

# ANNUAL REPORT 23-24

#### **ABOUT FISAT**

Federal Institute of Science and Technology (FISAT), a leading private self-financing professional college, was established in 2002 under the aegis of the Federal Bank Officers' Association Educational Society (FBOAES). Located at Hormis Nagar in Mookkannoor, the birthplace of Federal Bank's founder, Late Sri. K.P. Hormis, the campus benefits from a serene rural ambience conducive to learning and innovation.

FISAT is affiliated with APJ Abdul Kalam Technological University and approved by the All India Council for Technical Education (AICTE). The institution is accredited by the National Assessment and Accreditation Council (NAAC) with an 'A+' Grade (2023) and all eligible undergraduate programs are accredited by the National Board of Accreditation (NBA). FISAT also holds ISO 9001:2015 certification, ensuring its commitment to high educational standards.

The college has consistently advanced its vision of academic excellence under the strategic planning and execution of FBOAES. With over 700,000 sq. ft. of built-up area on a 35-acre campus, FISAT offers state-of-the-art infrastructure that fosters creativity and innovation. Currently, the college has over 3,300 students enrolled in various programs, 1,100 of whom reside in four on-campus hostels. The academic community is supported by 178 faculty members and 115 non-teaching staff, making FISAT an institution with strong academic and administrative support.

FISAT has embarked on a journey of achieving excellence in the professional educational sector of the state. The growth has been very consistent and the institution has been able to maintain the quality of education it provides. Every department in the institute strives to achieve excellence, true to its motto, vision and mission of the Institute.

FISAT has upholds its Vision and Mission and propels ahead with its motto "Focus on Excellence"

The Vision of the institute is "To become a world class professional institute with focus on excellence, moulding committed global professionals and technocrats, who can meet the demands of business, industry and research"

The Mission statements guide FISAT in its pursuit of excellence and is

- > To transform into an advanced centre of Technical Education, which will, in turn bring out professionals with superior skills and social commitment.
- > To provide state-of-the art facilities to mould brilliant young talents, enabling them to take up challenging assignments in the highly competitive global scenario.

The Quality Policy of FISAT is:

FISAT shall strive continually for evolving into an advanced centre of learning and research in the technical and management domains through focus on excellence in all its endeavours, adhering to applicable requirements, embedded in its quality assurance system. The institute is committed to transforming its students into globally competent, socially committed and ethically driven professionals capable of excelling in industry, entrepreneurship and society.

FISAT offers a variety of undergraduate, postgraduate, and Ph.D. programs:

- B.Tech Programs (Intake):
  - Computer Science and Engineering (180)
  - Computer Science and Design (60)
  - Electronics and Communication Engineering (120)
  - Electrical and Electronics Engineering (60)
  - Electronics and Instrumentation Engineering (60)
  - Mechanical Engineering (120)
  - Civil Engineering (120)
- ➤ M.Tech Programs:
  - Power Electronics and Power Systems (12)
  - Structural Engineering and Construction Management (24)
  - VLSI and Embedded Systems (12)
  - Artificial Intelligence and Data Science (12)
  - Renewable Energy (12)
- > M.Tech (Working Professionals):
  - Artificial Intelligence and Data Science (15)
  - Renewable Energy (15)
- ➤ MBA (120)
- ➤ MCA (120)
- > Ph.D. programs in various engineering disciplines and management fields.

The campus is equipped with a FAB Lab, Incubation Centre, modern classrooms, a computerised library, language labs, and recreational amenities like a fitness centre, indoor and outdoor sports facilities, and canteens. The college also provides services like a medical care centre, ambulance, ATM, and transportation facilities.

FISAT has also established research centres such as the Centre for High Performance Computing (CHPC), Instrumentation Research and Consultancy Centre (IRACC), Centre for Applied Research and Development in Civil Engineering (CARD), Centre for Research and Innovations in Signal Processing (CRISP) and Centre for Advanced Research in Power Converters (CARPC) to nurture innovation and research. Professional bodies like IEEE, ISTE, CSI, ASME, ISA, ASCE, and ACM are active on campus, along with technical forums such as Thyra, Echo, Electra, Idea, SAME, Forum, FIESTA, ACE and FFSC.

