



Jyothi Engineering College

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A CENTRE OF EXCELLENCE IN SCIENCE & TECHNOLOGY BY THE CATHOLIC ARCHDIOCESE OF TRICHUR

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NBA Accredited B. Tech Programmes in Computer Science & Engineering, Electronics & Communication Engineering, Electrical & Electronics Engineering and Mechanical Engineering valid for Academic Years 2016-2017 to 2018-2019

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CIVIL News

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CIVIL ENGINEERING DEPARTMENT

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 engineers and 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 values.

SHORT TERM TRAINING



Seven day Short Term Training Program was conducted on 'Practical Approach to Urban Transportation Planning uses

CUBE Software' during 20th – 26th May 2018. Eminent resource persons include Prof. Dr. M.V.L.R. Anjaneyulu, Dean, NIT Calicut, Mr. Ansu V. Asst. Professor, GEC Calicut, Dr. Harikrishna M. Asst. Professor, NIT-C and Mr. Hari G. P., Additional General Manager (Urban Transport) KMRL. Hands on training program on CUBE software was given by Ms. Vamsee M. Transportation Research and Planning. The program was organized by Ms. Vincy Verghese and Ms. Archana S. and was jointly sponsored by IEDC and ISTE. The program had participation from faculty and PG students of various premier engineering colleges across Kerala.

DEPARTMENT ACTIVITIES



Our department consistently took initiatives to organize events that would bridge the gap between academia and industry as a part of this an invited talk and panel discussion on 'Road Safety Auditing, Evaluation and Treatment' was conducted on 15-2-2018, wherein Dr. T. Elangovan, Exe. Director, KRSA and Er. Niju Azhakesan, Director KRSA were present as resource persons.



Furthermore, a core meeting on KSCSTE funded project titled 'Driver centric safety evaluation of two-lane rural highway' was conducted with the project mentor, Dr. T. Elangovan, on the same day for evaluating the progress and conduct of the project.



Our faculty Ms. Shiny Shajan was enthusiastic in coordinating an add-on course on 'Total Station Survey' which was held on 24 and 25 of February 2018 for the department personnel.



A two day training program on "Geometric Design of roads using Plannal Software" was conducted on 12th and 13th of March 2018 aiming to imbibe the technical know-how of the students in using design software's to address real life problems.

Our department has been prudent in extending technical assistance to governmental activities by undertaking consultancy on soil testing for PMGSY road projects for Chalakkudy Block



We welcomed Mr. Prasoon Jacob to join the department as Trade Instructor.



Dr. Nidhi M. and Mr. Jestine J. Thannickal were welcomed to the department to the post of Associate Professor and Assistant Professor, respectively.



Asst. Prof. Ms. Nisni Ashraf and Ms. Lakshmi Divakaran P, bid goodbye to our department.



Ms. Jimsy Sunil has bid farewell from our institute as Trade instructor.

STUDENT ACHIEVEMENTS

University Results



Our students once again bring glory to the institute as Ms. Divya Joshy and Ms. Ameera V.U. of 2012-16 batch secured 23rd and 44th ranks, respectively, in the

PROGRAMME EDUCATIONAL OBJECTIVES

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

1. Graduates shall have concrete knowledge in the application of necessary mathematical tools, scientific theories and modern developments in civil engineering.
2. Graduates will understand societal needs and will be committed to developing optimal solutions.
3. Graduates will be able to pursue higher education, research or entrepreneurship apart from being employable.
4. Graduates will be competent to face challenges in civil engineering through a lifelong learning process and will have high ethical values, honesty and responsibilities.

PROGRAMME OUTCOME

Engineering Graduates will be able to:

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

PROGRAMME SPECIFIC OUTCOME

1. Acquire execution level knowledge / Acquire applied knowledge in Environmental Engineering, Geotechnical Engineering Structural Engineering and Transportation Engineering.
2. Utilise theoretical concepts and technical skills in developing appropriate solutions for water quality management, sanitation, pavement design, traffic engineering and transportation planning.

Calicut University B.Tech Civil Engineering Examinations.



Our students excelled in academics as Ms. Christymol E B (SGPA 8.71), Ms. Vineetha N (SGPA 8.36) and Ms. Tania Baburaj (SGPA 8.29) of S8 Civil secured the first, second and third position, respectively, in their class in the sixth semester results published by University of Calicut.



Our student Ms. Linda David K of S8 CE qualified GATE-2018, the entrance exam for pursuing higher studies in prestigious institutes in the nation, by attaining a score of 419.



The unceasing efforts of our students Ms. Megha T S (SGPA 9.02), Ms. Bhavya George (SGPA 8.98) and Ms. Siji Vincent A (SGPA 8.72) of S6 Civil helped them secured the first, second and third position, respectively, in their class in the fifth semester results published by APJ Abdul Kalam Technological University.



