



Jyothi Engineering College

NAAC Accredited College with NBA Accredited Programmes*

Approved by AICTE & affiliated to APJ Abdul Kalam Technological University

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 the academic years 2016-2022. NBA accredited B.Tech Programme in Civil Engineering valid for the academic years 2019-2022.



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 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.

JECC TALK SERIES



The 4th Tech Talk Series was organized by the Department of Civil Engineering on 16/02/2020 at the Press Club Hall, Thrissur on the topic 'Domestic Pollution & Remedial Measures'. The panel members included Dr. Ajayakumar Varma, Former Executive Director, Suchitwa Mission- Local Self Government Department Kerala, Dr. Girija D., Registrar- Kerala Agricultural University and Prof. S. Rathish, Professor and HOD, Department of CE, JECC. The session was led by Dr. Ajayakumar Varma, who drew attention to the general solid waste produced and its management. The session was followed by a presentation on household waste production and the available disposal methods by Dr. Girija D. The concluding session was by Prof. S. Rathish on water pollution and its treatment processes. There was an active discussion on queries raised by the audience on the sessions.

PROGRAMME EDUCATIONAL OBJECTIVES

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

1. Graduates will have concrete knowledge in the application of necessary mathematical tools, scientific theories and modern developments in civil engineering.
2. 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.

PROGRAMME OUTCOMES

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 analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

DEPARTMENT ACTIVITIES

The Professional Bodies of the Department have always been keen in facilitating technical sessions for our students. Mr. Babu Raghavan took a technical session on 12/02/2020 about 'Building with Concrete' organized by ICI for the Civil Engineering Students of JEC.



Er. Siva Iyer handled a technical session on 'Significances of Building Services' organized by Civil Engineering Association & Institution of Engineers (India) on 19/02/2020



The Department has been dynamic and never ceased in organizing technical sessions even during the COVID'19 pandemic times! The events had great participation within and without the country!

Er. Tony Jacob, Director, Contask Management solutions, presented a talk on 'Construction Management Opportunities in 'Engineering, Procurement & Construction' (EPC) Industry' in the webinar organized by Department of Civil Engineering in association with Xavier Institute of Management and Technology, Bangalore on April 28, 2020.



A three-day online Short Term Training Programme on 'State of the Art Practices in Transportation Engineering' in association with Indian Society for Technical Education was organized by the Department from 10-06-2020 to 12-06-2020. Transportation experts from the international and national level were inducted as resource persons for the event. Dr. A.S. Narasimha Murthy, Senior Transportation Engineer, California, Dr. Sunil Vasudevan, Techno Legal Expert, Trivandrum, Er. Rijesh N.M, Deputy Town Planner, Regional Town Planning Office, Ernakulam, Er. Amegh Gopinath, Technical Expert, GIZ, Delhi, Er. Santhosh Kadavy, Manager, IBI group, Andhra Pradesh and Er. Vivek M., Traffic and Transportation Planner, RINA Consultancy S.P.A, Mumbai were the speakers who led various sessions



A webinar on the topic 'Post Covid Scenario: Civil Engineering Perspectives' was organized by the IE(I)-CED, JEC on 18-06-2020. The expert for the talk was Dr. Jeevan Joseph, Asst. Professor, Dept. of Civil Engineering, National Institute of Technology, Trichy. He explained the opportunities and challenges faced in the field of Civil Engineering post COVID'19 era.



Er. Shyju Nair, CEO, DH Academy handled a webinar on "Concrete: Past, Present & Future" which was organised by ICI Student Chapter JEC on 24-06-2020.



TECHNICAL COMPETITIONS!

As part of the World Plumbing day celebrations, a state level poster competition was organized by the Indian Plumbing Association. The students in our college enthusiastically took part in the competition which was held in the college on 04.03.2020.



THARANG'20, our college Technical Fest was celebrated with great festivity and glamour on the campus on 6th and 7th March 2020. Our Department organized various technical and entertaining competitions, namely Technovation, Hungry Brains, Instridge, Boyante, Slip or score and Archery. The events saw a great participation from in and out of the college. Many of our students bagged prizes in the various events organized as part of Tharang'20.



STUDENT ACHIEVEMENTS

Students our pride!

