



Jyothi Engineering College

NAAC Accredited college with NBA Accredited programmes

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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 ethical values.

TECHNICAL TALK ON VENT PIPE BRIDGES



Our department in association with various professional bodies has jointly conducted technical talks and events to imbibe in our students the ideas and skills to be a competent professional. As a part of this, a technical talk on "Vent Pipe Bridges - an economical alternative for conventional bridges" by Dr. P. Vijayan, Professor, Department of Civil Engineering, Government Engineering College, Thrissur was organized by our department in association with ISTE Student Chapter and Civil Engineering Association (CEA)

DEPARTMENT ACTIVITIES



Dr. P. Gireeshan, Deputy Chief Engineer, Kerala Water Authority, Kochi delivered an invited talk on World Water Day the 23rd of March 2019 on the theme "Leaving no one behind". The program was well organised by Indian Concrete Institute.



An invited talk on "Traffic Signalling System" by Dr. P. Ravikumar, Senior Director, C-DAC Thiruvananthapuram was organized by Department of Civil Engineering in association with IE(I) and Civil Engineering Association for B-Tech and M-Tech students on 15th February 2019.



A technical talk on "Rehabilitation of RCC Structures" and "High strength Concrete" by Er. M. A. Joseph, Chairman, ICI Kochi Center, Regional Head, Technical Services at Ultratech Cement Ltd was organized by IEI and ICI on 2nd February 2019.



As a part of the World Plumbing Day 2019 celebration, a poster making competition was held at Jyothi Engineering college on 07th March 2019. The best three posters were selected and awarded by the department.



A talk on "Personality Development and Psychological issues" by Dr. Joy, Consultant psychiatrist, Metropolitan Hospital, Thrissur was organized on 31st January 2019 by ISTE to make students aware about the mental health followed by problems and various forms of personality disorder such as overthinking, anticipation, anxiety, hallucination, suicide tendency etc.



Our department extended a warm welcome to its new members, Dr. Agnes Anto C. and Dr. Sreekumar M who have joined as associate professor. However, the department bid good bye to Mr. Aswin P. Vijayan who has been very charismatic and a beloved teacher to the students.

PROGRAMME EDUCATIONAL OBJECTIVES

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

1. Graduates shall have definite 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 a sense of responsibility.

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.

STUDENT ACHIEVEMENTS University Results



Our students has come out with flying colours in the university exam results published by APJ Abdul Kalam Technological University. Ms. Anjana C.P. (SGPA 9.73), Ms. Bhavya George (SGPA 9.55) and Ms. Siviya Varghese (SGPA 9.45) of S8 Civil (2015-19) secured the first, second and third position, respectively in their class in the seventh-semester results.



Ms. Angel Mariya Joseph (SGPA 9.87), Ms. Henna Mariya (SGPA 9.8) and Ms. Dona Thomas (SGPA 9.74) of S6 Civil (2016-20) secured the first, second and third position, respectively in their class in the fifth-semester results.



Ms. Shefeekha A (SGPA 10), Ms. Blessy P Samuel (SGPA 9.54) and Ms. Femin K.A (SGPA 9.46) of S4 Civil (2017-21) secured the first, second and third position, respectively in their class in the third-semester.



Ms. Swathy P Mohan (SGPA 8.61), Ms. Silpa Sekhar G (SGPA 8.45) & Ms. Anupama Krishnan (SGPA 7.98) and Ms. Giji Sonia (SGPA 7.98) of S2 M.Tech (2018-2020) secured the first, second and third position, respectively in their class in the first semester results.



Ms. Arathi A.R. (SGPA 9.38), Ms. Thasneem Nadirsha (SGPA 8.88), Mr. Midhun T (SGPA 8.44) of S4 M.Tech (2017-2019) secured the first, second and third position in their class in the third-semester results published by APJ Abdul Kalam Technological University



Our students Ms. Haleema Lameez Thajuddeen, Ms. Anjana C. P. and Mr. Sarath M. of S8 CE (2015-2019) has qualified GATE-2019 examination with commendable score of 396,385 and 364, respectively.

