Estd- 1980

Department of Civil Engineering

Kakatiya Institute of Technology & Science, Warangal -15

Newsletter

JULY 2013 Vol 1, Issue 2

Vision of the department

- **The Vision of the department is to become a leading centre of excellence in producing quality human resource in civil engineering by developing a sustainable technical education system to meet the changing technological needs of the Country. The Department will make significant contributions to the economic development of the state, region and nation.**

Mission of the department

- **To produce outstanding Civil Engineering graduates with highest ethics**
- **To impart quality education in civil engineering to raise satisfaction level of all stake holders.**
- **To serve society and the nation by providing professional civil engineering leadership to find solution to community, regional and global problems and accept new challenges in rapidly changing technology.**

Programme Educational Objectives (PEOs) : The Programme Educational Objectives (PEOs) of the civil engineering program are designed to produce skilled engineers who are ready to contribute effectively to the civil engineering profession and are ready to handle the challenges of the profession. The Programme Educational Objectives (PEOs) are defined considering the opinion of all the stakeholders.

PEO1	Apply fundamental technical knowledge and skills to find creative solutions to challenges and problems in various areas of basic sciences and engineering.
PEO2	Able to analyze, design and use skills in order to formulate and solve civil engineering problems.
PEO3	To practice civil engineering in a responsible, professional and ethical manner to implement eco- friendly sustainable technologies for the benefit of industry and society.
PEO4	Able to take up higher education, engage in research and development in civil engineering and allied areas of science and technology

Program Outcomes(POs) : Engineering Graduates will be able to

PO1	Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.	Engineering knowledge
PO2	Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.	Problem analysis
PO3	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.	Design/development of solutions
PO4	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.	Conduct investigations of complex problems
PO5	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	Modern tool usage
PO6	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.	The engineer and society:
PO7	Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.	Environment and sustainability
PO8	Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.	Ethics
PO9	Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.	Individual and team work
PO10	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.	Communication
PO11	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	Project management and finance
PO12	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.	Life-long learning

Program Specific Outcomes (PSOs) :

PSO1	Apply fundamental computational methods and elementary analytical techniques in sub-disciplines related to civil engineering.
PSO2	Design civil engineering structures, component or process to meet desired needs with appropriate consideration for the public health and safety, cultural, societal, sustainability and environmental considerations
PSO3	Appreciate professional and ethical responsibility concerning legal, contemporary, environmental & cultural issues and consequent responsibilities relevant to the professional engineering practices and norms of civil engineering practice code.
PSO4	Appreciate the role of research in civil engineering practice and recognize the need for and to engage in life-long learning in civil engineering and allied domains as relevant to rapidly changing technology.

FACULTY PUBLICATIONS

D.R.Seshu and N.R.Dakshina Murthy "Non-Destructive Testing of a Bridge Pier-A Case Study", 2nd International conference on Rehabilitation and Maintenance in civil engineering SOLO Indonesia 8-10 March, Vol.54, pp.564-572, 2013.

M. Srikanth and Jagganath has published a paper on "Strength Characteristics of Self curing concrete", International Journal of Research in Engineering and Technology, Vol.1,Issue 1, September 2012, pp 51-57.

K.Babu and M. Veera Reddy has presented a paper on "Coconut Shell Concrete Properties using Rock Flour" under sustainable construction materials and technologies, Department of civil Engineering, National Institute of Technology-warangal ,pp.216-221,15-16 March 2013.

Dr.L. Sudheer Reddy, Associate Professor of civil engineering had presented a paper "Finite Element analysis of high strength Concrete beams with web reinforcement", International Conference on Intelligent Society in Pursuit of advances in Civil Engineering, March 4-5, 2013, ITM University, Gurgaon, Haryana.

Dr.M. Veera reddy published a paper on"Moment Curvature Characteristics of Fiber Reinforced High Strength Concrete Beam", International Journal of Earth Science & engineering, Vol.5,No.2, April 2012.

Dr.M. Veera Reddy, Flexural Behaviour of Steel Fiber Reinforced High Strength Rice Husk Ash Cement Concrete Simply supported Beams", International Journal of Civil and Structural Engineering, Vol.2, No.4, May 2012.

Andal Mudimby published a paper on "Sulphate ion diffusion in Modified Geosynthetic Clay Liners",International Journal of emerging Technology and Advanceed Engineering, Vol. 2, issue 7,pp 254-257, July 2012.

Andal Mudimby published a paper on"Diffusion Characteristics of Geosythetic Clay Liners amended with partial replacement of bentonite by flyash", Textiles and Light Industrial Science and Technology, Vol.1, Iss.2, pp.20-23, October 2012.

Andal Mudimby published a paper on"Hydraulic Conductivity of GCL with Bentonite – Silica Fume Matrix" ,Journal of Urban and Environmental Engineering, Vol. 6, No.2, pp.109-112, 2012.

SHANGAI TOWER

It is the world's second tallest building of 632 meters (2,073 ft) high and has 128 stories, (4,090,000 sq ft). Its tiered construction, designed for high energy efficiency, provides multiple separate zones for office, retail and leisure use. To make the structure stable in strong winds, it has an innovative spiraling cylindrical shape that is aerodynamic. The distinctive helix shape looks beautiful. A central aspect of its design is the transparent, second skin that wraps the entire building. The ventilated atriums it encloses conserve energy by modulating the temperature within the void. The space acts as a buffer between inside and outside, warming up the cool outside air in the winter and dissipating heat from the building interior in the summer.

ANTILIA

It is the private home owned Mukesh Ambani, chairman of Reliance Industries the world's most expensive private residential property is that no floor is alike, whether in design or even materials used.

To expose the engineering students to the current trends in the areas of communications and allied ones, the department has a tradition of conducting a national level technical symposium every academic year.

SUMSHODINI -13, a 2 day national level student technical symposium was conducted for the Academic Year 2012-13, on 4th & 5th of March 2013.

SUMSHODINI -13 covered many events in the emerging fields of engineering aimed at creative interaction among student participants and experts in the fields.