FISAT has consistently produced top performers in university exams and boasts an active Placement and Training Cell. This cell has successfully placed students in leading companies like Accenture, TCS, Infosys, Wipro, UST Global, as well as in government organisations like BARC, ONGC, and Power Grid. The college is accredited by Tata Consultancy Services for placement activities.

The Institution Day and Founders Day celebrations of this year were held on September 27, 2024, marking an occasion that allowed us to reflect on the beginnings of FISAT and honour the indomitable spirit of our visionary founder, Adv. P V Mathew. It was a day of deep significance, as it reminded us of the humble origins of our institution and the relentless dedication of Adv. P V Mathew, who devoted his life to its growth and development.

Dr. Dharmaraj Adat, former Vice Chancellor of Sree Sankaracharya University of Sanskrit, Kalady, delivered the commemorative speech in honour of Adv. P. V. Mathew on the auspicious occasion of Founders day. He shared valuable insights and experiences, inspiring us to continue the pursuit of excellence and service to society that has been the hallmark of our institution. He acknowledged the contributions of Adv. P V Mathew in building FISAT. The Institution Day and Founders Day

celebrations served as a poignant reminder of our roots and a source of renewed inspiration to carry forward the vision and values that have guided us on this remarkable journey of education and growth.

## **MANAGING COMMITTEE OF FISAT FOR 2023-2025**

The President, General Secretary and Treasurer of the Federal Bank Officers Association are the President, Secretary and Treasurer of the Society 2023-2025 as per the clause XIX(a)(1)(i), (ii) and (iii) of the bye-laws of the society. Nine members were elected to the Managing Committee in the Annual General Body meeting held on 05-November-2023 as per clause XX of the bye-laws. Accordingly, the twelve constituted themselves into the Managing Committee with effect from 05-November-2023. Subsequently, Vice President, Associate Secretary and Associate Treasurer were elected in the first meeting of the Managing Committee held on 13-November-2023 as per clause XIX(a)(iv) of the bye-laws.

| Managing Committee Members for 2023-2025 |                     |  |  |  |  |
|------------------------------------------|---------------------|--|--|--|--|
| Sri. Sachin Jacob Paul                   | President           |  |  |  |  |
| Sri. Paul Mundadan                       | Vice President      |  |  |  |  |
| Sri. Shimith P R                         | Secretary           |  |  |  |  |
| Sri. Abdul Nazar M P                     | Associate Secretary |  |  |  |  |
| Sri. Jenib J Kachapilly                  | Treasurer           |  |  |  |  |
| Sri. Rajanarayanan V M                   | Associate Treasurer |  |  |  |  |
| Sri. Sathyamoorthy S                     | Member              |  |  |  |  |
| Sri. Ajithkumar K K                      | Member              |  |  |  |  |
| Sri. George C Chacko                     | Member              |  |  |  |  |
| Smt. Jayasree K                          | Member              |  |  |  |  |
| Sri. Rajavarma E K                       | Member              |  |  |  |  |
| Sri. Pappachan V O                       | Member              |  |  |  |  |

# The Governing body

As per the guidelines of the AICTE and APJAKTU, the Governing Body was constituted with the following members: The Secretary of FBOAES is nominated as the Chairman of the Governing Body and the President of FBOAES as the Vice Chairman of the Governing Body.

The members of the Governing Body of FISAT are:

- 1. Mr. Shimith P R, Chairman, FISAT (Secretary of the Federal Bank Officers' Association Educational Society FBOAES), Chairman
- 2. Mr. Sachin Jacob Paul, Vice-Chairman, FISAT (President of the Federal Bank Officers' Association Educational Society FBOAES), Vice Chairman
- 3. Dr. Jacob Thomas V, Principal, Secretary