The dedication of our students to academics has rendered Ms. Henna Maria (SGPA 9.73), Ms. Dona Thomas (SGPA 9.64) and Ms. Salini M S (SGPA 9.27) of S4 Civil in securing the first, second and third position, respectively, in their class in the third semester results published by APJ Abdul Kalam Technological University.



Ms. Arathi A R (SGPA 9.27), MS. Nivea John (SGPA 8.23) and Mr. Noble Jose (SGPA 8.09) of S2 M.Tech Transportation Engineering secured the first, second and third position, respectively in their class in the first semester results published by APJ Abdul Kalam Technological University.

Publications / Presentations



Our students have been keen in presenting their innovative works at various technical platforms. In this context, Mr. Edwin Chiriyankandath and Mr. Deignmon C. D. of S6 CE presented their paper on 'Drone Total Staion' at FET'ERA'18 organised by Ammini College of Engineering, Mankara, Palakkad on 22-2-2018.



Mr. Edwin Chiriyankandath and Mr. Deignmon C. D., Mr. Robby Konikkara, Ms. Delsy Louis and Ms. Reshma Rajan of S6 Civil presented their well appreciated work as a paper entitled 'Drone Total Station' on 23-2-2018 at KSCSTE KETCON 2018 conducted at Sahrdaya College Engineering, Kodakara.



Our students under the exemplary guidance of our faculties have crossed regional borders in voicing their prestigious projects, as a part of this Ms. Bincy B J and Dr. Anitha Jacob presented a paper entitled "Use of Data Mining Technique for Systematic Road Safety Audit of Non-urban Highways" International Conference on Infrastructure Development- Issues,



Innovations and the Way Forward (ICID 2018)” conducted on June 21-23 at Mar Baselios College of Engineering and Technology, TVM.



Mr. Midhun T and Dr. Anitha Jacob, presented a paper entitled “Activity Based Transportation Modeling for Chelakottukara ward of Thrissur District” at the International Conference on Infrastructure Development- Issues, Innovations and the Way Forward (ICID 2018)” conducted on June 21-23 at Mar Baselios College of Engineering and Technology, TVM.



Ms. Rosmy Sebastian and Ms. Vincy Verghese, presented a paper “Environment Impact Assessment of Thrissur Vadanapally Road Project” at the International Conference on Infrastructure Development- Issues, Innovations and the Way Forward (ICID 2018)” conducted on June 21-23 at Mar Baselios College of Engineering and Technology, TVM.



Ms. Arathi A R and Ms. Vincy Verghese, presented a paper entitled “Feasibility study of provision for exclusive bus lanes on urban roads”, at the International Conference on Infrastructure Development- Issues, Innovations and the Way Forward (ICID 2018)” on June 21-23 at Mar Baselios College of Engineering and Technology, TVM.



Ms. Thasneem Nadirsha and Ms. Archana S presented a paper entitled “Analysis and development of traffic speed, flow, density relationships for urban roadway” International Conference on Infrastructure Development- Issues, Innovations and the Way Forward (ICID 2018)” conducted on June 21-23 at Mar Baselios College of Engineering and Technology, TVM.

FACULTY ACHIEVEMENT



Our head of the department Prof. S. Rathish presented a paper on ‘Water audit and optimum solution for deficit management in Jyothi Engineering College’ in OISCA Global Youth Forum 2018 at XIME Cochin on 10th February 2018. He was dynamic in moderating an induction programme for the Assistant Engineers of Kerala Water Authority on 2-2-2018 at CWE, Trivandrum.



The experienced personnel in our department has always been in the fore front to indulge in technical awareness programme, Prof. Cyriac M.G. delivered an invited talk on ‘Plastic Pollution’ on World Environmental Day celebrations conducted at Railway Divisional Office at Palakkad on 5th June 2018.



Ms. Anitha Jacob successfully cleared the NPTEL online course examinations on ‘Effective Engineering Teaching in Practice’ and ‘Patent Drafting for Beginners’ with “Elite’ certification.



Ms. Nisni Ashraf successfully attended a 5 day STTP on the topic Design and Detailing of Structural Elements at Muthoot Institute of Technology and Science during 8th to 12th January 2018.



Ms. Shiny Shajan actively took part in a faculty development programme on “Advances in structural Engineering” dedicated for teachers in various engineering colleges sponsored by APJ Abdul Kalam Technological University, Government of Kerala, from 04-06-2018 to 08-06-2018 at Vidya Academy Of Science and Technology, Thalakkottukara, Thrissur.



A paper entitled “Effect of Rural Highway Geometry on Driver Workload – A Step Towards Safety” authored by Dr. Anitha Jacob, Mr. Jinesh K.J., Ms. Jisha Akkara and Dr. Jose P Therattil was presented at the International Conference on Civil Engineering Advancements in Sustainable Infrastructure Development and Environment – CEASIDE 2018 at GEC Thrissur during 18th to 20th of January 2018.