

A Memorandum of Understanding was made with CADD International, Thrissur,





Mr. Vishnu Vijayan (S6 CE) has qualified GATE 2023





Surya C.S , MTech student received admission for Ph.D in IIT Delhi

World Earth Day Celebration was conducted by Civil Engineering Department , in association with IEI on 20/04/2023 Jute bag was distributed to give the message "No more Plastic Bags"

#### **College Vision**

Creating eminent and ethical leaders through quality professional education with emphasis on holistic excellence.

#### College Mission

\*To emerge as an institution par excellence of global standards by imparting quality engineering and other professional programmes with state-of- the-art facilities.

\* To equip the students with appropriate skills for a meaningful career in the global scenario.

\* To inculcate ethical values among students and ignite their passion for holistic excellence through social initiatives.

\* To participate in the development of society through technology incubation, entrepreneurship and industry interaction.

### **Department Vision**

To emerge as a Centre of Excellence in Civil Engineering through quality professional education and to create eminent leaders with values committed to the profession and society.

#### **Department Mission**

\* To impart state of the art education and to provide industry exposure to students

\* To create civil engineers who successfully adapt and innovate solutions for the built environment

\* To inspire and transform the students to hard core professionals and academicians with ethical values.

## PROGRAM EDUCATIONAL OBJECTIVES

The program educational objectives of B.Tech in Civil Engineering are:

 Graduates will have concrete knowledge in the application of necessary mathematical tools, scientific theories and modern developments in civil engineering.
Graduates will understand the societal needs and will be committed in developing optimal solutions.

3. Graduates will pursue higher education, research or entrepreneurship apart from being employable.

4. Graduates will be competent to face challenges in civil engineering through lifelong learning process and will have high ethical values, honesty and a sense of responsibility

## PROJECT SPECIFIC OUTCOMES

1. Acquire the ability to plan, furnish and/or analyse designs and implement infrastructure-related systems, produce related documents, drawings and reports, and quantity estimates, related to the civil engineering domain.

2. Apply theoretical concepts and technical skills in developing appropriate sustainable solutions through self-learning, research and teamwork for technical problems requiring civil engineering interventions towards a better quality of life.

3. Utilise the acquired knowledge in Environmental Engineering and Transportation Engineering to conceptualise, analyse, and evaluate specific problems in Water Quality Management, Sanitation, Pavement Design, Traffic Engineering and Transportation Planning and develop appropriate solutions.

### **Department Activities**



A workshop conducted on BIM software for Civil Engineers by CADD international on 04-01-2023



On March 4, 2023, an Industrial Visit was held at Antech BM's a7 DBM construction for the S4 CE.(2021-25)



Industrial Visit was conducted to Painkulam Aquaduct on June 2<sup>nd</sup> 2023, S6 CE (2020-24)



On March 24<sup>th</sup> , 2023, an Industrial Visit was held at Goa Dairy Plant , S6(2020-24)



On Marth 18th Industrial visit was conducted to Goa Waste Management Corporation s8(2019-23)



Organised Project Expo-23 for Final year students and prizes sponsored by professional bodies are distributed to students.

### **Students Achievements**

Ms. Shafeeka, Ms. Raveena P & Ms. Bleesy P Samuel (2021 pass out) received position certificates for top 2% students under KTU.

Ms. Seethal Anna Kuruvilla (S6 CE) successfully completed the MOOC on "Power quality improvement technique" with a consolidated score of 71%.

Mr. Mohammed Hashim Mohammed Sageer successfully completed the MOOC on "Wheeled Mobile Robots"

Ms. Surya C S (S4 PG) successfully completed the MOOC on "Geo spatial analysis in urban planning"

Ms.Bineetha Wilson A & Ms.Soja R Joseph (S2 M.Tech) completed the 12 weeks MOOC course on "Geographic Information Systems

Ms.Binnetha Wilson, Ms. Soja R Joseph & Ms. Subina S (PG) have successfully completed internship training in Highways engineering lab at KSCSTE- NATPAC, Trivandrum.

Ms. Surya C S and Ms. Flora Philip have participated in the 2 day workshop on 'Full depth reclamation technology' organized by KSCSTE-NATPAC.

Ms. Surya C.S. was awarded with Best Paper award at ICC-IDEA-2023

Ms. Janet (S6 CE/2020-24) attended the professional student summit at Adlux Convention Center on 11th feb 2023.

Mr. Subin V(S8 CE / 2019-2023) participated Jsquard team and secured 2nd prize in KCAET tech fest (kerala agricultural university Tavanur, Malappuram).

## **Sports Acivements**

Mr. Sidhil S(S6 CE) & Mr. Sharon (S4 CE) participated in APJAKTU Inter college Athletic meet at Trivandrum

Mr. Kevin Sebastian (S8 CE / 2019-2023) placed first position in boys Shotput, second in the boys' javelin throw and Third in the boys' Discuss Throw category at the JECC annual sports competition in 2022–2023.

Mr. Sidhil S (S6 CE/2020-2024) earned first position in the boys' 100-meter race, first position in the boys' 200meter race and second place in the boys' 400-meter relay at the JECChosted annual sports meet in 2022– 2023.

Mr. Sharon TS (S4 CE/2021-2025) earned second position in the boys' 1500-meter race at the JECC-hosted annual sports meet in 2022–2023.

Ms. Adithya T S of (S2 CE /2022-26)have secured first position in 100m race and 400m relay girls at the JECC-hosted annual sports meet in 2022–2023

## **Student Publications**

Ms. Surya C S (S3 Mtech) published a paper entitled " identification of pedestrian crash prone locations and

mitigations measures" in IJIRSET, vol.12, Issue 1, Jan 2023.