- 4. Mr. Jenib J Kachapilly, Treasurer, FBOAES, Nominated Members of the registered society
- 5. Mr. Paul Mundadan, Vice President, FBOAES, Nominated Members of the registered society
- 6. Mr. Abdul Nazar M P, Associate Secretary, FBOAES, Nominated Members of the registered society
- 7. Mr. Rajanarayanan V M, Associate Treasurer, FBOAES, Nominated Members of the registered society
- 8. Mr. Sathyamoorthy S, Managing Committee Member, FBOAES, Nominated Members of the registered society
- 9. Dr. J Letha, Former Vice Chancellor of Cochin University of Science and Technology (CUSAT) and Currently working as Pro Vice Chancellor in Jain Deemed to be University., Member (Educationalist)
- 10. Dr. K. Vijayakumar, Chairman ISTE, Professor and Director of Technical Education, Kerala (Rtd), Member (Educationalist)
- 11. Mr. Dinesh P Thampi, Vice President & Delivery Centre Head Kerala, Kochi & Trivandrum, Tata Consultancy Services, Infopark, Kochi, Kerala, India., Member from Industry
- 12. Dr. Ramesh Unnikrishnan, Advisor-II, Training and Learning Bureau, AICTE, AICTE Nominee
- 13. Mr. Ajayan C, Deputy Secretary for Higher Education, Government of Kerala, Nominee of Government
- 14. Dr. Dhanya B.S, Associate Professor, Civil Engineering, RIT Kottayam, Syndicate Nominee of University
- 15. Dr. Mini P R, Vice-Principal, Member
- 16. Dr. Unni Kartha G, Dean (Academics), Professor, Member
- 17. Dr. Deepa Mary Mathews, Associate Professor & HoD, MCA, Member

For the smooth coordination of the key functions, the following subcommittees were instituted. The subcommittees oversee the specific functions. The President, Secretary and Treasurer will serve as the ex-officio members of the Sub Committees.

**Purchase & Finance:** The committee reviews the financial aspects of the institution including budget, purchase and provides recommendations to the Managing Committee.

- 1. Sri. Jenib J Kachapilly
- 2. Sri. Sathyamoorthy S
- 3. Sri. George C Chako
- 4. Sri. Ajithkumar K K

**Admission:** The committee reviews the process of admission and provides recommendations to the managing committee.

- 1. Sri. Sachin Jacob Paul
- 2. Sri. Rajanarayanan V M
- 3. Sri. Ajitkumar K K
- 4. Sri. Pappachan V O
- 5. Sri. Abdul Nazar M P

**New Courses:** The committee reviews the possibility of new courses and gives recommendations to the managing committee regarding new and existing courses.

- 1. Sri. George C Chako
- 2. Sri. Paul Mundadan
- 3. Sri. Rajavarma E K
- 4. Smt. Jayasree K
- 5. Sri. Pappachan V O

**Human Resources:** The committee reviews the HR functions and policies of the Institution and provides recommendations to the managing committee.

- 1. Sri. Shimith P R
- 2. Sri. Paul Mundadan
- 3. Sri. Abdul Nazar M P
- 4. Sri. Sathyamoorthi S
- 5. Sri. Rajanarayanan V M
- 6. Smt. Jayasree K

# The Managing Committee met Five times during the year. The major decisions were

- > To proceed with the following new programs: Integrated MCA, M Tech in working professionals.
- Admission under the Overseas Citizens of India /Foreign Nationals/Children of workers in Gulf Countries category for B Tech.
- > To convert to an Autonomous institution.
- > To review the salaries of the non-teaching staff members.
- > To purchase additional land near the football ground
- > To provide seed money for research of faculty members

#### **MAJOR MILESTONES 23-24**

FISAT has set major milestones during the year 2023-2024. The major achievements and activities during the period are:

- ➤ All time record for B.Tech Admission 833 students admitted. Total intake in 2024-25 stands at 1104 in all programs.
- > Granting of 2(f) status by UGC, recognising the college under UGC act and making the institution eligible to apply for Autonomous status
- > NBA Accreditation of B.Tech in Civil Engineering
- > 3 Year extension of approval from AICTE
- > Approval of Overseas Citizens of India / Foreign Nationals / Children of people working in Gulf Countries (OCI/FN) seats in all B.Tech Programs
- > Approval of Integrated MCA by AICTE
- > Scholarships worth Rs. 415.63 Lakhs
- > 502 Placement Offers, 113 Companies visited for campus recruitment
- > 70% Program pass in B.Tech, top 3 among self financing colleges in KTU
- > Rs. 35.5 Lakhs funding received/sanctioned for the Academic Year 2023-2024 under various schemes
- > Indian Society for Technical Education (ISTE) Best Faculty Chapter Award
- Outstanding Student Branch Chapter Award for Institute of Electrical and Electronics Engineerings (IEEE) FISAT Student Branch - Signal Processing Society
- ➤ Interzone winners of Basketball Men, Volleyball Men, Football Women and Runners up for Tug of War Men, Tug of war Women
- > Students of mechanical engineering secured ASME (American Society of Mechanical Engineers) Scholarships worth Rs. 6.5 Lakhs

- The team from EIE was among the three finalist teams globally for the STE Student Awards, which took place in Finland in March 2024.
- ➤ Hosted TEDX FISAT

#### **Admissions**

During this year, the institution was successful in getting Three Year Extension of approval and approval for admitting students under the OCI/FN (Overseas Citizen of India and Foreign Nationals from AICTE. The approval for starting Integrated MCA was also sanctioned by AICTE.

As we know, the engineering education sector in the state as well as the country has been going through a tough phase with demands for non computer science engineering hitting an all time low. In spite of the formidable challenges, FISAT has been able to secure an all time highest number of admission in engineering.

The total number of seats filled stands at 833 in B.Tech on the closing date of admission. This number is more than the approved intake of 720. The detailed branch wise split of the approved intake and the number of seats filled is given in the table below. The number of seats filled includes the supernumerary seats allowed through EWS, AICTE Tuition fee waiver and OCI/FN schemes. The induction program for the B.Tech, Vidyarambham was conducted on 29 August 2024 with an impressive crowd of 3000+ students and parents attending the sessions. The program was inaugurated by Dr. Shalij P R, DTE, Kerala.

|                                             | Approved | Number of seats |
|---------------------------------------------|----------|-----------------|
| Branch                                      | intake   | filled          |
| Civil Engineering                           | 120      | 101             |
| Computer Science and Engineering            | 180      | 224             |
| Computer Science and Design                 | 60       | 74              |
| Electronics and Communication Engineering   | 120      | 150             |
| Electrical and Electronics Engineering      | 60       | 70              |
| Electronics and instrumentation Engineering | 60       | 70              |
| Mechanical Engineering                      | 120      | 144             |
| Total                                       | 720      | 833             |

All seats in the PG programs, MBA and MCA, are also filled this year. The intake in both programs are 120 each. In five M.Tech programs, the total admission is 26 out of the 72 seats available. The college got approval for admitting students under the working professionals scheme for Al&DS and Renewable Energy (RE). Four students are admitted in Al&DS and One student in RE under working professionals.

## **Accreditation & Autonomy**

The two major achievements this year are approval of the college's application for 2f status by the UGC and the accreditation of the B.Tech Program in Civil Engineering.

The application for 2f status was submitted to UGC through APJ AKTU and was approved. With this, the college has become eligible for applying for Autonomous status. The registration process in the UGC portal for Autonomy is completed.

The B.Tech Program in the department of Civil Engineering is accredited for three years from 2024-2027. The visit was conducted from 09-11 February 2024. All eligible UG programs are accredited by the NBA as of now.

#### **Academic Results**

The academic results during the period has been very encouraging, The program pass in B.Tech is 70.6%, MBA, 78%, MCA, 95.87% and M.Tech 100%.

The functioning of the Academic Performance Monitoring Committee (APMC) has been strengthened to improve the academic performance of the students. Individual counselling to students has been implemented to improve the effectiveness of the session.