Placements



It has been a moment of achievement for our department as our final year students were placed at various reputed and distinguished companies. Jessica Roy and Siviya Varghese are placed in Infosys.



Ms. Jessica Roy and Mr. Jithin Joy K are placed in Amazon.



Ms. Sruthy Krishna K. R. and Ms. Reshma Rajan are placed in Focus Academy for Career Enhancement (FACE).



Mr. Anto, Ms. Jessica Roy, Mr. Jithin Joy K. and Ms. Sruthy Krishna K. R are placed in Sutherland Global Services.

Awards

Our students have been honoured by the college for their academic excellence. Ms. Arathi A. R. and Ms. Siviya Varghese are selected as the best outgoing student from M. Tech and B. Tech, respectively.



Ms. Anjana C. P., Ms. Bhavya George, Ms. Siviya Varghese, Ms. Siji Vincent A., Ms. Megha T. S., Ms. Arppitha K., Ms. Varsha P. and Ms. Haleema Lameez Thajuddeen secured CGPA above 9 in the seventh-semester results published by APJ Abdul Kalam Technological University.



Ms. Angel Mariya Joseph, Ms. Dona Thomas, Ms. Henna Mariya, Ms. Sreya Murali, Ms. Alaka Menon, Ms. Gowri Vrinda P., Ms. Nimisha K., Ms. Salini M. S., Ms. Aajini Giri, Ms. Ardra P. M., Mr. Abhijith Nair and Mr. Eloi C. S. secured CGPA above 9 in the fifth-semester results published by APJ Abdul Kalam Technological University.



Ms. Shefeekha A., Ms. Blessy P. Samuel, Ms. Femin K. A., Ms. Raveena V., Ms. Nikhitha Davis and Mr. Vinayak Vinod secured CGPA above 9 in the third-semester results published by APJ Abdul Kalam Technological University.



Our students have received recognition for their work at different technical

platforms outside the college. Mr. Midhun T. of S4 M.Tech CE (Transportation Engineering) has bagged the best paper award in Transportation Planning category at the sixth colloquium on Transportation Systems Engineering and Management (CTSM 2019) held during 14-15 June, 2019. The event was organized by PG Section in Transportation Engineering and Planning, Civil Engineering Department, Sardar Vallabhbhai National Institute of Technology, Surat



Ms. Nivea John of S4 M.Tech CE (Transportation Engineering) has secured the best paper award in the National Conference on Recent advances in Civil Engineering and Technology 'REACT-2019' organized by the Civil Engineering Department, Vidya Academy Of Science and Technology during 06-07 May 2019.



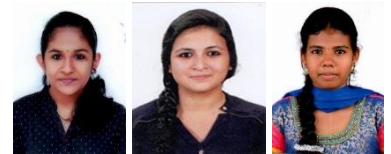
Mr. Eloi.C.J, Ms. Clodiya Charley A., Ms. Olfy Nixon and Mr. Saison Xaviour E.C. of S6 CE won second prize in "Project Expo" competition conducted by Thejus engineering college as a part their tech fest "THEJOMAYA" on March 5th 2019.



Ms. Clodiya Charley A., Mr. Eloi C. J., Mr. Saison Xavier, Ms. Olfy Nixon and Mr. Akash M. B. of S6 CE was selected to exhibit and present their project titled "Anaerobic Treatment Process To Minimise the BOD Of Septic Tank Effluents", guided by Prof. M. G. Cyriac in the final round of "SRISHTI 2019" held at Saintgits college of Engineering during the 18th & 19th of February 2019.



Our talented students are encouraged to achieve greater heights in their extra-curricular activities. Mr. Eloi C J of S6 CE is awarded Grade 8 violin, Level 3 award in the graded examination of Trinity College, London.



As a part of the World Plumbing Day a poster making competition was conducted by the department on March 07th, 2019. Ms. Salini.M.S. of S6 CE, Ms. Anjana Ramesh of S4 CE and Ms. Akhila.P.K of S6 CE won first, second and third prize, respectively in the poster making competition.



