

Requisition Letter

From

Head of the Department,  
Civil Engineering,  
J.K.K Munirajah College of Technology,  
T.N.Palayam.

To

The Principal,  
J.K.K Munirajah college of Technology,  
T.N.Palayam.

Respected Sir,

Sub: Seeking permission for conducting a Certificate Program-Reg

We have planned to conduct a certificate Program for II-, III- and IV-year CIVIL students on "BUILDING INFORMATION MODELING" from 22.09.2022 TO 28.09.2022 by program coordinator Mrs.P. REENA AP/CIVIL . So, I request you to kindly provide permission to conduct the certificate Program.

Thanking You,

Place: T.N.Palayam

Date: 12.09.2022

Yours Truly,

*Permitted*  
*[Signature]*

*[Signature]*  
PRINCIPAL  
JKK MUNIRAJAH COLLEGE  
OF TECHNOLOGY  
T.N. PALAYAM (PO) 628 506.  
GOBI (TK), ERODE (DI).

*[Signature]*



# J.K.K. MUNIRAJAH COLLEGE OF TECHNOLOGY

Approved by AICTE, New Delhi And Affiliated to Anna University, Chennai.

Accredited by NAAC with "A" grade

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JKKMCT/CIRCULAR/SEP/2022

14.09.2022

**CIRCULAR**

The Department of Civil Engineering is planning to organize a Certificate Program on **"BUILDING INFORMATION MODELING"** (36 Hours) for the benefit of the students from **"22.09.2022 (THURSDAY) TO 28.09.2022 (WEDNESDAY)"** Students those who are willing to attend the Program can enroll their names to their class in-charges respectively on or before **19.09.2022**.



  
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Copy To,

All the HODs and Staff Members, The  
Student's circulation,

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Program Name : **BUILDING INFORMATION MODELING**

Program Code : **22CEBIMCP01**

Program Coordinator Name: Mrs.P.REENA M.E

Total Hours : 36 hrs

## CHAPTER I

- Introduction to BIM modeling
- The need and scope of with live examples
- Ergonomic data and its application

## CHAPTER II

- Applying learnings to a bigger scale hotel/at scheme/hostels
- Incorporation of site factors

## CHAPTER III

- Realistic approach road and building bye-laws
- The magic of Importing previous plans & reorient them to achieve larger scale in no time

## CHAPTER IV

- Prepare specifications in BIM
- Estimating all the quantities in a very short time.
- Layer wise calculation for pipelines, electrical ducts, AC units, etc

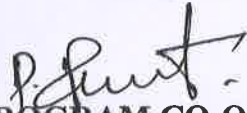
## CHAPTER V

- Introducing structural layers for design
- Cross-check with foundation calculation & column orientation
- Data and record for the 3D design of individual aspects for the next level.


Prepared By :

Name : P REENA

Designation : AP/CIW

  
PROGRAM CO-ORDINATOR

  
HOD

  
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### CERTIFICATE PROGRAM - BUILDING INFORMATION MODELING

Schedule Period :22.09.2022 TO 28.09.2022

Dates/ Duration	09:30 AM to 11:30 AM (02.00 hr)		11.45 AM to 1.15 PM (01.30 hr)		2:00 PM to 4.20 PM (02.30hr )
22.09.2022	A thorough introduction to BIM	BREAK	BIM's extent and various application	LUNCH	Case study and live applications/examples
23.09.2022	PROJECT- Small scale (initial) with interior		Hostel room or a Master bed room.PROJECT- Office Building		PROJECT- Evaluation of the project
24.09.2022	Introduction to bigger scale problems based on previous sample design		Time saving factor using 3D skills.Cross check in 3D-Quick Revit analysis/SAP		Specification generation in BIM.PROJECT- Hospital Hostel
26.09.2022	Estimation of quantities.Basics of foundation calculation & column		PROJECT- Individual home Duplex bungalow		PROJECT- Individual home- Evaluation
27.09.2022	PROJECT- Duplex bungalow- Evaluation		5D estimation and BIM/adding another dimension to BIM		Layer of services: water supply and Sanitation.PROJECT- Multi-story building
28.09.2022	Calculation and Fitting nitty-gritty.Centerline plan and Cross check with grid formation		Electrical Layout and BIM,AC layout ducting (only introduction)		Electrical Layout: drawing and estimation