Publications / Presentations / Participations

The following S4 M. Tech students presented their papers at two day National Conference & Seminar

Mr. P. Parthipan presented and published the following papers.

i. 'Pedestrian Facilities and Safety Analysis at Railway Station in the Pilgrim Season' in Conference Proceedings, NCCE-NITK 2020, National Institute of Technology, Surthkal, Karnataka on Jan 30, 2020.



ii. 'Pedestrian Flow And Capacity at Railway Station' in Conference Proceedings, Emerging Trends in Civil Engineering, 2020, K. L. University, Andra Pradesh, June 26,27,2020.

Ms. Swathy P. Mohan published a paper titled 'Accident Prediction Model for Evaluating Safety of Horizontal Curves on Two Lane Rural Highways' in International Journal of Advances in Engineering and Management, Vol. 2, issue 1.

The following S4 M.Tech students presented papers at a Two-day National Conference & Seminar (NCIET 2020) on 'Innovations in Engineering & Technology' organized by Government Polytechnic College, Palakkad Sponsored by the Department of Technical Education, Kerala held on 11th and 12th February 2020.

(i) Ms. Dona Joy presented the paper titled 'Modelling of Operating Speed in Horizontal Alignment of Two Lane Rural Highways'

(ii) Ms. Swathy .P. Mohan presented the paper titled 'Accident Prediction Model for Evaluating Safety of Horizontal Curves on Two-Lane Rural Highways'

(iii) Ms. I. P. Malavika presented the paper titled 'Economic Analysis of Congestion -A Case Study'

(iv) Ms. Silpa Sekhar G. presented the paper titled 'Influence of Pavement Condition on Headway and Average Travel speed'.



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 OUTCOMES

1. 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.

Ms. Giji Sonia presented and published the paper titled 'Determination of Stream Equivalency Factor for Toll Plaza' in the International Journal for Scientific Research and Development, Volume8, issue 1, March 2020.



The following S4 M. Tech students published papers in the International Journal for Scientific Research and Development, Vol. 7, Issue 12, 2020

- i. Ms. Aparna M. S. published the paper titled 'Analysis of Pedestrian Parameters at KSRTC Thrissur, Kerala'
- ii. Ms. Lekshmi Krishna published the paper titled 'Pedestrian Crossing Behaviour between Transport Terminals'
- iii. Mr. Nidhin Sebastian published the paper titled 'Infrastructure Characterized Operations in Kerala State RTC.'



Ms. Ammu B. Crusho published the paper titled 'A State-of- Art Review on the Interfacial Bond Strength of Bituminous



Overlay in Asphalt Pavements' in the International Advance Journal of Engineering Research (IAJER), Volume 3, Issue 3, March, 2020

Our Students are PLACED!

Ms. Nithya K Mathew of S8 CE was selected in the Infosys campus recruitment drive.



Co-curricular & Extracurricular activities

Mr. Rahul M of B. Tech S4 CE attended the event Professional Student Summit, a state level event organized for professional students across the state at CUSAT on February 15th, 2020.



Ms. Nivya Varghese and Ms. Rosmin Thomas attended a seminar on World Engineering Day organized by The Institution of Engineers (India), Thrissur on 4th March 2020.



Ms. Femin K.A. of S6 CE bagged the first prize in both Kadha Prasangam and Kavita Parayanam in 'Ezhutham Parayam – Sahithya Malsaranga' in a State Level Literary Competition organised by the Research and Publication Wing of Kerala Police Academy, Thrissur on June 2020.

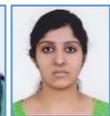


Congrats to the Winners!

Mr. Arjun P. M., Ms. Shabla K. and Ms. Sneha Thomas of S4 Civil Engineering (2018-22) won the first, second and third positions in the third semester results published by APJ Abdul Kalam Technological University scoring SGPA of 9.71, 9.67 and 9.54 respectively.



Ms. Shefeekha A., Ms. Raveena V. and Ms. Blessy P. Samuel and Ms. Femin K.A. of S6 Civil (2017-21) secured the first, second and third positions in the fifth-semester results published by APJ Abdul Kalam Technological University scoring SGPA of 9.74, 9.48 and 9.09 respectively.



Ms. Dona Thomas, Ms. Henna Maria and Ms. Salini M. S. and Sreya Murali and Asna P. of S8 Civil Engineering (2016-20) won the first, second and third position in the seventh semester results published by APJ Abdul Kalam Technological University scoring SGPA of 9.32, 9.25 and 9.11 respectively.