Our students bagged prizes at various events conducted as part of the intercollege Techfest "Tharang'19" held during February 23,24 of 2019 at Thrissur Sakthan Ground. The team comprising of Ms. Anusha P. Antony, Ms. Henna Mariya, Ms. Mariya Rose Vincent won the first prize and the team comprising of Ms. Gowri Vrinda P. and Ms. Nimisha K. won the second prize in the event "Flying Dutchman".



The team comprising of Ms. Angel Mariya Joseph, Ms. Alaka Menon, Mr. Aiwin Levi, and Mr. Sayooj K.D won second prize in the event "Srishti Project

Expo 2019". The same team secured second prize in the event "NIRMANA-Project Expo" as part of Vyvidh'19.



The team comprising of Mr. Fredin K. Joy, Mr. Titus James, and Mr. Alwin Andrews won first prize and the team comprising of Ms. Salini M. S., Ms. Nimisha K. and Ms. Ardra P. M. won second prize in the event "Town Planning".



The team comprising of Mr. Fredin K. Joy and Mr. Delvin Davis of S6 CE secured first prize in the event "Ship Retro" conducted as part of Vyvidh'19 the techno-cultural fest of Vidya Academy of Science and Technology, Thrissur, held during 8-9 February 2019. The team comprising of Ms. Salini M.S., Ms. Anusha P. Antony, Ms. Mariya Rose Vincent, Ms. Sreya Murali and Ms. Athira Dhanesan of S6 CE participated in the same event.

Publications / Conferences



It has been a moment of pride and joy when the detailed project report for water supply to Thekkumkara grama panchayath prepared by Ms. Tania Baburaj, Ms. Greeshma Davis, Ms. Jinu James, Mr. Sujith M. S. and Mr. Swaroop A. of 2014-18 batch as part of their B.Tech final year project has been highly appreciated by the officials of the

Panchayath and Kerala Water Authority.

The project work completed by our students as part of their curriculum has always received appreciation and recognition at various technical platforms. Ms. Anusha P Antony, Ms. Salini M. S. and Ms. Henna Mariya of S6 CE presented a paper in the poster session in the 31st Kerala science congress held during the 2nd & 3rd of February 2019 at Fatima Mata National College, Kollam.

Ms. Anusha P. Antony has presented the paper titled "Comparative Study of 3D Printing & Conventional Practices" in a national conference (PCON'19) & seminar (PSEM'19) on "Innovations in Engineering & Technology" organized by the Government Polytechnic College, Palakkad and sponsored by the department of technical education and Kerala State Council for Science, Technology & Environment held during 10-11 January 2019.

Ms. Anusha P. Antony has participated in the zonal level of "Perfect Home" an Intercollegiate Rebuilding Kerala Ideation Competition held at Government Women's College, Vazhuthakad Trivandrum on the 25th of January 2019.



Ms. Jerry Soman and Ms. Shahana H. of S4 M.Tech presented their papers "Accident prediction model for horizontal curves" and "A study to determine pedestrian walkability index in mixed traffic conditions", respectively in the International Conference on Recent Developments in Engineering organized by Dhaanish Ahmed Institute of technology on 23rd March 2019. These papers have been published in International Research Journal of Engineering and Technology (IRJET) Volume 6, Issue 3, March 2019.



Our students of S4 M.Tech published their papers in International Research Journal of Engineering and Technology (IRJET) Volume 6, Issue 6, June 2019.

- Ms. Ameera V. U. published the paper titled "Passing opportunity model of vehicles on two lane undivided highways under mixed traffic conditions"
- Ms. Bincy B. J. published the paper titled "GIS Based Road Safety Audit of State Highways in Thrissur"
- Ms. Jerry Soman published the paper titled "Mode choice behaviour Analysis of students in Thrissur city"
- Ms. Maria Francis published the paper titled "Analysis of Passenger flow of rail transportation in Kerala"
- Ms. Namitha Susan Joseph published the paper titled "Pedestrian Safety Analysis at School Zones"



Our students of S4 M.Tech published their papers in International Journal of Engineering Research and Technology (IJERT) Volume 8, Issue 6, June 2019.