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### Resource Person Profile

Title of the Program	BUILDING INFORMATION MODELING
Duration and Timing of the Program	22/092022 TO 28/09/2022
Name of the Resource Person	Mrs.P.REENA M.E
Photo Image of the Resource Person	
E-mail	<a href="mailto:reenapalanisamy24@gmail.com">reenapalanisamy24@gmail.com</a>
Mobile No:	9600264870
Designation	AP/Civil
Official Address	Department Of Civil, JKKMCT, T.N.Palayam-638506, Erode (Dt)
Educational Qualification	B.E(civil Engineering), M.E(Structural Engineering)
Experience	4 years of Teaching Experience as Assistant Professor
Field of Interest	Structural analysis

  
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## CERTIFICATE PROGRAM- BUILDING INFORMATION MODELING

### STUDENT WILLING LIST

NO	REGISTER NUMBER	STUDENT NAME	STUDENT SIGNATURE
1	731221103301	SUSITHRA S	
2	731220103001	DIVAKAR R	
3	731219103002	ANILKUMAR BALDABOI	
4	731219103003	DEBACHAND MUDULI	

PROGRAM CO-ORDINATOR

HOD

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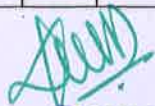
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## CERTIFICATE PROGRAM- BUILDING INFORMATION MODELING

Schedule Period : 22.09.2022 TO 28.09.2022

S.N O	NAME OF THE PARTICIPANT	ATTENDANCE OF THE PARTICIPANTS													
		22.09.22		23.09.22		24.09.22		26.09.22		27.09.22		28.09.22			
		FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN		
<b>II YEAR</b>															
1	SUSITHRA S	/	/	/	/	/	/	/	/	/	/	/	/	/	/
<b>III YEAR</b>															
2	DIVAKAR R	/	/	/	/	/	/	/	/	AB	/	/	/	/	/
<b>IV YEAR</b>															
3	ANILKUMAR BALDABOI	/	/	/	/	/	/	/	/	/	/	/	/	/	/
4	DEBACHAND MUDULI	/	/	/	/	/	/	/	/	/	/	/	/	AB	/
<b>Total Number Of Present</b>		4	4	4	4	4	4	4	4	3	4	4	4	3	
<b>Total Number Of Absent</b>		Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	1	Nil	Nil	Nil	1	
<b>Signature Of Program Coordinator</b>		P.P.S.	P.P.S.	P.P.S.	P.P.S.	P.P.S.	P.P.S.	P.P.S.	P.P.S.	P.P.S.	P.P.S.	P.P.S.	P.P.S.	P.P.S.	P.P.S.
<b>Signature Of Hod</b>		B.S.V.	B.S.V.	B.S.V.	B.S.V.	B.S.V.	B.S.V.	B.S.V.	B.S.V.	B.S.V.	B.S.V.	B.S.V.	B.S.V.	B.S.V.	B.S.V.

  
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### ASSESSMENT ON BUILDING INFORMATION MODELING

ANSWER ALL QUESTIONS (25\*1= 25 MARKS)

1. What is the benefit of using BIM technology for designers, engineers, and architects?
  - A. It is a cheaper alternative to other design software
  - B. It is not as widely used as other design software
  - C. They are able to see their upcoming projects in 3D
  - D. BIM only allows for 2D design
2. The following are some advantages of 3D BIM.
  - A. Streamlined sharing of design expectations and communication
  - B. Enhanced 3D visualization of the entire project
  - C. Reduced rework and revisions because there was total transparency from the start
  - D. All of the above
3. What documents support the BIM Management process? (select 2 answers)
  - A. BIM Protocol
  - B. BIM Execution Plan
  - C. Federated Model
  - D. Information Delivery Plan
4. What discipline models can be included in a federated BIM Model? (select 2 answers)
  - A. Electrical services model
  - B. Decoration and furniture model
  - C. Legal services model
  - D. Structural model

