



NARASARAOPETA
ENGINEERING COLLEGE
(AUTONOMOUS)



TECHNICAL MAGAZINE

STAPATHI



JULY TO DECEMBER 2020

Department of

CIVIL ENGINEERING

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II year, Civil



Department of Civil Engineering

Dreamt it We Built it!



Vision

- To achieve excellence with high technical competencies empowered with research based challenges in the field of civil engineering to promote the knowledge and skills of students to effectively and efficiently participate in outcome based sustainable development.

Mission

- To shape infrastructure development for the purpose of promoting innovative logical thinking among students so as to provide civil engineering solutions to 21st century needs of problems and challenges in the society.
- To impart academic knowledge and skills so that the students could assess, state and solve general and complex civil engineering problems.
- To provide a hub of research and consultancy services to the needs of social development in general and regional development in particular.

New Trends in Technology:

Use of GGBS in Manufacturing of Solid Concrete Blocks:

Concrete blocks are produced in large variety of sizes either solid or hollow, dense or lightweight, air cured or steam cured, load bearing or non-load bearing can be produced manually or with the help of machines. Proportioning the mix components for a concrete masonry unit is an important step in producing high-quality units; otherwise it leads to either uneconomical or poor quality. Hence, an attempt was made to address these issues. Although solid concrete blocks are being used abundantly, there are no proper guidelines for the mixture proportioning. Blocks can be used for different purposes like construction of load-bearing walls as well as non-load bearing walls. There has to be proper guidelines to manufacture these blocks in a consistent manner. Blocks produced these days are purely based on experience of the operator or the laborers working at casting yards, which affects the quality of these blocks. Also, there are no proper guidelines for utilizing either mineral or chemical admixtures in the manufacturing of concrete blocks. Sometimes either excess amount or lesser amount of cement in the manufacturing is usually observed, which can be avoided when proper guidelines are provided. Otherwise this leads to an uneconomical mix or affects the quality of the blocks. An effort to provide guidelines for the proportioning of solid concrete blocks was made. Optimum mix for the manufacturing of solid concrete blocks is mix with a cement content of 150 kg/m³. Mineral admixtures can be used in the manufacturing of solid concrete blocks. However, GGBS has shown very effective in replacement of cement without compromising the quality of the solid blocks. Air-entraining admixtures do not serve their purpose, but plasticizers can be used to reduce w/c for better finish.

Faculty Focus

- Dr. Babu Rao Gudipudi has published a research paper entitled "Effect of different pH waters on Compressive Strength & Tensile Strength of Concrete", in Solid State Technology (Scopus), Vol: 63, Issue: 1s, Sep, 2020, Page: 1719- 17248
- Tanneru Veda Bharathi, has published a research paper entitled "Experimental studies on cement mortar with copper slag and cerefiber- mix" in International Journal of Advances in Engineering and Management (IJAEM), Vol: 2, Issue: 5, September 2020, Pages: 19-24.
- K.V.Pratap has published a research paper entitled "Dynamic analysis of G+20 multi storied by using shear walls in various locations for different seismic zones by using ETabs" in Materials today: proceedings in August, 2020.

Conferences/ Webinars/ Seminars/ Workshops/FDP s attended:

- Dr.P.Naga Sowjanya attended FDP on Role of Transportation Engineers towards Sustainable Roads and Traffic Safety organized by Shri Vishnu Engineering College for women (A) from 22nd Feb, 2021 to 27th Feb, 2021.

Conferences/ Seminars/ Workshops attended:

- K.V.Pratap has participated in International conference on Advanced materials Behavior & Characterization organised by Mattest Research Academy, Chennai during 18- 23 July, 2020.

- Dr.G.Babu Rao has participated in two days training programme on "Groundwater Scenario & Management in Coastal Andhra Pradesh" jointly organised by the Department of Geosciences, Dr. B. R. Ambedkar University, Srikakulam & the Central Groundwater Board, Southern Region, Hyderabad, on 24 & 25th August, 2020.

