



# DEPARTMENT OF CIVIL ENGINEERING

## Kakatiya Institute of Technology & Science, Warangal



DECEMBER 2019

VOL 8, ISSUE 1

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### 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.

PEO 1	Demonstrate professional competency in varied fields of engineering industry and/or pursue higher education by nourishing mathematical scientific and engineering precepts.
PEO 2	Investigate, analyze and design solutions to complex civil engineering problems ensuring safety, sustainability and ecological harmony.
PEO 3	Exhibit professionalism by transferring latest technology and understanding societal impacts to protect interests of the public at large.
PEO 4	Develop competence by engaging in lifelong learning, in order to integrate ethics, economics and equity.

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, 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 practices.	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

“If you do what you have always done, then you will get what you have always gotten.”  
--Anthony Robbins



**Program Specific Outcomes (PSOs):**

<b>PSO 1</b>	Apply fundamental computational methods and elementary analytical techniques in sub-disciplines related to civil engineering
<b>PSO 2</b>	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
<b>PSO 3</b>	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.
<b>PSO 4</b>	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.

**Chief Editor Message:**

It gives me immense pleasure in welcoming NEWSLETTER, on behalf of the entire campus community of KITS Warangal. This newsletter will serve to reinforce and allow increased awareness, improved interaction and integration among all of us. This inaugural issue is a brief account of the important events of Civil Department. I congratulate all those who have contributed in bringing out this issue. I hope this newsletter will inspire all of us for a new beginning enlighten with hope, confidence and faith in each other.

**- Dr. K. Ashoka Reddy, Principal**

**Editor Message:**

I was given the privilege to serve as the chief editor of this newsletter which gives me great opportunity to present the first issue of this newsletter. In this context, these editorial standards are set forth to give readers and contributors a clear idea of what they can and should expect from the newsletter

**- Dr. M. Veera Reddy, HOD, CED**

**Editor In-charge Message:**

It is with great honor and great pleasure for me to involve in laying the groundwork of this newsletter. I congratulate the Editorial Team for their hard work in producing this Newsletter. I am absolutely certain that the best is yet to come. I hope that you will enjoy reading this newsletter

**- Dr. M. Andal, Professor, CED**

**INAUGURAL OF CEA**

The session was about the inaugural of CEA body (2019-2020). Head of the Department Dr. L. Sudheer Reddy along with senior faculty and faculty coordinators launched the poster of CEA body. Later Student chapters of Indian Concrete Institute (ICI), Indian Green Building Council (IGBC), Institution of Engineers India (IEI), and Indian Road Safety Campaign (IRSC) were inaugurated, respective faculty coordinators gave a brief about the activities and benefits of being part in the chapter. HOD launched yearly calendar of CEA and gave brief regarding activities. HOD also guided about the activities to be held in CEA and also appreciated the work done by the association body and faculty coordinators in the past years. Finally, faculty coordinators wished the association body.





## **INDUCTION PROGRAM**

The objective of this program was to acclimatize the students to the new environment and get them acquainted with the institution culture. The induction program comprised of interesting activities like motivational speeches and review, social sensitization, team building activities, expert lectures, and debate and campus orientation sessions. The rationale for induction was to ensure a smooth transition for the students into the university system. There are various technical committees in the Institute like CEA, ICI, IRSC, IEI, IGBC and cultural committee through which they organize many events under the guidance of faculty members. The session “Introduction to extra-curricular activities” was to introduce these cells and their activities to the first-year students. The heads of various committees were assigned the task of sharing their vision and objectives of the respective cell and to introduce all the major events organized by these cells in the institute. They motivated the students to become the member of the cell by explaining the advantages of being in these cells. In general, it gave an insight to the students on the extracurricular and co-curricular activities happening in the Institute throughout the year which will help them improve their soft skills. In this session students of 1<sup>st</sup> year were introduced to the respective programs and its objectives. Faculty gave details regarding courses, internships, laboratories. Students were also apprised about the various opportunities in research and industry.



## **SEMINAR ON WATER CONSERVATION**

Indian concrete institute (ICI) and Indian Society for Technical Education (ISTE) student chapters of civil engineering department organized a one-day seminar on “Water conservation” for all the students and faculty of civil engineering on 23<sup>rd</sup> August 2019. The resource persons of the day Dr. P. Sridhar, Assistant professor, department of civil engineering, NITW and Dr. Ch. Sumanth, assistant professor, civil engineering department, NITW spoke about the basic things of water conservation on earth, abundance, availability, and utilization of fresh water. They showed the statistics of world water consumption. The session was stressed on wasting of water unnecessarily in industries and in houses and the measures to be taken to minimize the wastage. Interactive sessions with students were done, their doubts were answered and discussions were done. The session was closed by acknowledging the importance of water conservation.





