



MANGALORE INSTITUTE OF TECHNOLOGY & ENGINEERING

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(A Unit of Rajalaxmi Education Trust®, Mangalore - 575001)

Affiliated to V.T.U., Belagavi, Approved by AICTE, New Delhi.



DEPARTMENT OF CIVIL ENGINEERING

ACES
2022-23

NEWS BULLETIN

MANGALORE INSTITUTE OF TECHNOLOGY & ENGINEERING



DEPARTMENT OF CIVIL ENGINEERING

VISION

To produce **Competent and Professional** Civil Engineers with **Academic excellence** and **Ethics** to meet Societal Challenges at Global level

MISSION

M1: To provide quality technical education through student centric teaching - learning processes.

M2: To enable student with practical knowledge, innovation and research to find solutions for societal problems.

M3: To impart professional skills and ethics to involve in consultancy and Civil Engineering projects



Program Outcomes (POs)

PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: 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.

PO3: 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.

PO4: 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

PO5: 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.

PO6: 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.

PO7: 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.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: 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.



PO11: 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.

PO12: 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

Program Specific Outcomes (PSOs)

After the completion of Civil Engineering program, graduates are able to

- Utilize the Civil Engineering knowledge and problem analysis skills to conceptualize, develop, and execute the Civil Engineering projects
- Deploying quality Civil Engineers to work towards societal needs to achieve environmental and sustainable development





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Mijar, Moodabidri – 574225, Mangalore Tq, D.K Dist., Karnataka

Department of Civil Engineering

ACES – Committee List

| Name | Responsibility |
|--------------------------------|---------------------------------|
| • Dr. Ganesha Mogaveer | - Head of the Department |
| • Dr. Jayaprakash M C | - ACES Faculty Coordinator |
| • Mr. Waseem Ahmmed S N | - President |
| • Mr. Vishnu | - Vice President |
| • Mr. Basavaraj B Y | - Secretary |
| • Mr. Sharath Raj S R | - Treasurer |
| • Mr. Swaraj Adyanthaya | - Cultural Coordinators |
| • Mr. Sachin Devadiga | - Sports Coordinator |
| • Mr. Ashwin Poojary | - Student Placement Coordinator |



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Department of Civil Engineering

Preamble

Association Civil Engineering Students (ACES) it is one of the non-profit association formed for the benefit of Civil Engineering students. Under the flagship of the Department of Civil Engineering, MITE, every year various technical talks from the industry persons and professors from IITs, IISc& NITs, and also workshops, conferences, technical tours, industry visits, sports, etc are conducted under this forum. Apart from all these finishing school programs for the final year, students will be organized every year as a pre-employment training program to bridge the gap between industry and academia. ACES believes that the true potential of students can be realized by encouraging them to participate in various activities including participation in innovative project competitions and acknowledging their achievements



About the Civil Engineering Department

Civil Engineering is a prominent and oldest branch of engineering which deals with buildings, bridges, roads, flyovers, railways, water supply, sanitary, development of townships and other infrastructural development. Due to liberalization policy of the government, many infrastructure projects like golden quadrilateral, National highway constructions and transport sector development are the need of the hour. Many multinationals are engaged in the infrastructure developmental activities. The job opportunities are in civil engineering fields and software companies. Analytical and logical abilities and liking for the profession are the essential requirements. Subjects on concrete technology, transport engineering, water supply and sanitary engineering, geotechnical engineering, fluid mechanics and machinery, structural mechanics, hydrology and water resources, irrigation engineering are studied in this course.

The Department of Civil Engineering has been started at MITE in the year 2013 and has been accredited by the National Board of Accreditation, New Delhi (from 2018-2021). The Department focuses on the overall development of the students through innovative teaching and learning. One of the main objectives of the Department is to produce qualified, competent and employable civil engineering graduates to cater the needs of industry and society by imparting requisite knowledge and training in different areas of Civil Engineering and emerging technologies. The department has highly qualified faculty. The students from different parts of the country are studying in the branch. Some of the labs which have been established under the department are Surveying, Basic Material testing Lab and Fluid Mechanics Lab. Software Application and Design Lab, Geotechnical Lab, Environmental Lab, Concrete and Highway Lab and Structural Engineering Laboratory.

MITE - Local CAFET INNOVA Technical Society Centre is started under the Department of Civil Engineering in association with CAFET-INNOVA Technical Society, Hyderabad. It is an International nonprofit organization to encourage the teaching faculties, young talent especially students towards the field of Research & Development (R&D) and harness their intellectual abilities for the betterment of institution as well as industry.

