

MALNAD COLLEGE OF ENGINEERING, HASSAN

DEPARTMENT OF CIVIL ENGINEERING

NEWSLETTER JAN 2020



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MALNAD COLLEGE OF ENGINEERING, HASSAN

(An Autonomous Institution Affiliated to VTU, Belgaum)

VISION OF THE INSTITUTION

To be an institute of excellence in engineering education and research, producing socially responsible professionals

MISSION OF THE INSTITUTION

Create conducive environment for learning and research

Establish industry and academia collaborations

Ensure professional and ethical values in all institutional endeavors.

VISION OF THE DEPARTMENT

The Department of Civil Engineering will be a centre of excellence in industry-oriented teaching, training, research, professional ethics, social responsibility, and continuing education for practicing engineers through sponsored research and consultancy services

MISSION OF THE DEPARTMENT

To improvise the curriculum to include contents pertaining to situational experience of variety of sites and develop a sense of social responsibility and to enhance research orientation of students through internship programs.

To enhance sponsored research and consultancy works to achieve effective industry-institute-interaction and conduct Continuing Education Programme for practicing engineers.

To inculcate professional ethics through quality and modern construction practices.

To switch over to modern methods of material testing, Engineering analysis and design.



Dr. A. J. Krishnaiah,
Professor and Head
Civil Engineering Department

The Malnad College of Engineering Hassan was established in 1960 and the Civil Engineering department is one of the oldest Department in the campus. Besides high-quality teaching and instruction at both UG and PG levels, the department is actively involved in basic and innovative research and consultancy and provides high-quality technical advisory support through various R&D through KSCST projects and consultancy to various organizations. The civil engineering department with its multifaceted faculty continues to maintain and cultivate strong links with the infrastructural industry, academic and research institutions both within and across the state as well as country. As the problems of the society are multi-dimensional, we must try our best to meet the requirement of the society. With this view in mind, the Civil Engineering department provides quality education in UG as well as PG in Civil Engineering.

I congratulate all the passing out students of Civil Engineering Department Malnad College of Engineering, Hassan. I hope you have achieved your goal/ ambition in your life with the education in Malnad College of Engineering. I also welcome the newly joined students. I congratulate you on achieving your goal to pursue your higher studies here. I am sure that your dream of doing higher studies in the best civil engineering department will be fulfilled here.

With best wishes.

Dr. A. J. Krishnaiah, Professor and Head

FACULTY MEMBERS SUCCESSFULLY COMPLETED THE NPTEL/SWAYAM ONLINE COURSES

Sl. No	Faculty Member	Title of the Course	Duration in weeks	% Scored	Results
1.	Dr. A. J. Krishnaiah Prof. & Head	Subsurface Exploration: Importance and Techniques Involved	Feb.-April 2019 (8 Weeks)	43	Successful Completed
2.	Dr. A. J. Krishnaiah Prof. & Head	Geo technical Engineering Laboratory	July.-August 2019 (4 Weeks)	67	Elite
3.	Dr. A. J. Krishnaiah Prof. & Head	Geo synthetics Engineering Laboratory	July.-August 2019 (4 Weeks)	60	Elite
4.	Dr. H. S. Narashimhan Associate Prof.	Design of Reinforced Concrete Structures	July-Oct. 2019 (12 Weeks)	87	Elite + Silver
5.	Mr. Kishor Kumar S Asst. Professor	Integrated Waste Management for a Smart City	July-Oct. 2019 (12 Weeks)	64	Elite
6.	Mr. Kishor Kumar S Asst. Professor	Water, Society and Sustainability	Aug.-Sept. 2019 (4 Weeks)	48	Successful Completed
7.	Dr. Mohan Kumar Chavan, Professor	Academic Writing	May-Oct. 2019 (15 weeks)	75	Elite + Silver



**CONGRATULATIONS TO
HITHASHREE. M. N. ,
BHOOMIKA. D FOR WINING
GOLD MEDALS ON
GRADUATION DAY. ASHIKA RAJ
FOR GOLD MEDAL IN M'TECH,**



PREPARATION FOR GATE IN CIVIL ENGINEERING

Teqip-3 sponsored 3 day workshop on 'preparation for gate in civil engineering' was organised from 11-13 oct 2019 for final and pre-final year students. The workshop was co-ordinated by Dr. Mohan Kumar Chavan and Dr. B.E.Yogendra. Principal Dr. K.S.Jayantha was the chief guest at the inagural Program. A total of about 90 students participated in the workshop.

Day 1 (29th November) - "How To Crack GATE In First Attempt" By Mr. Amit Saha 10:00 am up to 12:00 noon followed by the lecture at 1:00 pm To 6:00 pm **Hydrology and Environmental** by Mr Sowmajeet Sen

Day 2 (30th November) – Lecture at 10:00 am To 5:00 pm Geo-tech & RCC by Mr Satyajeet Sahoo.