## **Placement and Training**

The institution places significant emphasis on its Placement and Training programs. Over the past year, the cell has expanded its efforts, offering additional training opportunities to better equip students for campus recruitment. As a result, despite economic challenges such as a global recession and widespread layoffs in the IT sector, the graduating batch of 2024 achieved an impressive 502 job offers from 113 companies, with an average salary package of ₹5.7 Lakhs per annum. Notable companies that participated in the recruitment process include TCS, Asian Paints, TATA Elxsi, SAP, Cognizant, Ruby Seven, Qburst, Digital Core Technologies, Experion, MIL Control, Pidilite, Saint-Gobain, Poornam Infovision, Walkaroo, Federal Bank, ESAF, Astral, ICICI, People10, Kalki Tech, Aditya Birla, RDC Concrete, Schneider Electric, and Procsys. Recruitment for the 2025 batch has just started, with 3 recruitments completed so far, resulting in 26 offers. The placement cell of FISAT Business School is handled at the department level and the outcome is commendable with 95 job offers.

|       | Year of Passing - 2024 |                |                  |                              |                    |                    |      |        |  |
|-------|------------------------|----------------|------------------|------------------------------|--------------------|--------------------|------|--------|--|
| SI No | Branch                 | No of students | No. of<br>Offers | No. of<br>Students<br>Placed | Highest<br>Package | Average<br>Package | Male | Female |  |
| 1     | CE                     | 60             | 52               | 29                           | 7.88               | 3.55               | 11   | 18     |  |
| 2     | CS                     | 124            | 221              | 102                          | 9                  | 4.73               | 50   | 52     |  |
| 3     | EC                     | 110            | 58               | 40                           | 9                  | 4.09               | 20   | 20     |  |
| 4     | EE                     | 35             | 11               | 8                            | 8                  | 3.75               | 7    | 1      |  |
| 5     | El                     | 17             | 8                | 7                            | 8                  | 4.78               | 3    | 4      |  |
| 6     | ME                     | 87             | 25               | 18                           | 9                  | 3.15               | 17   | 1      |  |
| 7     | MBA                    | 118            | 95               | 66                           | 9.5                | 4.92               | 23   | 43     |  |
| 8     | MCA                    | 121            | 32               | 26                           | 11                 | 3.79               | 13   | 13     |  |
|       | Total                  | 672            | 502              | 296                          |                    |                    | 144  | 152    |  |

|                 | Year of Passing - 2025 |     |                  |                              |                    |                    |      |        |  |
|-----------------|------------------------|-----|------------------|------------------------------|--------------------|--------------------|------|--------|--|
| SINO I Branch I |                        |     | No. of<br>Offers | No. of<br>Students<br>Placed | Highest<br>Package | Average<br>Package | Male | Female |  |
| 1               | CSE                    | 129 | 18               | 18                           | 7                  | 5.9                | 8    | 10     |  |
| 2               | CSD                    | 63  | 8                | 8                            | 5.8                | 5.1                | 4    | 4      |  |
|                 | Total                  |     | 26               |                              |                    |                    |      |        |  |

A comprehensive training program was conducted for final-year B.Tech students, consisting of 9 days of Aptitude training, 10 days of technical training, and 6 days of company-specific preparation. The training also included two online practice tests to reinforce learning. To enhance the interpersonal skills, a three-day soft skills workshop was organised for third-year students. A 6-day training program with online practice tests and a three-day soft skills workshop was also organised for the pre-final year students. To further strengthen students' programming abilities, this year, a 12-hour technical workshop was incorporated into the regular timetable. Similar training sessions were conducted for MCA and MBA students.

## **Scholarships**

The institution was able to facilitate the following scholarships to the students during the year. The total amount is Rs. 415.63 Lakhs