About ACES: ACES (Association of Civil Engineering Students) is a student's of civil engineering association, it is one of the non-profit association formed for the benefit of civil engineering students. Under the flag ship of Department of Civil Engineering every year conducting various technical talks from the industry persons and professors from IITs, IISc & NITs, workshops, conferences, technical tour, industry visit, sports etc. for the benefit of civil engineering students.

MITECONS: MITE consultancy services provides the consultancy services in different fields of Civil Engineering for both Government, Semi Government and private agencies since from inception. The basic aim of MITE consultancy services (MITECONS) is provide quality services for technical problems at reasonable and affordable rates as a service to society.

About Finishing School Program: The finishing school program on Building Construction Practices initiated by the Department of Civil Engineering was started for the Final Year students' in 2017-18. The training covered areas of construction practices like setting out and marking, hands on training on masonry, software application in Civil Engineering, Geotechnical investigations. The FSP also covered topics on formwork and scaffolding, bar bending, RMC, Mixed design, alternate building materials etc. This pre-employment training program was to enhance and sharpen required skills among the civil engineering graduates and make them employable.



MESSAGE FROM HEAD OF THE DEPARTMENT



Dr. Ganesha Mogaveera

Professor & Head

Department of Civil Engineering

Mangalore Institute of Technology & Engineering

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It is my immense pleasure to mention that, Civil Engineering is a prominent and oldest branch of engineering which deals with buildings, bridges, roads, flyovers, railways, water supply, sanitary, development of townships and other infrastructural development. Due to liberalization policy of the government, many infrastructure projects like golden quadrilateral, National highway constructions and transport sector development are the need of the hour. Department of Civil Engineering was established in the year 2013 and organised a series of activities like Technical talks, Quiz competition, Model exhibition, National and international level conferences & workshops and finishing school program. Department focused on industrial training to the students apart from regular academic activities. I am proud to mention that, our Department is releasing News Bulletin for concluding series of activities of the academic year 2022-23.

I am grateful to our honourable chairman Sri. Rajesh Chouta, Founder of Rajalaxmi Education Trust® for his tremendous support in developmental work of the department and our beloved Principal Dr. Prashanth C M for his constant support and encouragement. I would like to appreciate the continuous effort put forward by the Coordinator of Association of Civil Engineering Students (ACES) Dr. Jayaprakash, M. C. and it's my privilege to thank the faculty members of Civil Engineering Department and my dear students.

Dr. Ganesha Mogaveera





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DEPARTMENT OF CIVIL ENGINEERING

ACES Activity List of 2022-23

| Sl. No. | Event | Date | Resource Person | Topic |
|---------|-----------------------------------|--------------------------|----------------------|--------------------------------------------------|
| 1 | Hands-on Training | 09/09/2022 | Ms. Swapna S A | Non-Destructive Testing' of Concrete Structure |
| 2 | Techno Week 2022 – Technical Talk | 27/09/2022 | Er. Eknath Dandakeri | Pre Execution Errors Handling and Solving' |
| 3 | | | Er. Sudhir Shetty | 'Basic and Handling of Ready-Mix Concrete |
| 4 | Technical Talk | 15/11/2022 | Er. Anil V Baliga | Civil Engineers and their Personal Finances |
| 5 | Industry Visit | 01/12/2022 to 03/12/2022 | Mr. Benny | Sewage Treatment Plant |
| 6 | Site Visit | 21/12/2022 | - | NHAI Construction Site Visit |
| 7 | Industry Visit | 27/06/2023 | Er. Anand Kumar S K | Master Plannery and Dwaraka Constructions Puttur |
| 8 | Exhibition | 19/08/2023 | - | Working Models Based on Hydraulics Pressure |

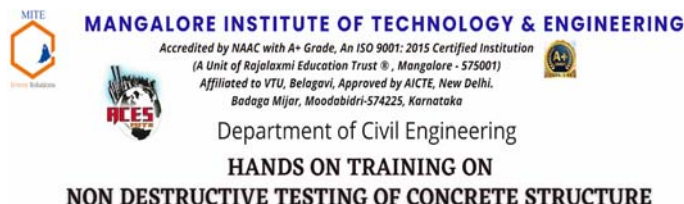
Department of Civil Engineering

Hands-on Training on 'Non-Destructive Testing' Of Concrete Structure

by Ms. Megha Mayuri B G

Department of Civil Engineering, MITE

Date: 9th September 2022



Department of Civil Engineering organized a Hands-on Training on 'Non-Destructive Testing' of Concrete Structure on 9th September 2022 for 4th year Civil Engineering students.

