

SANKALAN (संकलन)



Vision of the Department

To prepare civil engineering professionals with an ability to develop designs and initiate innovative thoughts focusing on infrastructural needs with a social responsibility.

Mission of the Department

M1: To enhance technical skills among the students by adopting effective teaching-learning processes.

M2: To impart knowledge of emerging infrastructural needs of the society for developing eco-friendly designs.

M3: To inculcate technical competencies among the students to enable them to meet present and future challenges.

M4: To prepare for life-long learning with professional ethical practices

Editorial Board

Faculty

Dr. G. Manohar,

Professor & Head, - Editor

T. RajaRamanna - Co-ordinator

M. Srividya - Co-ordinator

Students:

1. Sandeep Reddy

2. A. Rasagnya

3. G. Sai Kiran

4. K. Sree Vani

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MATRUSRI ENGINEERING COLLEGE

Approved by AICTE & Affiliated to Osmania University

16-1-486, Saidabad, Hyderabad-500059

Website: <http://matrusri.edu.in>

DEPARTMENT ACTIVITIES

1. Two-Day Workshop on **“Ansys Package”** 31/03/2017 & 1/04/2017 MECS, Hyderabad
2. Guest lecture on occasion of Swamy Vivekananda 154th Anniversary on **“Personality Development”** by Sri. Ayush Ji, C.E.O ADROITEC, Engineering Solutions Pvt. Ltd on 12/01/2017.
3. Seminar on **“Primavira Software-Project management Techniques”** by Imarat Consulting Services on 15/02/2017.
4. Technical talk on **Mix Design** by Prof.M.Venugopal MVSR Engineering College, Hyd on 15/03/2017.
5. Guest Lecture on **“Waste Water Management”** Canal Irrigation by G.Surender, retired director WALAMTARI, TSERL, Hyderabad
6. Technical talk on “Failures of foundation due to earthquakes” by **Dr.K.Madhusudhan**

FACULTY ACTIVITIES

1. **Smt .P.Dhanamma** attended Two-Day National Workshop on *“Smart Building Materials and Technologies(SBMT-2017)”* 27/01/2017 to 28/01/2017 M.J.College, Hyderabad.
2. **Smt.B.UdayaSree , Dr.G.Manohar, Sri.P.Prashanth** attended Two-Day Workshop on *“Ansys Package”* 31/03/2017 & 1/04/2017 MECS, Hyderabad
3. **Smt.B.UdayaSree** attended Two Day work shop on *“Structural Health Monitoring and Condition Assesement of Exsisting Structures”* 20/01/2017 to 21/01/2017 At UCE, O.U, Hyderabad.
4. **Sri.P.V.S.Koteswara Rao** attended Three day workshop on *“Condition Assesement and rehabilitation of Structures* 17/03/17 to 19/03/2017 NIT Warangal.
5. **Sri.T.RajaRamanna** attended Two-Day National Workshop on *“Smart Building Materials and Technologies(SBMT-2017)”* 27/01/2017 to 28/01/2017 M.J.College, Hyderabad.
6. **Sri.T.RajaRamanna** Participated Three Day Workshop on *“Condition Assessment and Rehabilitation of Structures”* 17/03/2017 to 19/03/2017 NIT, Warangal.
7. **Sri.P.Prashanth** Participated in One Week Faculty Development Programme on *“Limit State Design of Steel Structures”* 20/02/2017 to 24/02/2017 NIT, Warangal.
8. **Sri.U.Tirumalesh** Participated in One Week Faculty Development Programme on *“Limit State Design of Steel Structures”* 20/02/2017 to 24/02/2017 NIT, Warangal.

FACULTY ACHIEVEMENTS

9. **G.Satyavathi** published a paper in International Journal of Current Science with title Moisture deficit stress, thermal regimes and their interaction on biomass and yield components of two blackgram genotypes.

STUDENT ACTIVITIES

1. **Mr. Mohd. Meharaj** (III/IV) has won 1st prize in paper Presentation (Water Resources) in NIRMAN 2K17 held during 10-11/03/2017 in O.U, Hyderabad.

2. **Miss. Sirisha & Miss. Sindhu** (III/IV) has won 2nd prize in paper Presentation (Structural Engineering) in NIRMAN 2K17 held during 10-11/03/2017 in O.U, Hyderabad.

3. **Miss. Pranusha and Mr.Santosh Naik** (IV/IV) have won the cash prize for securing highest marks in Concrete Technology from Ultra Tech Cement, Hyderabad.

4. A student of B.E.II/IV, **Mr. Sai Kiran** secured South India Merit rank in the competitive exam conducted on General ability and domain area by CANTERCAD on 03/04/2017.