Ms. Swathy P. Mohan, Ms. Dona Joy and Ms. Anupama Krishnan of M. Tech S4 Civil won the first, second and third positions in the third semester results published by APJ Abdul Kalam Technological University scoring SGPA of 9.00, 8.25 and 8.13 respectively.

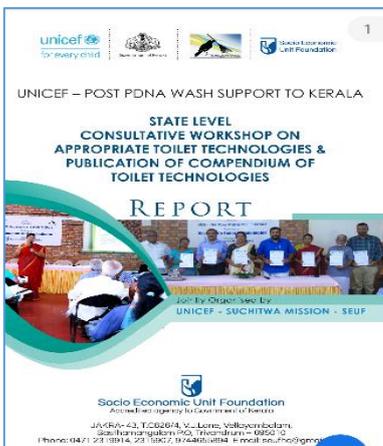


Ms. Athira C., Ms. Mahima Mary Thomas and Ms. Neelu Mammen of M. Tech S2 Civil won the first, second and third position in the first semester results published by APJ Abdul Kalam Technological University scoring SGPA of 9.27, 9.05 and 8.36 respectively.



FACULTY OUR ASSET!

Prof. S. Rathish was the panel member for the state level consultative workshop on ‘Appropriate Toilet Technologies’. He was also a reviewer for the compendium of toilet technologies published as a part of this workshop jointly organized by UNICEF-Suchitwa Mission-Socio Economic Unit Foundation (SEUF) on January 6th 2020.



Ms. Jisha Akkara presented a paper on ‘Effect of Road Geometry on Driver Eye Blink Rate’ in a two day National Conference & Seminar (NCIET 2020)



on ‘Innovations in Engineering & Technology’ organized by Government Polytechnic College, Palakkad Sponsored by the Department of Technical Education, Kerala held on 11th and 12th February 2020.

Ms. Jisha Akkara published a technical paper titled ‘Accident Prediction Model for Evaluating Safety of Horizontal Curves on Two Lane Rural Highways’ in the International Journal of Advances in Engineering and Management, Vol. 2, issue1.

Prof. S. Rathish was the moderator for the discussion on the topic ‘Experience from community managed water supply schemes state level strategy formulation work’ jointly organized by UNICEF-KRWSA-SEUF on 20th February,2020



Ms. Carol Varghese, Ms Rakendu P. S., Ms. Megha, Mr. Vismay Nair attended a workshop on AICTE quality initiatives, NITTT & NEAT organised by FISAT, Angamaly on 6th March 2020.

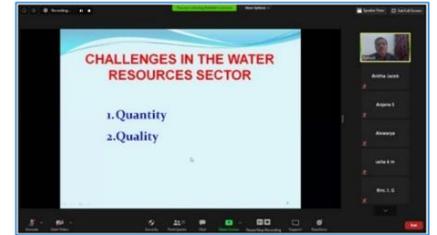


Dr. Nidhi M. was both reviewer and chairperson in the 1st International Conference on Structural Engineering and Construction Management organised by FISAT, Angamaly from 15/05/2020 to 16/05/2020.



Prof. S. Rathish handled a technical session on the topic ‘Water resources management in Kerala’ in an online faculty development program on “Enhancing Civil Engineering Proficiency” organized by Government

Polytechnic College, Chelakkara from 18th-20th May 2020.



Ms. Archana S. published a technical paper on “Pedestrian Facilities and Safety Analysis at Railway Station in the Pilgrim Season” in NCCE-New and Effective Innovations, Technical and Key Challenges organized by NIT, Surathkal on Jan 30,2020.



Ms. Archana S. published the following papers in International Journal for Scientific Research and Development, Vol. 7, Issue 12, 2020

- Analysis of Pedestrian Parameters at KSRTC Thrissur, Kerala
- Pedestrian Crossing Behaviour between Transport Terminals
- Infrastructure Characterized Operations in Kerala State RTC

Ms. Vincy Verghese published a paper titled ‘Determination of Stream Equivalency Factor for Toll Plaza’ in the International Journal for Scientific Research and Development, Volume8, issue 1, March 2020.



Many members of the faculty and some of the students attended numerous online webinars, workshops, Short Term Training Programme, Faculty Development Programme and Massive Open Online Courses in order to keep up with the latest trends in the scientific, engineering and management fields, during the COVID-19 lock down period.

GOOD BYE...

Our beloved trade instructor, Ms. Reshma K.C. bid goodbye to the Department and joined a government enterprise after serving for seven years at Jyothi Engineering College.