The following are some of the major advantages of conduction of Exhibition

1. The hands-on training was a part of the necessary learning of internship to enable the students to conduct the NDT and to analyse the same in real time projects.
2. There was a presentation on Types of NDT and their advantages and disadvantages to create a better awareness among interns about the choice of NDT's to be used accordingly.
3. The hands-on training gave an opportunity to each student to individually work with the Rebound Hammer, to collect data and analyse the data to plot the graph and to arrive at a conclusion on the strength of the concrete tested.
4. The skill of handling and using a Rebound hammer equipment was imparted to students

The hands-on training enabled the students to work individually and in teams and students learned a new skill in depth and were able to carry on the NDT test using Rebound hammer.



Students were using the Non-Destructive Testing instrument in the field

Department of Civil Engineering

Technical Talk on 'Pre Execution Errors Handling and Solving'

by Er. Eknath Dandakeri,

Structural Engineer, Sigma Consultants, MANGALURU

Date: 27th September 2022



A “Techno Week 2022” was jointly organized by Department of Civil Engineering and ACCE (I), Mangalore in association with RAMCO Cements Ltd., on the occasion of “Techno Week” to mark the occasion of birthday celebrations of Bharath Ratna Sir. Mokshagundam Visvesvaraya on 27th September 2022.

Er. Eknath Dandakeri has explained his experience with case study on “Pre Execution Errors Handling and Solving” and its care full execution in the field of Civil Engineering projects. He has given idea on

any of engineering projects a design error is an instruction (or lack of instruction) in the plans and specifications that, if followed by the contractor, will require replacement or correction at a cost (or result in a construction failure). He also discussed about the various causes and effects of cracks in buildings. He also mentioned about the different types of cracks appearing in the structures.

Er Eknath Dandakeri, Structural Engineer, Sigma Consultants, MANGALURU, has done his Civil Engineering from NIE, Mysuru, M.Tech from NITK, Surathkal, and Theses at Structural Engineering Research Centre, Chennai. Worked as engineer for various Engineering firms, and later started working as a structural consultant for ‘Sigma Civil and Structural Consultants’-Mangaluru. He is active member of ACCE (India), Indian Society of Earthquake Technology, and Indian Concrete Institute.



Er Eknath Dandakeri, Structural Engineer, Sigma Consultants, MANGALURU, delivered a talk on “Pre Execution Errors Handling and Solving”

Department of Civil Engineering

Hands-on Training on 'Basic and Handling of Ready-mix Concrete'

by Er. Sudhir Shetty,

Director, IRC Concretemix India Pvt. Ltd, MANGALURU

Date: 27th September 2022



A "Techno Week 2022" was jointly organized by Department of Civil Engineering and ACCE (I), Mangalore in association with RAMCO Cements Ltd., on the occasion of "Techno Week" to mark the occasion of birthday celebrations of Bharath Ratna Sir. Mokshagundam Visvesvaraya on 27th September 2022.

Er. Sudhir Shetty has explained his experience with case study on "Basic and Handling of Ready-mix Concrete" and its care full execution in the field of Civil Engineering projects. He has given insight focus on advanced innovative cost effective materials for construction purposes and dealt on their properties,

advantages and how well readymix concrete can be used in construction. Quality control of ready mix concrete is important as it has to be mixed and transported to different locations. Batching, mixing, transportation and handling of ready mixed concrete is discussed. While Ordering Ready Mixed Concrete. Following Points is to be specified: Coarse aggregate size, Slump, Air content, Basis for proportioning,

Er. Sudhir Shetty, Director, IRC Concretemix India Pvt. Ltd, MANGALURU, has done his Civil Engineering from Deccan college of Engineering, Hyderabad. He obtained a course from City & Guilds London institute for Readymix concrete technology in the year 2010. At present he is a Director of IRC Concretemix India Pvt Ltd. Mangaluru and also proprietor of NG Associates Managlore, a civil consulting and civil contract firm.