# **Faculty Publicaions**

The article "Traffic effect evaluation of a proposed retail mall in a medium-sized town" was written by Ms. Vincy Verghese and published in the journal "Recent achievements in transportation systems engineering and management."

Ms. Archana S published international journal entitled " Modeling of pedestrian gap acceptance behavior at uncontrolled intersections" in the journal of IRJET vol 10,issue -3, March 2023.

Ms. Neerja P G & Dr. Alwyn Varghese published journal entitled ' A comprehensive review of partial replacement of cement in concrete' in a scopus indexed journal.

Ms. Jisha Akkara published a paper entitled"Pavement Condition Assessment Using Fuzzy Analytic Hierarchy Process" in International Journal of Pavement Research and Technology.

# **Faculty Achivements**

Dr. Alwyn Varghese, is provided a contribution as session chair in the "National conference on Materials Structures and Environment (MSE)" organized by the depot. of civil engg. NSS college of Engg. . Palakkad held on 16 & 17 June 2023.

Dr. Alwyn Varghese, was given guideship in KTU.

Mr.Cyriac M G published an article regarding waste management in the Deepika newspaper dated 16th May 2023. Ms. Vincy Verghese and Ms. Archana S. got a certificate for participation in the classified traffic count survey, which was carried out by NATPAC in TCR for the project Road asset management for national highways and state highways in Kerala from March 7 through March 10, 2022.

Ms. Anna Joseph attended CSR Round Table Conference on Race to Net Zero Alathur on 4<sup>th</sup> May 2023.

Ms. Anna Joseph successfully completed the MOOC on "Electronic Waste Management Issues & Challenges" with a consolidated score of 84%

Ms. Jisha Akkara successfully completed the MOOC on "Electronic Waste Management Issues & Challenges" with a consolidated score of 81%.

Ms. Soorya M Nair successfully completed the MOOC on "Retrofitting and Rehabilitation of civil infrastructure " with a consolidated score of 75%.

# **Faculty Development Programme**

Ms Jisha Akkara, Ms Anna Joseph, Ms Jeffy Johny have actively participated in the KTU sponsored 3day faculty development programme Sustainable solutions on to environmental water quality issues oraganized by dept. of civil engineering of Royal College of Engineering. and Technology., Thrissur. from 19th Jan 2023 to 21th jan 2023.

Ms Suhas Nair S has actively participated in the KTU sponsored 3day faculty development programme on Sustainable Materials in Civil engineering oraganized by Dept. of Civil Engineering of Ahalia School of Engineering, Palakkad. from 23rd Jan 2023 to 25th Jan 2023.

Ms Jisha Akkara has actively participated in the KTU sponsored 3day faculty development programme on research publication and ethics intended for research scholar in collaboration with IEEE oraganized by dept. of Eletrical and electronics engineering of Jyohti Engineering college, TCR. from 23th Jan 2023 to 28th jan 2023.

Dr. Alwyn Varghese and Ms. Soorya M. Nair actively participated in a five-day online FDP on current research trends in the field of civil engineering from January 16 to January 20, 2023, which was organised by the department of civil engineering in association with the academic staff college, OP Jindal University.

Ms. Archana S actively participated in a 2 weeks AICTE training and learning academy hybrid FDP on design and production of reclaimed asphalt pavement mixture: A step towards sustainable green pavement from January 09 to January 14, 2023 and 16th jan 2023 to 20th jan 2023 at college of engineering TVM.

Ms Soorya M Nair has actively participated in the KTU sponsored 5day faculty development programme on Applications of artificial intelligence in Civil Engineering organized of by Dept. Civil Engineering of TKM College of Engineering, Kollam from 30th Jan 2023 to 03rd Feb 2023.

Dr. Alwyn Varghese has actively participated in the KTU sponsored 5day faculty development programme on research innovations, self learning & entrepreneurship organized by dept. of Civil Engineering of NSS College of Engineering, Palakkad from 30th Jan 2023 to 03rd Feb 2023.

Ms. Anna Joseph Ms. Jeffy Johny and Mr. Suhas S Nair, have actively participated in the KTU sponsored 5day faculty development programme on Outcome based education (OBE): Adopting effective pedagogy organized by dept. of mechanical engineering, JECC from 30th Jan 2023 to 03rd Feb 2023.

Ms. Neerja PG and Ms. Anju M J. has actively participated in the KTU sponsored 3-day faculty development programme on Smart Grids and integration of renewable sources organized by dept. of Electrical & Electronics Engineering, IES College of engineering, Chittilappilly, Thrissur, from 22nd Feb 2023 to 24th Feb 2023.

Ms Soorya M Nair has actively participated in the KTU sponsored 5day faculty development programme on Mathematical and statistical techniques in engineering and management sciences organized by dept. of BSH of JECC from 13th feb 2023 to 17th Feb 2023.

Ms. Soorya M. Nair successfully completed the short-term online training "Geospatial Data on Processing and Analysis" organized Department by the of Civil Engineering, SCMS School of Engineering and Technology from 20th February to 06th March, 2023.

Ms Soorya M Nair has actively participated in 5-day faculty development programme on Sustainabe Repair and Rehabilitation of Constraucted organized by School of Civil Engineering, VIT University, 6<sup>th</sup>- 10<sup>th</sup> March 2023.

### **PROGRAM OUTCOME**

1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

2. Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

3. Design/development of solutions: 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.

4. Conduct investigations of complex problems: 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. 5. Modern tool usage: 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.

6. The engineer and society: 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.

7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

10. Communication: 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.

11. Project management and finance: 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. 12. Life-long learning: 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