ORGANIZING COMMITTEE

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Principal, BMSIT&M

Dr. H. K. Govindaraju

Vice-Principal, BMSIT&M

CONVENER

Dr. Rajakumara H. N.

Professor & Head, Civil Engineering

COORDINATORS

Dr. Aruna G. Associate Professor

Dr. Lalit Kumar Gupta, Assistant Professor

Dr. Athiyamaan V., Assistant Professor

TEAM MEMBERS

Dr. Rajesh Gopinath	Associate Professor
Mrs. Shobha R.	Assistant Professor
Mrs. Archana K.	Assistant Professor
Mrs. Shimna Manoharan	Assistant Professor
Mr. Vinod.B. R.	Assistant Professor
Dr. Chandrashekharappa A.	Assistant Professor
Dr. Deepak M. S.	Assistant Professor
Dr. Anup G. Ekbote	Assistant Professor
Dr. Marsh M. Bandi	Assistant Professor
Dr. Vibha Venkataramu	Assistant Professor

REGISTRATION

To join the FDP, you need to register by clicking on the registration link

https://forms.gle/ZzC1t9FAJHKRzNuX8

PAYMENT DETAILS

- Last date to Register: November 22, 2022
- Fees details:

Industrialist	2000/-
Academicians	1000/-
Research Scholar/Student	500/-

Accounts details:

Account Name	Principal,
	BMSIT&M
Account Number	50360255956
IFSC Code	IDIB000A682
MICR Code	560019059
Bank Name	Indian Bank
Branch	Avalahalli

Certificate will be provided to those participants whose attendance will be at least 80% with feedback submitted.

RESOURCE PERSONS

Eminent from Academics and Industries.

CONTACT US

Dr. Aruna G. Mobile: 8870199041 Dr. Lalit Kumar Gupta Mobile: 9314120770 Dr. Athiyamaan V. Mobile: 8824431753

Email: civildept_events@bmsit.in

BMS INSTITUTE OF **TECHNOLOGY & MANAGEMENT**

(An Autonomous Institute under VTU, Belgavi) Avalahalli, Yelahanka, Doddaballapura Main Road, Bengaluru 560064



ONE WEEK FACULTY **DEVELOPMENT PROGRAMME** ON ADVANCED COMPUTATIONAL **TECHNIQUES** CIVIL ENGINEERING

28th November -3rd December 2022

Organized by

Department of Civil Engineering In Association with













ABOUT THE INSTITUTE

BMS Institute of Technology and Management established in the year 2002, is one of the six institutions under BMS Educational Trust. It is an autonomous institution with NBA, NAAC & NIRF recognition. The institution offers eight undergraduate, 3 post-graduate, and 9 research programs. The synergy from training activities by industry professionals and outcome-based education, has led to vibrant activities as co-creation of curriculum, innovations, research, and consultancy, training to enhance specific competencies, participation in industry expos, fairs, competitions, apart from guest lectures, seminars, and workshops. The institution has an eco-friendly lush green area of about 21 acres. Successful placements, university rank holders, national-level projects, research endeavors, laurels in sports, and high ranking in the educational institution lists manifest the journey that BMSIT&M has embarked upon).

Institute Vision

To emerge as one of the finest technical institutions of higher learning, to develop engineering professionals who are technically competent, ethical and environment friendly for betterment of the society.

Institute Mission

Accomplish stimulating learning environment through high quality academic instruction, innovation and industry-institute interface.

ABOUT THE DEPARTMENT

The Department of Civil Engineering was established in 2013 and is defined by its singular strengths, collaborative synergies, and commitment to excellence. The Department offers programs at an Undergraduate level with an AICTE approved intake of 60 and houses excellent laboratories, classrooms, and computing facilities for Teaching, Research, and Qualitative Consultancy. Civil Department has signed

MOU with M/S MEDINI, DESIGN MENTORS and CONSTRUCTION MANAGEMENT TRAINING INSTITUTE. BMSIT&M Laboratories are the first of the choice when precise and standardized testing on materials is required. Proficient structural RCC and Steel design and detailing services for the industrial and individual construction projects, Non-Destructive Testing for existing buildings and technical procedures for repair, retrofitting, and rehabilitation, Solution to complex soil and geotechnical problems at sites, Optimized construction management schemes, and environmental impact assessment.

Department Vision

To be an Exemplary Centre, disseminating quality education and developing technically competent civil engineers with professional integrity for the betterment of society.

Department Mission

Impart technical proficiency through quality education; Motivate entrepreneurship through enhanced industry - interaction and skill based training; Inculcate human values through outreach activities.

ABOUT THE FDP

Computational techniques are fast, easier, reliable and efficient way or method for solving mathematical, scientific, engineering, geometrical, geographical and statistical problems via the aid of computers. The purpose of this FDP is to train the faculty members and research scholars on the fundamentals of computational techniques required for solving complex civil engineering problems which cannot be solved by manually and ordinary methods. This will help for producing accurate results in least time.