| Schol | arships                                                      | No. of Beneficiaries | Amount in Lakhs |  |  |  |  |  |
|-------|--------------------------------------------------------------|----------------------|-----------------|--|--|--|--|--|
| AICTE |                                                              |                      |                 |  |  |  |  |  |
| 1     | Tuition Fee Waiver Scheme                                    | 119                  | 59.50           |  |  |  |  |  |
| 2     | Pragati Scholarship (Girls)                                  | 5                    | 2.50            |  |  |  |  |  |
| Gover | nment of India Scholarships                                  |                      |                 |  |  |  |  |  |
| 3     | Central Sector Scholarship for OBC Students                  | 15                   | 1.50            |  |  |  |  |  |
| 4     | Prime Minister's Scholarship for Central Armed Police Forces | 2                    | 1.80            |  |  |  |  |  |
| 5     | PG scholarship for single girl child                         | 2                    | 0.66            |  |  |  |  |  |
| 6     | AICTE Swannath Scholarship Scheme                            | 1                    | 0.50            |  |  |  |  |  |
| Gove  | rnment of Kerala                                             |                      |                 |  |  |  |  |  |
| 7     | Lower Income Group Fee Concession                            | 206                  | 51.50           |  |  |  |  |  |
| FBOA  | FBOAES Scholarships                                          |                      |                 |  |  |  |  |  |
| 8     | Scholarship for children of FBOAES Members                   | 34                   | 3.70            |  |  |  |  |  |
| 9     | Fee Concessions                                              | 586                  | 293.97          |  |  |  |  |  |

# List of Beneficiaries of Children of FBOAES Members

| 2023 Ad | mission   |                            |             |  |
|---------|-----------|----------------------------|-------------|--|
| SI No   | Branch    | Name of student            | Amount (Rs) |  |
| 1       | CSE       | JOTHSNA SARA KURUVILLA 100 |             |  |
| 2       | CSE       | ALWIN TOMY                 | 10000       |  |
| 3       | CSE       | ABHIRAM A K                | 10000       |  |
| 4       | CSE       | ABHINAV KRISHNA P          | 10000       |  |
| 5       | CSE       | SAFFAN SANEER              | 10000       |  |
| 6       | CSE       | ROSE MOL JOSEPH            | 10000       |  |
| 7       | CSE       | SHREESHANKAR S             | 10000       |  |
| 2022 Ad | mission   |                            |             |  |
| 1       | cs        | AADI SANKAR U I            | 10000       |  |
| 2       | ME        | ALVIN VARGHESE             | 10000       |  |
| 3       | cs        | ANCY ANN PHILIP            | 10000       |  |
| 4       | cs        | ATHULYA K GUPTA            | 10000       |  |
| 5       | cs        | DIYA MANOJ PODUVAL         | 10000       |  |
| 6       | cs        | ERIN ANTU                  | 10000       |  |
| 7       | cs        | EVELINE JESON              | 10000       |  |
| 8       | cs        | HARRY THOMAS BINU          | 10000       |  |
| 9       | cs        | LAKSHMI P MENON            | 10000       |  |
| 10      | cs        | MAEGHNA BUSHI SATHYAN      | 10000       |  |
| 11      | cs        | MARIA MANUEL               | 10000       |  |
| 12      | cs        | MARIA NATHASHA BIJUMON     | 10000       |  |
| 13      | cs        | MARIYA RAHAEL MARTIN       | 10000       |  |
| 14      | cs        | GEORGY JOJO CHIRAYIL       | 10000       |  |
| 15      | cs        | SIDDHARTH NAIR S           | 10000       |  |
| 2021 A  | OMISSIONS |                            |             |  |
| 1       | cs        | ALEN ELDHO PAUL            | 10000       |  |
| 2       | cs        | GOPIKA JAYARAM             | 20000       |  |
| 3       | cs        | HARIPRASAD R               | 10000       |  |

| 4       | ME           | SRAVAN JAIJU           | 10000 |  |
|---------|--------------|------------------------|-------|--|
| 5       | cs           | SHRAVAN SAJITH PODUVAL | 20000 |  |
| 2020 AE | MISSIONS     |                        |       |  |
| 1       | CSE          | ANJANA S KAMATH        | 10000 |  |
| 2       | CSE          | JOAN DAVID             | 10000 |  |
| 3       | CSE          | MALAVIKA K             | 10000 |  |
| 4       | CSE          | SNEHA JOSEPH           | 10000 |  |
| 5       | CE           | SIVARAJ B              | 10000 |  |
| 2022 MC | CA ADMISSION | l                      |       |  |
| 1       | MCA          | GEETHANJALI G          | 20000 |  |
| 2023 ME | BA ADMISSION |                        |       |  |
| 1       | MBA          | KEZIA ANN ANIL         | 10000 |  |