### **NUKKAD NATAK**

To create awareness about the road accidents and its prevention in students "NUKKAD NATAK" (a street play) was conducted. It was planned to conduct Nukkad Natak in two phases, in which first phase was conducted in the college and other was about to conduct at major junctions in Warangal. The main motto of the Nukkad Natak was to motivate the public to prevent the loss of lives in road accidents. Firstly, we chanted few slogans "ALERT TODAY-ALIVE TOMORROW, SPEED THRILLS BUT KILLS and SADA SURAKSHAJEEVAN RAKSHA" and gathered students. Here, three acts were enacted:

1. Driving without helmet and Rash driving
2. Drunk and Drive
3. Illegal crossings over dividers

This activity was held at administrative block in the college campus, Students with a great enthusiasm gathered there to witness the act. The team intoned some songs related to road safety along with some formations. The team has reminded the benefits of obeying the traffic rules and consequences to be faced when they are not. This small play has influenced and warned the students regarding their safety issues to prevent accidents. Thus, the play was ended.



### **ENGINEER'S DAY**



Engineer's day celebrations were held at Kakatiya institute of technology and sciences, Warangal on the auspicious occasion of the birth anniversary of Bharat ratna SIR MOKSHAGUNDAM VISHVESVARAYA i.e., 14th sep,2019 on behalf of "IEI, KITSW" and "VIBRANTS OF KALAM". The day has witnessed many aspiring engineers and the staff of KITSW graced the occasion with their presence. The chief guests joined us for the occasion were Dr. K. Bangaraiah, (Chief Engineer, JRCGLIS Warangal), Sri M. Anil Kumar, (assistant engineer, NPDCL, warangal), Sri G. Shiva Prasad, (Life Coach & President, Vibrants of Kalam, Warangal). Bangaraiah garu addressed the audience about the "Lift Irrigation Schemes and Challenges". Anil Kumar garu gave some practical insights about the outside world. Shiva Prasad garu has delivered interesting speech by explaining the importance of role of Engineer's in society.

“THE PESSIMIST SEES DIFFICULTY IN EVERY OPPORTUNITY. THE OPTIMIST SEES OPPORTUNITY IN EVERY DIFFICULTY.”

-WINSTON  
CHURCHINN

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## **GUEST LECTURE ON ROCK MECHANICS**

On 16<sup>th</sup> September 2019, Civil Engineering Department has organized a guest lecture on **ROCK MECHANICS**, by Dr. G. V. Ramana garu, Assistant prof. at NIT Warangal. Ramana garu has enlightened the importance of Geotechnical engineering in Civil Engineering aspects. He has explained the various design factors that should be considered in construction of dams, reservoirs, tunnels, skyscrapers etc. He described the type of failures generally occur in the real execution and shared his practical experiences. He also gave various valuable insights that to be happen practically.



## **SEMINAR ON SUSTAINABLE HOUSING FOR FUTURE GENERATIONS**

On 19<sup>th</sup> September 2019, Civil Engineering Department of KITSW conducted a seminar on sustainable housing by A. Suchith Reddy garu. He enlightened many students with his seminars at National level Workshop on Good Construction Practices at KITSW Organized by Industrial Consultancy Cell (ICC) and One day Workshop on Effective Procurement Policies in an autonomous Institution at KITSW Organized by Education Technology Center (ETC). In view of its environmental impact, sustainable construction involves the design and management of built structures, at the scale of buildings, infrastructure, or urban agglomerations and use of renewable energy resources as well as their attendant technologies in building and maintenance to reduce global greenhouse gas emissions. Sustainable design can help to create a sustainable way of living within a community. While the existing social constructs can be seen to influence architecture, the opposite can also be true. A socially sustainable building, if successful, can help people to see the benefit of living sustainably. The same can be said for environmentally sustainable design, in that architecture can lead the way for the greater community. While fulfilling these concurrent objectives, sustainable construction involves as well concerns for the aesthetic quality of the built environment, its architecture, its infrastructure, and its urban organization, all attuned to the specificities of local culture as well as global commonalities.





**SUMSHODHINI 2K19**

Sumshodhini – 19, a National Level Technical Symposium scheduled from 24th -26th October 2019, is being conducted collaboratively by all the departments of KITSW. This event includes many departmental activities such as 3D Floor Modelling, Paper & Poster Presentation, Bridge Fabrication, Tech intellect, Instridge, Replica, Tech Treasure Hunt.

**3RD FLOOR MODELLING: -**

3d floor modelling is a complete one-day workshop conducted affiliated with RUDRA CONSTRUCTIONS, Hyderabad. This is one day workshop that can be performed even without any basic technical knowledge of soft wares like AUTOCAD. In this workshop the expert explained how to design a floor using a simple software. Nearly 50 students participated in the event and 10 from various college attended the workshop. This even has been a successful of sumshodhini. This workshop is all about planning developing a 3D floor model of a building.



**Faculty presiding for Department inaugural**



**Students participating in Instridge**



**Lecture on Concretrix Event**



**Students attended for Workshop**