  
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5. Which of these tasks should happen prior to the construction phase? (select 2 answers)
- A. Integration of "as built" information
  - B. Synchronizations of changes across models
  - C. Clash detection and modification of inconsistencies
  - D. Monitoring compliance with environmental requirements.
6. Who is responsible for managing the digital model at company level?
- A. BIM Modeler
  - B. BIM Animator
  - C. BIM Manager
  - D. BIM Coordinator
7. At what stage of the construction project does development and maintenance of the BEP occurs?
- A. Pre-construction
  - B. Construction
  - C. Post construction
  - D. Handover and maintenance
8. What is the main purpose of the digital plan of work?
- A. To ensure that handover process goes smoothly
  - B. To support integrated project delivery
  - C. To provide information for the federated asset model
  - D. To ensure timely preparation of deliverables for the client to enable efficient decision making
9. Which of these activities take place at the post construction phase of the project? (select 2 answers)
- A. Model coordination
  - B. Overview of design
  - C. Building performance monitoring
  - D. Asset Information Management

  
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10. What does AIR stands for?
- A. Approved information register
  - B. Asset information requirements
  - C. Asset integration requirement
  - D. Asset information register.
11. Which of the following modeling can be done through BIM?
- A. MEP System
  - B. Sustainability
  - C. Management
  - D. All of the above
12. Which of the following is not an element of BIM?
- A. Technologies
  - B. Tendering
  - C. Processes
  - D. Policies
13. Which of the following is not a fundamental of BIM?
- A. Visualization
  - B. Quantification
  - C. Communication
  - D. Conversion
14. Which of the following is an use of BIM in project life cycle?
- A. Management of BIM models
  - B. BIM in construction management
  - C. BIM in facility operation
  - D. All of the above

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15. Which of the following is not a future potential of BIM?

- A. Improved Productivity
- B. Improved Speed of delivery
- C. Improved Coordination
- D. Reduced Environmental Impact

16. In virtual reality (VR), the users' perception of reality is completely based on

- 
- A. virtual information
  - B. factitious information
  - C. true information

17. Which of the following is not a type of Immersive Technology?

- A. Augmented Reality (AR)
- B. Transcended Reality (TR)
- C. Virtual Reality (VR)
- D. Extended Reality (ER)

18. Which of the following is not an application of Virtual Reality?


- A. Health Care
- B. Gaming
- C. Gardening
- D. Law Enforcement

19. Which of the following is an application of Virtual reality?

- A. Automotive
- B. Recreational
- C. Tourism
- D. All of the above

20. Which of the following is not an application of AR/VR in Construction?

- A. Project Planning
- B. Project Staffing
- C. Measuring Accurately
- D. On Job Site Revision

  
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21. Which of the following is an application of AR/VR in construction?

- A. Safety and Inspection
- B. Underground Construction
- C. Machinery Training
- D. All of the above

22. What is full form of BIM?

- A. Building Internet Model
- B. Building Integrated Modeling
- C. Building Infrared Modeling
- D. Building Information Modeling

23. Which of the following information cannot be generated using BIM?


- A. Topographical
- B. Spatial
- C. Elements
- D. Systems

24. Which of the following information can be generated through BIM?

- A. Quantities
- B. Schedule
- C. Operations
- D. All of the above

25. Which of the following Modeling can not be done through BIM?

- A. Site
- B. Website
- C. Architectural
- D. Structural

  
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## CERTIFICATE PROGRAM BUILDING INFORMATION MODELING

### STUDENT MARK LIST

S.NO	REGISTER NUMBER	STUDENT NAME	STUDENTS MARK
1	731221103301	SUSITHRA S	87
2	731220103001	DIVAKAR R	92
3	731219103002	ANILKUMAR BALDABOI	88
4	731219103003	DEBACHAND MUDULI	80

PROGRAM CO-ORDINATOR

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### SUMMARY/ OUTCOME REPORT

Name of the Certificate Program: **BUILDING INFORMATION MODELING**

Program Code: **22CEBIMCP01**

Name of the Program Coordinator: Mrs. P. REENA M.E

I hereby affirm that the entire Program contents in the Certificate Program **"BUILDING INFORMATION MODELING"** listed in the Add on Program Syllabus have been actually Learned by the students as the part of the prescribed co-curricular activities through Add on Program by NAAC and NBA.