Day 3 (1st December) – Lecture at 9:00 am To 12:00 pm (Geo-tech & RCC) and Full Length MOCK test from 1:00 pm To 4:00 Pm (Offline Test)

Eighty students of Civil Engineering participated in the Three days workshop.



DEPUTATION TO JOHRAT ENGG COLLEGE, ASSAM TO ASSIST IN CONNECTION WITH NBA-SAR PREPARATIONS DURING 24-26TH OCTOBER, 2019



Dr H. S Narashimhan and Sumana Jayaprakash, reviewed the draft SAR of the Jorhat Engg College.

Changes were suggested in terms of methodology, hard copies of documents and the presentation techniques.

The criteria of the SAR were presented by concerned faculty members.

Summation of the review of the report was presented to the Head and the faculty members of the Department.

Exit feedback meeting with the principal Prof. Reeta Sarmah, Institute NBA Co-ordinator Dr Arup Bhattacharjee, Head of the Department Dr. P.K. Khaund and Department NBA Co-ordinator Dr. Atanu Kumar Dutta.

Group photograph with some of the faculty members of the Civil engineering Department, Jorhat Engineering College, Assam.



GETECHNICAL ENGINEERING LABORATORY AND ITS USAGE IN DESIGN

TEQIP-3 sponsored Two Day 'hands on training workshop was organised for 5th semester students on 1-2 November 2019. Dr. A.J Krishnaiah and Prof. Manu.K.C. co-ordinated the workshop.

The experts team: Dr. M. T. Prathap Kumar, Professor & Head, Dept. of Civil Engineering, RNS Institute of Technology, Bengaluru and Dr. K. V. Manoj Krishna, Asst. Professor, SKSJIT, Bengaluru and Mr. Vignesh, Asst. Manager, AIMIL Co. Ltd, Bengaluru were the speakers of the workshop.



GETECHNICAL ENGINEERING LABORATORY AND ITS USAGE IN DESIGN



The present day world is very competitive and only those who prepare themselves effectively will be able to get through. Prof. Manu K. C. Asst. Professor welcomed the gathering and Dr. A. J. Krishnaia, Professor & Head of the department described the purpose of the programme and also introduced the resource persons.

The first session began focussed on Introduction to Geotechnical Engineering Laboratory and Demo on UCC, Direct shear test and Usage of results in SBC and settlement calculations by Dr. M. T. Prathap Kumar, Professor & Head, RNS Institute of Technology, Bengaluru.

The second session focussed on Introduction to shear strength and conduction of Triaxial Shear test and its application by Dr. K. V. Manoj Krishna, Asst. Professor, SKSJIT, Bengaluru.

The first session parallel focussed on demonstration of UCC and Consolidation of soil test by Mr. Vignesh, Asst. Manager, AIMIL Co. Ltd, Bengaluru.

The second day session was delivered an expert lecture on Introduction to consolidation of soil and conduction of Consolidation test and usage of results in various Civil Engineering Application by Dr. M. T. Prathap Kumar, Professor & Head, RNS Institute of Technology, Bengaluru.

The second day session began with a talk on Determination of CBR and Swelling pressure and its applications in Civil Engineering by Dr. K. V. Manoj Krishna, Asst. Professor, SKSJIT, Bengaluru.

There was an interactive session and the participants were seen, eagerly involving themselves in discussions. The feedback from the participants was taken. The participants expressed their happiness over the successful conduction of the workshop. 02 students from Bahubali Engineering College, Shravanabelagola and about 80 students from the parent institution benefitted from this workshop.

SITE VISIT BY CIVIL ENGINEERING STUDENTS TO ROOF TOP

Dr. H.S. NARASHIMHAN.

The 5th semester students were accompanied by the course faculty Dr. Narashimhan, to the roof top as part of the course Design of Reinforced Concrete structures

This was a real time exposure to the students for a better understanding of the concepts of RCC.

The building under construction near the main building in the campus was the site. About 80 students visited the site for an indepth understanding of the site with the faculty.



IGBC'S ADVANCED TRAINING PROGRAMME ON GREEN BUILDINGS AT NEW DELHI ON 28-29TH NOVEMBER 2019

Attended by faculty members Sumana Jayaprakash, Guruprasad, Darshan, Chethan Kumar N T. and foreman Sri Ramamurthy.

The training programme was organized by the Indian Green Building Council at India, at The India Habitat Centre, Lodhi Road, New Delhi.



