guest)
208w1a0153 (Guest)
208W1A0161 (Guest)
208w1a01d1 (Guest)
218W5A0107 LE (Guest)
218W5A0113 (Guest)
alekhya gullapudi (Guest)
Aravind (Guest)
B VENKAT RAO (Guest)
G Nipun Assistant Prof... (Guest)
Gayatri (Guest)
HARSHA PRIYA (Guest)
Kanta Rao mandava (Guest)
Kore Sri Harsha (Guest)
Manda Srividya (Guest)
Nathaniel Uyyala (Guest)
P sai lakshmi priyanka (Guest)
Participants (74)
Find a participant
188W1A01C7 (Guest)
188W1A01G4_Sec-C SA... (Guest)
188W1A01G9 BHASKAR... (Guest)
(Guest) Ask to Unmute More
198 160 Manikanta Sai (Guest)
198 1B1 Ravi kumar (Guest)
198 1B7 JAI AVINASH (Guest)
198 1b8 Banavathu thil... (Guest)
198 1C5 Jyothika Dande (Guest)
198 1E1 Navya (Guest)
198 1F4 Siva kumar (Guest)
198 1f6 sai kiran sai (Guest)
198 1G1 Hareesh (Guest)
198 1G8 V.kishore (Guest)
198W1A0139 (Guest)
198W1A0184 (Guest)
198W1A01A1 JAIDEEP ... (Guest)
198W1A01B6 - Srikanth (Guest)
198w1A01G5(Hymavathi) (Guest)
208 116 K.Pranitha (Guest)
Participants (77)
Find a participant
Manda Srividya (Guest)
(Guest) Ask to Unmute More
P sai lakshmi priyanka (Guest)
P. MANOHAR BABU (Guest)
P.Vijay(198W1A0195) (Guest)
Patan Abdullakhan (Guest)
Prasad Mandava (Guest)
Renuka (Guest)
S.Pravallika (Guest)
Sai Tarun (218W5A0125) (Guest)
sameer (Guest)
sarath budati (Guest)
sriram Bollineni (Guest)
Sujathatakkellapati (Guest)
Sumanth L-47 (Guest)
sushma (Guest)
TVG Reddy (Guest)
UPPALA iPhone (Guest)
Vinay (Guest)
198W1A01B5-Uday (Guest)
Participants (67)
Find a participant
VRSEC (Host, me)
Dr Da... (Co-host, guest)
(Guest) Lower Hand More
VRSEC (Co-host)
188W1A0103 Geethika (Guest)
188W1A0104.Bhavanap... (Guest)
188W1A0113_Sec-A GO... (Guest)
188W1A0115 BHARGAV... (Guest)
188W1A0123 Kommara... (Guest)
188W1A0124_Sec-A KO... (Guest)
188W1A0128_Sec-A M... (Guest)
188W1A0149 HARI PRIY... (Guest)
188W1A0151_Sec-A TH... (Guest)
188W1A0164_Sec-B BA... (Guest)
188W1A0166_Sec-B BA... (Guest)
188W1A0188 PAVANKU... (Guest)
188W1A01A1_Sec-B PA... (Guest)
188W1A01C7 (Guest)
188W1A01G4_Sec-C SA... (Guest)
188W1A01G9 BHASKAR... (Guest)

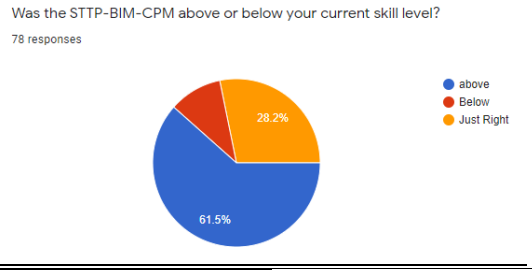
Feedback:

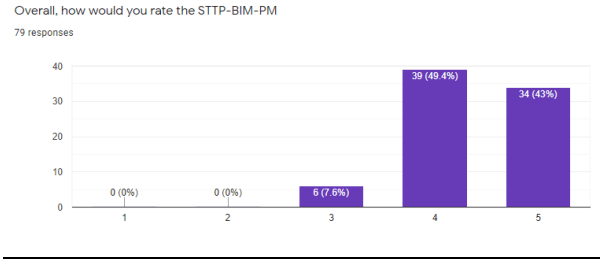

How would you rate the usefulness of the content
78 responses
40
30
20
10
0
0 (0%)
0 (0%)
7 (9%)
31 (39.7%)
40 (51.3%)
1
2
3
4
5

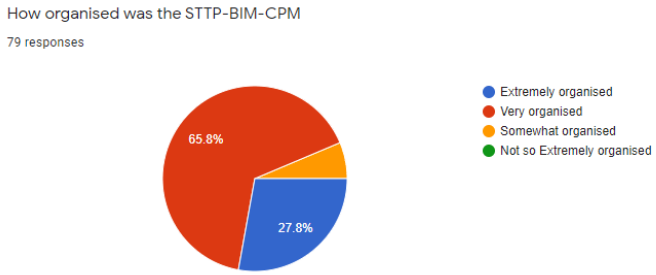

How would you rate the presenter's knowledge in the subject
79 responses
60
40
20
0
0 (0%)
0 (0%)
3 (3.8%)
27 (34.2%)
49 (62%)
1
2
3
4
5


How would your rate the presenter's style of teaching
79 responses
60
40
20
0
0 (0%)
0 (0%)
4 (5.1%)
33 (41.8%)
42 (53.2%)
1
2
3
4
5


How would you rate the presenter
79 responses
51.9%
45.6%
Excellent
Good
Fair
Poor


Was the STTP-BIM-CPM above or below your current skill level?
78 responses
28.2%
61.5%
above
Below
Just Right


Overall, how would you rate the STTP-BIM-PM
79 responses
40
30
20
10
0
0 (0%)
0 (0%)
6 (7.6%)
39 (49.4%)
34 (43%)
1
2
3
4
5


How organised was the STTP-BIM-CPM
79 responses
65.8%
27.8%
Extremely organised
Very organised
Somewhat organised
Not so Extremely organised