I confirmed that the Certificate Program title as **BUILDING INFORMATION MODELING** Bench was done by me in the beginning of this semester and Program delivery with attendance of the students were recorded.


I confirmed that all registered students for this Certificate Program were actively attended and Learned well throughout the duration of this Program. And all students were successfully completed and eligible to receive the participation certificate.

**Outcome:** Students shall be able to gain the knowledge in

- **BUILDING INFORMATION MODELING** has certainly offered a consistent and coordinated model-based approach to construct a building as per the design ideas.
- students can access information from the building design database at any point in time and keep a tab on the documentation process related to the construction of the building structure as per the designs
- One of the key learning outcomes that you after taking the **BUILDING INFORMATION MODELING** course is that you learn how to scan the Steel models for any type of collisions or any signs of collisions in the building even before its construction

Name: P REENA

Designation: AP / Civil

  
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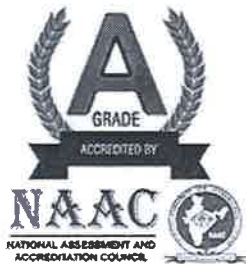
T.N.Palayam-638 506, Gobichettipalayam(Tk), Erode(Dt), Tamilnadu.

## CERTIFICATE

### FOR COMPLETION

This is certify that Mr./Ms .....**SUSUTHRA S**..... of  
.....**II-CIVIL**..... has successfully  
completed certificate Program titled  
“ **BUILDING INFORMATION MODELLING** “  
organised by Department of Civil Engineering

Date ; **22.09.2022 to 28.09.2022**



*P. Srinivas*  
COORDINATOR

*[Signature]*  
**PRINCIPAL**  
Principal  
**HOD JKK MUNIRAJAH COLLEGE J.K.K.M.C.T**  
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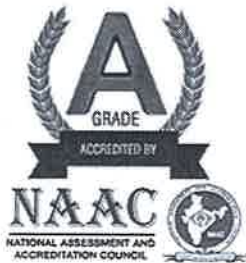
T.N.Palayam-638 506, Gobichettipalayam(Tk), Erode(Dt), Tamilnadu.

## CERTIFICATE

### FOR COMPLETION

This is certify that Mr./Ms ANILKUMAR BALDABOI of  
.....IV-CIVIL..... has successfully  
completed certificate Program titled  
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organised by Department of Civil Engineering

Date ; **22.09.2022 to 28.09.2022**



*P. Srinivas*  
COORDINATOR

*[Signature]*  
HOD

*[Signature]*  
PRINCIPAL  
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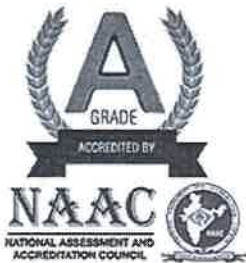
T.N.Palayam-638 506, Gobichettipalayam(Tk), Erode(Dt), Tamilnadu.

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### FOR COMPLETION

This is certify that Mr./Ms ..DEBACHAND.MUDULI.. of  
.....IV-CIVIL..... has successfully  
completed certificate Program titled  
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organised by Department of Civil Engineering

Date ; **22.09.2022 to 28.09.2022**



*P. Srinivas*  
COORDINATOR

*Coor. V*  
HOD

*[Signature]*  
PRINCIPAL  
J.K.K.M.C.T  
J.K.K. MUNIRAJAH COLLEGE  
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*[Signature]*  
Principal  
J.K.K.M.C.T



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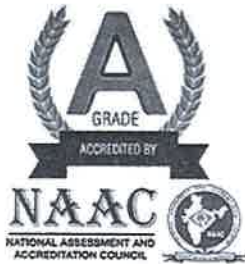
T.N.Palayam-638 506, Gobichettipalayam(Tk), Erode(Dt), Tamilnadu.

## CERTIFICATE

### FOR COMPLETION

This is certify that Mr./Ms .....**DIVAKAR.R**..... of  
.....**III-CIVIL**..... has successfully  
completed certificate Program titled  
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organised by Department of Civil Engineering

Date ; **22.09.2022 to 28.09.2022**



*P. Senthil*  
COORDINATOR

*Coor. V*  
HOD

*Principal*  
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*Principal*  
Principal  
J.K.K.M.C.T