- Ms. Leejiya Jose Published the paper titled "Performance Evaluation of Kerala State Road Transport Corporation"
- Ms. Shahana H. published the paper titled "Fuzzy logic based route choice behaviour modelling"



Our students of S4 M.Tech published their papers in International Journal of Scientific and Engineering Research, Volume 10, Issue 5, May 2019

- Ms. Chandni Divakaran P. published the paper titled "Road traffic induced

noise pollution modelling and fuel emission analysis at rail-road crossings”

- Ms. Herin K. J. published the paper titled “Study of on street and off street parking choice behaviour”



Our students of S4 M.Tech participated and presented their work in the 4th Kerala Technological congress - KETCON of KTU TECHFEST 2019 jointly organized by APJ Abdul Kalam Technological University and Kerala State Council for Science, Technology and Environment, hosted by Government Engineering College, Thrissur during 15-17 February 2019.

- Ms. Thasneem Nadirsha presented a research paper titled "Analysis and development of traffic speed flow density relationships for urban roadway"
- Ms. Aswathy K.R presented a research paper titled “Performance Analysis And Modelling Of Entry Capacity Of Roundabout Under Heterogeneous Traffic”
- Ms. Arathi A.R presented the paper titled” Feasibility study of provision for exclusive bus lanes on SH 69 in Thrissur city”



Our students of S4 M.Tech participated in National Conference & Seminar (PCON/PSEM'19) on “Innovations in Engineering & Technology” organized by Government Polytechnic College,

Palakkad Sponsored by the Department of Technical Education and Kerala State Council for Science, Technology & Environment and these papers are published in International Journal of Advanced Research in Computer and Communication Engineering IJARCCCE, Volume 8, Special Issue 1, January 2019

- Ms. Herin K. J. presented the paper titled “Study of on street& off street parking choice behavior”.
- Ms. Nivea John presented the paper titled ”Crash Characteristics Analysis And Blackspot Identification Using QGIS”
- Ms. Arathi A. R. presented the paper titled” Feasibility Study of Provision for Exclusive Bus Lanes on Urban Roads: Effects on Intersections”
- Ms. Jeena Johny presented the paper titled “Two Lane Highway Consistency Based On Alignment Indices”
- Ms. Chandni Divakaran P., presented the paper titled ”Estimation Of Pedestrian Level Of Service Model At Signalised Intersections
- Ms. Namitha Susan Joseph presented the paper titled ”Influence Of Geometric Design Characteristics On Safety Under Heterogeneous Traffic Flow
- Ms. Thasneem Nadirsha presented the paper titled “Analysis and Development of Traffic Speed Flow Density relationships For Urban Roadway”.
- Ms. Leejiya Jose presented the paper titled “Urban awareness and readiness for sustainable Transportation - A Case Study”
- Ms. Maria Francis presented the paper titled “Study On pedestrian Crossing behaviour at Intersections”

- Ms. Aswathy K. R. presented the paper titled “Performance Analysis And Modelling Of Entry Capacity Of Roundabout Under Heterogeneous Traffic

FACULTY ACHIEVEMENT



Dr. Nidhi. M. has reviewed papers in the Third National Conference on Structural Engineering and Construction Management (SECON'19) organized by Department of Civil Engineering, Federal Institute of Science and Technology(FISAT), Ernakulum, Kerala during 15th and 16th May 2019.



Ms. Jisha Akkara delivered a talk on “Surveying- Past, Present and Future” in a two-day training programme on “Land Survey- Conventional and Total station Survey” held on 1st March 2019 at Government Polytechnic College, Chelakkara.



Ms. Archana.S., Ms. Vincy Verghese and Ms. Jisha Akkara co-authored the papers with S4 M.Tech students which has been published in various journals and presented in various conferences.