ONE WEEK FACULTY DEVELOPMENT PROGRAMME ON ADVANCED COMPUTATIONAL TECHNIQUES IN CIVIL ENGINEERING 28th November -3rd December 2022

Registration Form

. Name
2. Age3. Gender
l. Qualification
5. Designation
5. Name of the institution
7. Department
3. Address for the correspondence
9. E-mail ID
10. Mobile Number
11. Payment Reference Number
The information provided herewith is true to the pest of knowledge. I agree to abide by the rules and regulations governing the faculty development

regulations governing the faculty development programme.

Date Signature of Participant

Signature of Head of the Institution



ONE WEEK FACULTY DEVELOPMENT PROGRAMME

ON

"ADVANCED COMPUTATIONAL TECHNIQUES

IN

CIVIL ENGINEERING"

28th November -3rd December 2022

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by

Department

of

Civil Engineering

Coordinator(s)

Convenor

Dr. Aruna G

Dr. Rajakumara H N

Dr. Lalit Kumar Gupta

Dr. Athiyamaan V



REPORT

The Department of Civil Engineering organized a one-week FDP program on "Advanced Computational Techniques in Civil Engineering" from 28th November 2022 to 3rd December 2022.

The FDP was inaugurated on 28th November 2022 at 9.30 am in the academic block seminar hall (2nd floor) by Dr. H.K Govindaraju, Vice Principal, BMSIT&M, and Dr. Anil GN, Dean (Academics), Dr. Rajkumara HN, Hod (Civil). Participants from outside colleges, inside colleges, and the Faculty of the Department of Civil Engineering participated in the inaugural program.

Totally 97 participants were registered for this program. Every day, the Morning session started at 11.00 am and ended at 1.00 pm. Similarly, the afternoon session started at 2.00 pm and ended at 4.00 pm





Day 1

After the inauguration, the session started at 11.00 am. MR. Rohit Sachdeva, PMRF research scholar, IISC Bangalore was the resource person. He presented a talk on "Application of FEM



in Civil Engineering using MAT LAB". Concepts of finite element analysis, stiffness matrix, types of elements, and interface of MAT lab were explained.

The afternoon session started at 2.00 pm. Ms. Varsha, PMRF research scholar, IISC Bangalore, gave a presentation and demo on MAT lab and how to write the program using it.





<u>Day 2</u>

Dr. Junid Nabi, Adjunct faculty, NIT Calicut, presented an online lecture on "Parametric Design in Structural Engineering using Grasshopper and ABAQUS CAE. All the comments on the Grasshopper software, usage, and demo on grasshopper and ABAQUS software were explained.

The afternoon session started at 2.00 Pm. MS K Pooja, Associate Professor, SKIT, Jaipur, who was given the talk on "Application of ABAQUS in composite material" how to model the composite material, advantages and application of ABAQUS, Steps involved in Abaqus were explained.



Day 3

Dr Harinadha Reddy, Associate Professor, BMS School of Architecture, and Bangalore, who was delivered a talk on "Performance on high strength and performance concrete under elevated temperature: A multi-scale approach. He explained the introduction to high-strength and performance concrete, dependent and independent parameters, mathematical modelling etc.

Dr Athiyamaan V, Assistant Professor, BMSIT&M, Bangalore, presented a titled on "Introduction to modelling of RCC elements using ABAQUS CAE. The procedure for modelling of RC element was demonstrated.

Day 4

Dr Marsh, Assistant Professor, BMSIT & M, Who was presented on "Traffic flow modelling using VISSIM". He explained how to install the software and demonstrated the modelling of traffic flow. A hands-on session was carried out.

Dr A R Prakash, KESEE Associates, Civil Engineering Consultant, and Contractor, was given the presentation on the application of Plaxis in geotechnical engineering through online mode. Also, he explained about geotechnical aspects of Earthquake Engineering

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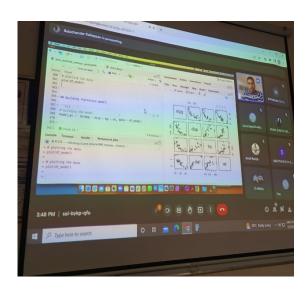




<u>Day 5</u>

Dr. Lakshmikanthan P, Scientist, CSIR-4P, who was explained computational tools for landfill design and assessment via online mode

MR. Balachandar Kaliappan, Scientist Assistant and Doctoral Students, TU Munich, Germany, was presented about statistical analysis using R software. A hands-on session was carried out for writing programs in R software



Day 6

MR, Abhishek Maharishi, Design Engineer, Dar-Al Handasah, Pune, delivered a presentation on Statistical analysis using MAT Lab. Also, he explained how to write the program for modelling of any elements and its implementation in ABAQUS software.



Valedictory

The valedictory function was held on 03.12.2022 at 2.00 PM. Feedback about the program was collected. The certificate was distributed to the participants. Faculty and staff members of the Civil Engineering department have participated in the valedictory function.

Coordinator(s) Dr. Aruna G Dr. Lalit Kumar Gupta Dr. Athiyamaan V Convenor Dr. Rajakumara H N