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## About Department

Department of Civil Engineering was established in the year 2010 with an intake of 60 students and subsequently in the year 2012 the intake was increased to 120 students. The department unveiled another programme 3 year Diploma in Civil Engineering with an intake of 60 students in the year 2014. The course offers a deep insight into the discipline and enables promising engineers to acquire skills required to succeed both individually as well as in Industry. The department is committed to well being and all round development of its students. The department is very well equipped with 9 laboratories and computational facilities.

## Vision

To emanate as a proficient learning resource – center producing competent technocrat.

## Mission

- Provide Conceptual and practical- oriented teaching- learning approaches
- Offer skill based trainings through advanced and sustainable technologies
- Organize activities on professional and interpersonal skills through industry interaction
- Establish learning environment promoting to societal, environmental and ethical values

## Program Educational Objectives (PEOS)

- Analyse technical concepts and demonstrate expertise in designs, analysis and implementation of infrastructural projects of Civil Engineering
- Engage in engineering profession with teamwork focusing on sustainable technologies and ethical practices
- Adopt innovative technologies and update skills through lifelong learning

## Department Association Activities

- Department of Civil engineering organized an "Inaugural Function of GRACE-2K19"**under GRACE association** on 18-sep-2019.


- Department of civil Engineering under GRACE association with the coordination of NSS has organised "MEGA TREE PLANTATION PROGRAMME" on 18-09-2019.


- Department of civil Engineering under Grace Association has distributed clay idols of Lord Ganesh on the occasion of Vinayaka Chavithi-2K19.

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## Industrial visit

- Department of Civil engineering organized an industrial visit to **NAGARJUNA SAGAR DAM** for IV B. Tech Students on 30th Aug 2019.

## Student achievements

### Student paper presentations:

- MD. Kadheer (162U1A0144) and P. Manasa (162U1A0158) has participated in paper presentation on "artificial intelligence in CE" at national level TECHNOQUEST-2019 held at N.B.K.R Institute of Science & Technology on 20-09-2019.

### Student poster presentations:

- K. Keerthana (172U1AO123) has participated in poster presentation on "Green Buildings" at national level TECHNOQUEST-2019 held at N.B.K.R Institute of Science & Technology on 20-09-2019.
- A.Lakshmi kavya (172U1AO102) has participated in poster presentation on "Hyper loop" at national level TECHNOQUEST-2019 held at N.B.K.R Institute of Science & Technology on 20-09-2019.

### Faculty Contribution:

- Mr. P.Umasai Krishna completed NPTEL Certification course on GeoTechnical Engineering Laboratory with a consolidated score of 64% from July- Aug 2019
- Ms. P. Bhanu sri completed NPTEL certification course on Geo Technical Engineering I during July-Aug 2019

GEETHANJALI INSTITUTE OF SCIENCE AND TECHNOLOGY::NELLORE

DEPARTMENT OF CIVIL ENGINEERING

NEWS LETTER

# Kinetic Chronicle

"Striving to Excellence"

**Design of Weir and Conditions for Stability & Maximum stress:**

In any hydropower projects the diversion structuresoccupies the key position. Among these diverging structures weir is the most commonly used structure, because of its simple design and operation. The forces acting on a weir built on a impervious foundation may be static or dynamic. The static forces include:

Normal water pressure on the upstream face of the weir. Normal water pressure on the downstream face of the weir. The weight of the water supported by the crest and the weight of the weir.

The conditions that are required to be satisfied for the stability of the weir. These include:

There must be no tension in the masonry or in the contact plane between weir and the foundation.

There must be no overturning.

There must be no tendency to slide on the joint with the foundation or any horizontal plane above the base.

The maximum toe and heel pressures in foundations should not exceed the prescribed safe limits. Failure by crushing is not considered here, as it generally does not occur, being a low structure

**Editors:**

Mrs.Sk. Dilkusha, Asst. Professor, P. Bhanu Sri, Asst. Professor

**Student's Editors:**

Kancharla Anil, 182U1A0149, II CE, Palam Pavan, 182U1A0149, II CE,

Marem Vishnuvardhan, 172U1A0164, III CE, Mettukuru Harish, 172U1A0165, III CE.