Er. Sudhir Shetty, Director, IRC Concretemix India Pvt. Ltd, MANGALURU, delivered a talk on "Basic and Handling of Ready-mix Concrete"

Department of Civil Engineering

Inauguration of ACES Activities 2022-23 & Technical Talk Report

by Er. Anil V Baliga

Proprietor, Manjeshwara Techno Trades, MANGALURU

Date: 15th November, 2022



ACES (Association of Civil Engineering Students) is a student's of civil engineering association, is one of the non-profit association formed for the benefit of Civil Engineering students. Under the flag ship of Department of Civil Engineering, every year in the beginning of the odd semester. ACES activity inauguration is formally organizing by the newly formulated office bearers of the academic year 2022-23. Followed by a technical talk had been arranged on “Civil Engineers and their Personal Finances” by Er. Anil V Baliga, Proprietor, Manjeshwara Techno Trades, MANGALURU.

Anil V Baliga has enlightened his experience with case study on “Civil Engineers and their Personal Finances” and its importance in the day to day life and Civil Engineering field. He has given hint on any of engineering projects that the team holds on to, must have a budget to stick our personal finances to from monthly net income, think about which of your expenses are “needed” (rent, food, commuting, utilities), which are “wanted” (dining, travel, subscriptions), and what will go to savings/investing.

Er. Anil V Baliga is a Proprietor, Manjeshwara Techno Trades, MANGALURU, completed B.E. (Civil Engg.) in NMAM Institute of Technology, Nitte and M.Tech. (Structural Engg.) in M.I.T., Manipal. From 1998-2008 he worked with Vimal & Anil at Mangalore as a Trainee Structural Design Engineer. Since 2008, Running a business MANJESHWAR TECHNO TRADES at Yeyyadi, Mangaluru.



Er. Anil V Baliga is a Proprietor, Manjeshwara Techno Trades, MANGALURU, delivered a talk on “Civil Engineers and their Personal Finances” on the occasion of ACES Students Activity Inauguration 2022-23

Department of Civil Engineering

AICTE Activity Program

Date: 1st to 3rd December, 2022

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Efficient Waste Management System Under AICTE Activity Points

Date: 1st Dec - 3rd Dec 2022
Time: 9:00 AM-4:30 PM
Place: Vamajoor Dump Yard Sewage Treatment Plant, Mangalore

AICTE Activity program, which was made compulsory by All India Council for Technical Studies (AICTE), GoI for technical education and to promote development in the country in a coordinated and integrated manner by the upcoming generation. The program was held from 1st December 2022 to 3rd December 2022.

Students has been visited to Sewage Treatment Plant, Solid Waste Processing & Disposal and Animal Trust Care from 1st December 2022 to 3rd December 2022 for three days. From this visit students came to know the thorough

study about the introduction, principle, design, initial & final parts in sewage treatment plant. Mr. Benny was a supervisor in the Solid Waste Processing unit, who explained the various processes involved in management of the municipal wet and dry waste at the facility. In the Animal Care Trust, is the shelter for animals who need immediate first aid and a hospital for sick animals. The volunteers will work day and night for the betterment of the sick animals, in reuniting lost pet's with their owners.



Department of Civil Engineering Students of 2nd and 3rd year were visited Sewage Treatment Plant, Solid Waste Processing & Disposal and Animal Trust Care from 1st to 3rd December 2022

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Badagamijar, Moodabidri

Department of Civil Engineering

NHAI Construction Site Visit

Date: 21st December, 2022



As a part of the activities under the Memorandum of Understanding between National Highway Authority of India (NHAI), New Delhi and Mangalore Institute of Technology & Engineering Moodabidri, a one day construction site visit has been organised by the Department of Civil Engineering on 21st December 2022 in the National Highway-169 stretch of Kulashakar to Sanoor. Students have understood the basic principles and construction techniques adopted in the construction of underpass which is located near MITE College campus. An exposure on RCC detailing along with the execution technique and precautionary measures

to be taken also been explained to the students. It has been clearly explained about the purpose of Construction of underpass and precautions to be taken in the design as flyovers pass above this underpass and awareness has been given that in case of any improper design this underpass may collapse leading to a lot of losses in terms of lives and investment.



