

Dhamini Reddy, LEED Green Associate

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EDUCATION

Texas Tech University, Lubbock, Texas

Expected Graduation: May 2021

Master of Science, Civil Engineering

Specialization in **Structural Engineering**

GPA-3.77

Visveswaraya Technological University, Bengaluru, India

August 2015 – July 2019

Bachelor of Engineering, Civil Engineering

GPA-8.48/10

NCEES, FE Civil - 2020

<https://account.ncees.org/rn/2093526-1338845-08f59e0>

GBCI, LEED Green Associate – 11420399-GREEN-ASSOCIATE

EXPERIENCE

Graduate Assistant, Texas Tech University

August – Dec 2020

- Evaluated and graded examinations, assignments, or papers, and record grades.
- Supervised laboratory work.

R M Consultants, Bengaluru, India

Engineering Intern

July – August 2018

- Cost and quantity estimation of the building using centerline method, **Composite masonry**, **Sustainable** biogas production, types of compound walls and, foundation types in black cotton soil.
- Collaborated with the 5 team members and completed the project efficiently on cost estimation of a single room.

PROJECTS

Structural Reliability of offshore platform, TTU

Spring 2020

- Designed SPAR platform against hurricane Katrina (2005) – The dimensions for the platform were assumed and the wave loading was calculated from Morison's equation from the NOVA buoy 42040 by considering significant wave height and average wave period.
- Five random variables dead load, live load, **morning** forces in the anchors, **Buoyancy** forces are assumed to be lognormally distributed, and **Wave** load is assumed to have Rayleigh distribution. A simple limit state function with the above variables is considered.
- The limit state function was analyzed for the reliability of the structure by **Nataf Distribution** and Monte Carlo stimulation. The platform was 99.62% times reliable by Nataf distribution with the correlation between variables.

LEED Gold Certification, TTU

Spring 2020

- Effectively produced sustainable strategies for new construction, **Single-family** home with 4400 **Square** ft of the building footprint, two levels in Chicago, Illinois was considered.
- Reduced parking footprints, **Rainwater** harvesting, WaterSense labeled faucets and fixtures, **Xeriscaping**, passive solar design, **Energy star** labeled equipment's, **Low** VOC emitting materials, FSC wood, use of fly ash, **Access** to quality transit, and others.
- A total of 71 points out of 110 possible points was achieved, which qualifies for Gold certification.



Mini project

- New tank Project, Old tank Project, Public Health and Engineering, Highway Project, and Town Planning
- Surveyed by Total station. Also came up with a more appropriate sewerage plan

Main project

- Experimental study on Partial Replacement of Cement by Marble Dust in concrete.
- M30 grade was used for mix design, 5,10,15, and 20% of cement was replaced by marble dust. 7 day and 28 days compressive strength was tested. Compressive strength increased up to 10% replacement of cement and future increase in marble dust content reduces the compressive strength at 7 and 28 days.
- The main incentive to choose this topic is to achieve sustainable development since marble dust is a byproduct of the marble industry. As the composition of marble varies with the geographical location, hence the composition of the marble should be considered.



RELEVANT COURSEWORK

Structural Reliability | Sustainable Building Design | Machine Learning for Civil Engineering | Structural Analysis I | Advanced Reinforced Concrete Design | Advanced Concrete Materials | Mechanics of Solids | Numerical Method | Advanced Foundation Engineering | Finite Element Methods (Spring 2021)

SKILLS

Engineering and Programming: AutoCAD, AutoCAD 3D, STAAD Pro, ETABS, GIS Software, Basic C, Python, and R

General Programs: Microsoft Office Certified

INVOLVEMENT

- American Society of Civil Engineers (ASCE)
- Participated in the 7th Edition of Concrete Fair 2018
- Secured district rank in International Chithana Science Examination (2004-2005)
- Completed 2 levels of Abacus training by GKidz skoolKAT
- Secured the Second rank in National Level in Mathematics talent search Examination
- Contributor to HelpAge India participated in a fundraising program for the rehabilitation of the differently-abled at Deepa Academy