Visit to the platinum rated Paharpur Business Centre, New Delhi as a case study

**SHARING THE LEARNING...THE
MOODLE EXPERIENCE- A TRAINING
PROGRAM CONDUCTED FOR 87
FACULTY MEMBERS ACROSS
DEPARTMENTS ON 5TH ,6TH OF DEC 19**

Sumana Jayaprakash, Faculty, Department of civil engineering, conducted a training program for faculty members on exploring moodle for teaching learning innovations, at the CAED centre. 87 faculty members across departments attended the program in two groups on two days. Faculty members were guided on Creating their own moodle site on gnomio.com.

Dr. M. K. Ravishankar, Dean Academic organized the program.

An outcome report and feedbacks was taken from the participants at the end of the program



LOW COST NATURAL COAGULANT AND ADSORBENT TREATMENT FOR COLOUR REDUCTION OF TEXTILE WASTEWATER

Guide: Prof. Kishor Kumar



Suhani K.S. of 7th semester, presented technical paper at the National conference on science, engineering and management, on 8-9th May 2019

Topic presented- Low cost natural coagulation and adsorption treatment for colour reduction of textile wastewater.

- It is important to develop a bio-degradable and eco-friendly organic coagulant without secondary pollution for wastewater treatment.
- Coagulant dose and adsorbent dosage is a important factors influencing the mechanism of coagulation and Adsorption.
- Maize and sugarcane leaves are natural coagulants have several advantages compared to alum.
- the activated sugarcane leaves charcoal is economical and it gives the better result in colour removal of textile waste water

INNOVATIVE, SUSTAINABLE SOLUTION BY SHARATH. D.R. 7TH SEMESTER STUDENT



As Sharath D.R. entered his college campus pedalling the bicycle he manufactured using bamboo on Saturday, his friends and teachers were surprised. The final year student of BE civil engineering in Malnad Engineering College, Hassan, took two months to design and manufacture a bamboo bicycle for himself.

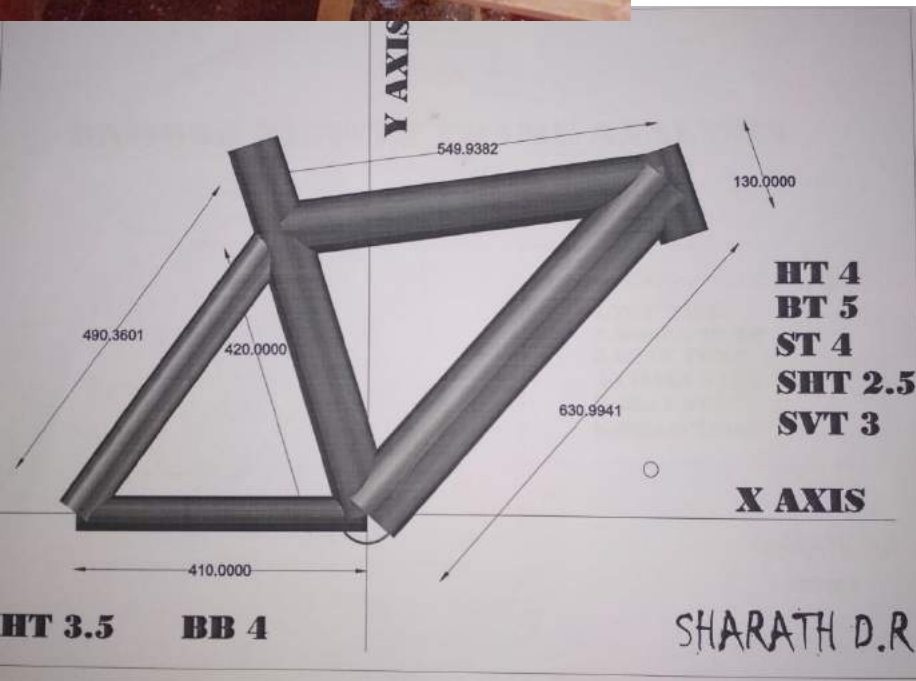
Sharath's classmates and teachers also pedalled the bicycle on campus.

Sharath, who is from Mysuru, got the idea of a bamboo bicycle after he read a book on bamboo in his college library. "The book was about the quality of bamboo and how it had been used in the past. By then, I had decided to shift to using a bicycle, leaving behind my old motor scooter. I thought of manufacturing my own bicycle using bamboo.