ARTICLE

CIVIL ENGINEERING BEING THE OLDEST PROVING THE STATEMENT“ OLD IS GOLD”:

Civil engineering is the oldest branch of Engineering. Earlier there used to be only two disciples of Engineering which are Military and Civil. Engineering has been an aspect of life since the beginnings of human existence. The earliest practice of civil engineering may have commenced between 4000 and 2000 BC in ancient Egypt , the Indus Valley Civilization , and Mesopotamia when humans started to abandon a nomadic existence , creating a need for the construction of shelter.

Because civil engineering is a wide-ranging profession , including several specialized sub – disciples , its history is linked to knowledge of structures , materials science , geography , geology , soils , hydrology , environment , mechanics and other fields. In most countries , a bachelor’s degree in engineering represents the first step towards professional certification , a professional body certifies the degree program.

Once certified, the engineer is designated as a professional engineer (in the United States, Canada and South Africa), a chartered engineer (in most Common wealth countries), a chartered professional engineer (in Australia and New Zealand), or a European engineer (in most countries of the European Union). There are international agreements between relevant professional bodies to allow engineers to practice across

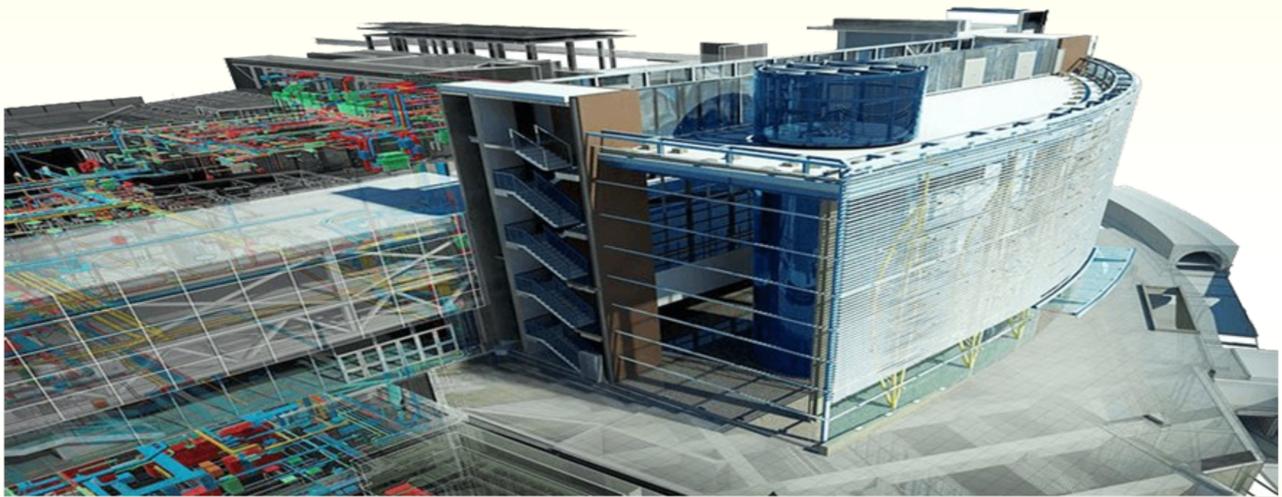
national borders. In essence , civil engineering may be regarded as the profession that makes the world a more agreeable place In which to live.

Construction engineering:

Construction engineering involves planning and execution , transportation of materials , site development based on hydraulic , environmental , structural and geotechnical engineering . As construction firms tend to have higher business risk than other types of civil engineering firms do , construction engineers often engage in more business – like transactions , for example , drafting and reviewing contracts , evaluating logistical operations and monitoring prices of supply.

TECHNICAL WRITE-UP

BIM-AN EVOLVING AUTOMATION



Building information modelling(BIM) is a process involving the generation and management of digital representations of physical and functional characteristics of places. BIMs are files which can be extracted, exchanged or networked to support decision-making regarding a building or other built asset. Current BIM software is used by individuals, businesses and government agencies who plan, design, construct, operate and maintain diverse physical infrastructures, such as water, refuse, electricity, gas, communication, utilities, roads, bridges, ports, tunnels, etc. Use of BIM goes beyond the planning and design phase of the project, extending throughout the building life cycle, supporting processes including cost ,project and construction management and facility operation.

Technology is poised to deliver a more profitable, resilient and agile construction industry and a better built environment.

It has a lot of benefits.

(1)Easy Maintenance of building life cycle.(2)Conflict Detection and risk mitigation.(3)High level of customization and flexibility.(4)Optimization of schedule and cost. (5)Faster Drafting without loss of cost and quality. (6)Coordination and collaboration. In India BIM is also known as VDC.Due to its population and economic growth, India has an expanding construction market. In spite of this,BIM usage was reported by only 22% of respondents to a 2014 survey. Further ,It will develop as building information science in progressing years.

A.Rasagnya
III/IV