Faculty Achievements/ Awards:

- Dr. G. Babu Rao has received "International Distinguished Educators Award 2020 (IDEA-2020)" from Green ThinkerZ Society, Punjab, India.

Important Activities held in Department

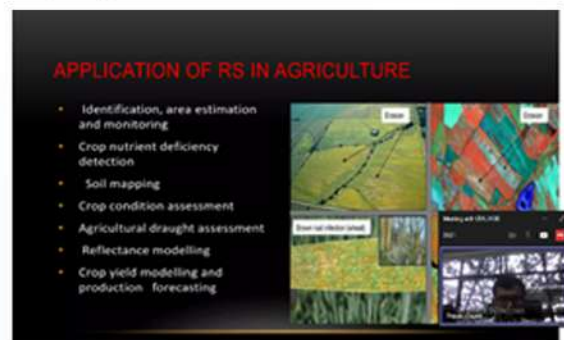
- Department of civil engineering organized Webinar on "Design with Geosynthetics" by Sri Rama Vattamwar, CEO, Co-founder, Lantek Engineering Consultants on 27-12-2020.



- Department of civil engineering organized Webinar on "Advanced Instrumentation in Geomaterial Characterisation" by Dr.Kadali Srinivas, Associate Professor, Department of Civil Engineering, VNR VJIT, Hyderabad. on 04-12-2020.



- Department of civil engineering organized Webinar on "Remote sensing for Agricultural usage" by Thiyaku, COO, Satyukt Analytics pvt ltd, Bangalore. on 12-11-2020.



Work performed with higher knowledge or skill, capacity or ambition, usually brings a correspondingly higher reward."- Mokshagundam Visvesvaraya



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Academic Toppers

❖ The following students stood in 1st, 2nd, 3rd and 4th positions in the end semester exams held in November-December in IVth year respectively.



K.NAGARAJU
17475A0126
RANK: 1
SGPA: 9.11



SK.MOHAMAD
16471A0123
RANK:2
SGPA:8.82



D.KIRAN
16471A0111
RANK:3
SGPA:8.71



K.S.N.MALLESWARA RAO
17475A0129
RANK:4
SGPA:8.61

Alumni Voice



I feel fortunate to be a student of Narasaraopeta Engineering College as it helped me to both on personal and professional front. It inculcated a lot of intra and interpersonal skills which helped me in all round development. Teaching by the senior faculty and the field exposure in my college life has helped me a lot in securing a good job. Personal care towards me by the faculty members has helped me in qualifying the competitive exams at state level. I like to thank the management of the college for providing necessary materials and books in the library to face the competitive world.

J.MANOGNA, Batch (2009-2013), Engineering Assistant GRADE-II Repudi village, Phirangipuram Mandal, Guntur

Student's Voice



I acknowledge that my knowledge has been enriched due to my association with our department. Knowledge transformation programs (guest lecture, workshops) conducted to the students is really helped to face global competition. The encouragement by the college management made me to qualify for campus interviews.

B.MAHOMMAD, IV B. Tech

Quotes by students:

The joy of engineering is to find a straight line on a double logarithmic diagram.

P.S.V.Siva(17471A0162)

Nothing is so inspiring as seeing big works well laid out and planned and a real engineering organization.

J.HASHMITHA(18471A0115)

Men build bridges and throw railroads across deserts, and yet they contend successfully that the job of sewing on a button is beyond them. Accordingly, they don't have to sew buttons.

A.G.KRISHNA (18471A0130)

Engineers ... are not mere technicians and should not approve or lend their name to any project that does not promise to be beneficent to man and the advancement of civilization.

B.MAHOMMAD(18475A0119)

CIVIL QUIZ

Questions

1. What is the full form of TMT bars?
2. Steel plates are rarely used for
3. By which of the below process is Aluminium manufactured
4. What is the nominal size of a brick?
5. A good brick when dropped from the height of 1 metre can:

Answers

1. Thermo Mechanically Treated
2. Providing support in R.C.C structures
3. Bayer process
4. 20x10x10 cm
5. Not break