Sharat made the drawings of the frame after watching cycle making videos. “I did work on the table first and later implemented it,” he said. He bought bamboo from the bamboo market in Hassan and worked out the frame with the help of araldite— an adhesive. He had difficulty procuring certain spare parts to suit the frame. “I took the help of a carpenter to cut the bamboo. Altogether it took two months to complete the task,” he said. Except the frame, the rest is like any other bicycle. He spent about ₹14,000 to manufacturer the cycle. Being a student, he was able to spend about ₹7,000 from his pocket money. For a few days, he took a break as he did not have money. His friend Kartik B.U, also in the final year of B.E., contributed a share of money to complete the exercise. “The cycle weighs 17.5 kgs. One of my friends who weighs around 96kgs pedalled it without any problem. It can carry five times its weight. I am happy,” he said.



CONSULTANCY ACTIVITIES , DEPARTMENT OF CIVIL ENGINEERING, MCE HASSAN

Cement, and Aggregates (2018-19)

Sl.	Date	Job No.	Client
1	02.04.2018	7044	M/s. Soma Enterprises Ltd.,Bangalore
2	07.04.2018	7061	EE, South Western Railway, Hassan
3	08.04.2018	7067	Mr.Raghavendra, Contractor,Hassan
4	11.04.2018	7068	Mr.H.R.Jeevan Kumar, Contractor, Hassan
5	11.04.2018	7073	Asst.Director, KRIDL, Hassan
6	12.04.2018	7074	Mr.Manu Nayak, Contractor, Hassan
7	16.04.2018	7078	M/s.RITES, Hassan
8	07.05.2018	7101	M/s.RITES, Hassan
9	29.05.2018	7130	M/s.RITES, Hassan
10	09.06.2018	7150	Deputy Chief, Engg, South Western Railway,M
11	18.07.2018	7174	Suraj Kumar.T.S, South Western Railway
12	30.11.2018	7302	M/s.RITES, Hassan
13	08.12.2018	7317	Asst.Director, KRIDL, Hassan
14	06.12.2019	7387	Mr.Manohar, Engineer
14	07.04.2018	7060	M/s. Rites, Hassan
15	07.04.2018	7064	Mr.Pradeep, Contractors, Hassan



Concrete Lab

CONSULTANCY ACTIVITIES , DEPARTMENT OF CIVIL ENGINEERING, MCE HASSAN

Water Samples (2018-19)

Sl.	Date	Job No.	Client
16	18.05.2018	7106	Sr.Sec, Engineer, South Western Railway,Hsn
17	29.05.2018	7128	M/s. Gurukula School, Banavara
18	01.06.2018	7137	Mr.Raje Gowda, Contractor, Hassan
19	14.08.2018	7200	Mr.Pradeep, Contractors, Hassan
20	14.09.2018	7220	M/s. Rites, Hassan
21	11.10.2018	7255	M/s. P.G.Shetty Constructions, Hassan
22	04.01.2019	7348	M/s. Autade Group, Hassan



Hydraulics Laboratory modernized

NDT and Design (2018-19)

Sl.	Date	Job No.	Client
1	16.04.2018	7077	Asst.Director, KRIDL, Hassan
2	16.04.2018	7078	M/s. Rites, Hassan
3	09.06.2018	7150	Sr.Sec, Engineer, South Western Railway,Hsn
4	18.07.2018	7174	Mr.Suraj Kumar, Contractor, Hassan
5	19.11.2018	7290	Asst.Director, KRIDL, Hassan
6	02.12.2018	7343	Sr.Sec, Engineer, South Western Railway,Hsn
7	24.01.2019	7366	Sr.Sec, Engineer, South Western Railway,Hsn
8	30.01.2019	7373	Commissioner, APMC, Hassan

CONSULTANCY ACTIVITIES , DEPARTMENT OF CIVIL ENGINEERING, MCE HASSAN

Mix Design (2018-19)

Sl.	Date	Job No.	Client
12	06.04.2018	7053	M/s. Megha Engineering Constructions Hassan
13	07.04.2018	7063	Sr.Sec, Engineer, South Western Railway,Hsn
14	20.04.2018	7082	Asst.Exe.Engineer.KUWS Hassan
15	01.06.2018	7135	Asst.Exe.Engineer.KSRTC, Hassan
16	14.08.2018	7198	M/s. Rites, Hassan
17	21.08.2018	7204	M/s. G.K.C Projects, Hassan
18	30.11.2018	7306	Asst.Director, KRIDL, Hassan
19	21.12.2018	7341	M/s. DJPR Construction PVT Ltd, Hassan
20	18.03.2019	7442	Mr.D.N.Nandeesha, Hassan
21	20.03.2019	7446	M/s. Nagarjuna Construction Co(NCC) Hsn
22	20.03.2019	7447	Asst.Exe. Engineer,Minor Irrigation, Hassan



200 ton compression Testing Machine in BMT Lab



Digital Triaxial Testing Machine, Geo Tech Lab

PROGRAM OUTCOMES (POs)

Engineering Graduates will be able to:

Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

Problem Analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

Conduct Investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