Department of Civil Engineering Students of 2nd and 3rd year have visited National Highway Construction Site on 21st December 2022

Department of Civil Engineering

Industrial Visit to Master Plannery and Dwaraka Constructions Puttur

Date: 27th June, 2023



Department of Civil Engineering Students visited Master Plannery Industry at Nagara Puttur and Gokula Layout at Mukrampady constructed by Dwaraka Constructions Puttur. Master Plannery Industry has been dealing with various alternative construction materials, hardware's, sanitary products, paint, cement, steel etc. by reducing the overall cost of construction. Company focuses on producing precast concrete such as Hemp Crete, Recycled Materials, Ferro cement Slab, Fly Ash Bricks, Dome shaped,

Hyperbolic slab etc. Er. Anand Kumar S K addressed the Students regarding the importance of how the Practical knowledge bridges the gap between theory and real-world applications. Real-world projects often present unexpected challenges and complexities. Working with construction materials, understanding their properties, and knowing how to use them appropriately. Er. Anand Kumar SK also stressed on weightage of Practical exposure which indirectly helps the budding engineers to navigate local building codes, regulations, and finally address the requirements of client needs effectively, leading to improved client satisfaction and positive referrals. Students also visited Gokula Layout at Mukrampady Puttur. Er. Gopalakrishna Bhat proprietor of Dwaraka Constructions explained the Students regarding the about various Construction Techniques related to sizes of walls, columns, beams and quality check ness in site. Also during the visit students witnessed the establishment of the plinth level in relation to the ground, which is a critical step for ensuring proper elevation of the building. Students were made to Compare the under-construction house with the house plan might have prompted students to consider construction techniques and its challenges.

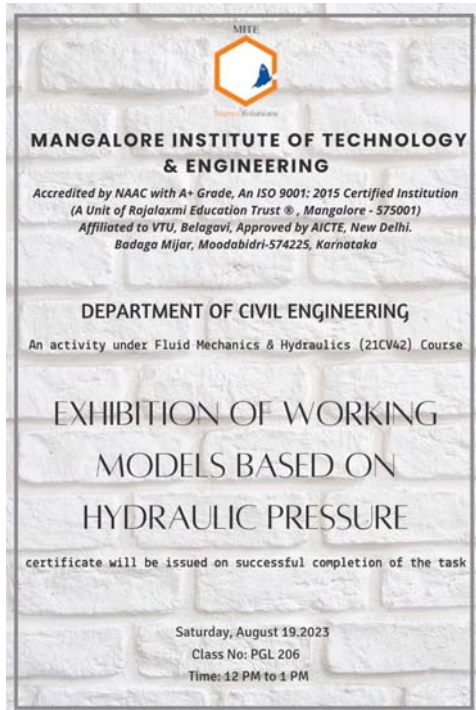


Department of Civil Engineering Students visited industry of Master Plannery and Dwaraka Constructions Puttur on 27th June 2023

Department of Civil Engineering

Exhibition of Working Models Based on Hydraulics Pressure

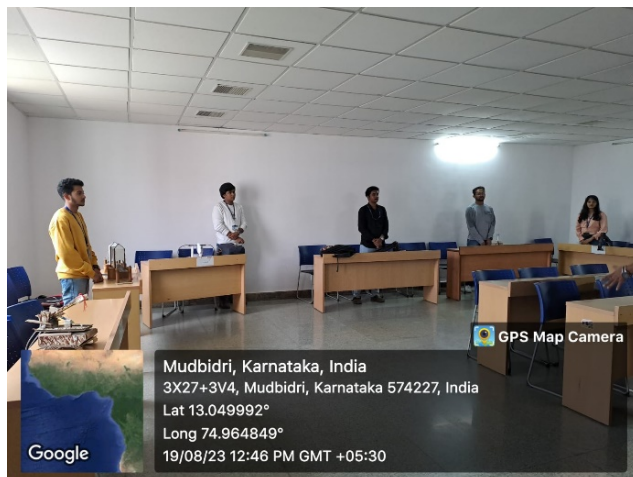
Date: 19th August, 2023



Department of Civil Engineering has organized a one day Exhibition of Working Models based on Hydraulic Pressure on 19th August, 2023 to enhance skill based learning for the 2nd year students. The exhibition is coordinated by Mrs Megha Mayuri.

The following are some of the major advantages and benefits of model Exhibition.

1. The exhibition was a part of Academic activity and all the models were working models based on Hydraulic Pressure
2. Students were able to understand, analyze and create a working model based on the given concept of Hydraulic pressure
3. There was a presentation and viva session in front of the judges to showcase their presentation skills
4. It was a teamwork consisting of two students in each group to develop team building ability
5. Exhibition was an interactive session with the students of other branches which helped in sharing of knowledge.



Department of Civil Engineering Students of 2nd year have Exhibited the Working Models Based on Hydraulic Pressure on 19th August 2023

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MANGALORE

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