# **Endowments**

| SI No | Name of<br>Endowment             | Department                                | Awarded to                                                                       | Award<br>Amount       | Sponsored by                                                |
|-------|----------------------------------|-------------------------------------------|----------------------------------------------------------------------------------|-----------------------|-------------------------------------------------------------|
| 1     | Vishnu Memorial endowment award  | Computer<br>Applications                  | Best outgoing MCA student                                                        | Rs. 3000/-            |                                                             |
| 2     | Dr. K U Joseph<br>Memorial Award | Science &<br>Humanities                   | Student with outstanding performance in first year B.Tech University Examination | Rs. 750/-<br>Memento  | Family of Dr. K U<br>Joseph                                 |
| 3     | Shinoy George<br>Memorial Award  | Science &<br>Humanities                   | Top Scorer in Mathematics                                                        | Rs. 1000/-<br>Memento | Staff members of<br>Science and<br>Humanities<br>Department |
| 4     | Hima Memorial<br>Award           | Electronics and Communication Engineering | Top Scorer in second and third year                                              | Rs. 1500<br>each      | Batchmates of Ms.<br>Hima                                   |
| 5     | Shaheej<br>Memorial Award        | Computer<br>Science and<br>Engineering    | The winner of the coding competition conducted during CSE day every year         | Rs. 4000/-            | Batchmates of Mr.<br>Shaheej                                |
| 6     | Ambu Sivadas<br>Memorial Award   | Mechanical<br>Engineering                 | Top Scorer in 3rd<br>Semester ME                                                 | Rs. 5000/-            | Family of ambu<br>Sviadas                                   |

## Recipients of PV Mathew Memorial Scholarships (Rs. 7,500/- each)

| SI No | Name                       | Department | Amount (Rs.) |
|-------|----------------------------|------------|--------------|
| 1     | MERCY ANTONY KUNDUPARAMBIL | MCA        | 7,500        |
| 2     | HARITH V                   | MBA        | 7,500        |
| 3     | P SREYA                    | ECE        | 7,500        |
| 4     | FATHIMA .I                 | EIE        | 7,500        |
| 5     | RAHUL .K R                 | CSE        | 7,500        |
| 6     | ALEESHA SHAJU              | CSD        | 7,500        |
| 7     | DONWIN VEMBILAN            | ME         | 7,500        |
| 8     | ALBIN K BABU               | EEE        | 7,500        |
| 9     | ADITHYAN M S               | CE         | 7,500        |

## **Internal Quality Assurance Cell (IQAC)**

Efforts have been initiated through the Internal Quality Assurance Cell (IQAC) to streamline the planning and execution of academic and other activities in the campus. The major activities undertaken by IQAC are coordination of all accreditations, Internal and external audits of the university, Approval process of AICTE, Affiliation process of University and ISO Certifications. The IQAC met two times and reviewed the quality initiatives of the campus. The IQAC also coordinates the meetings of the Internal Governing Council (IGC) and the Governing Body. The IGC met two times, reviewing the planning and progress of the activities of the campus. The Governing Body met once during this period.

The IQAC coordinated the preparation and submission of the application for KIRF (Kerala Institutional Ranking Framework), AQAR (Annual Quality Assurance Report of NAAC) and AISHE (All India Survey of Higher Education). The NIRF (National Institution Ranking Framework) data was also submitted with the support of the R&D Cell.

The IQAC convened two invited talks for the Heads of departments and senior faculty members about Autonomy. These seminars were indented to prepare the heads of departments for the transition to autonomy and the preparations required. A roadmap for Autonomy which summarises the requirements and planning required for transitioning to autonomy was prepared and submitted to the Managing Committee for discussion. IQAC also coordinated two staff development programs, about workplace happiness for non teaching staff and good teacher to gen-z for teaching staff. As per the recommendations of the Governing Body, an interactive session by the student counsellor for the group advisors was also conducted.

#### Infrastructure & Amenities

During the past one year, several significant improvements were made to the campus facilities. A new football ground was established, and additional land was acquired, followed by the construction of

boundary walls. Boundary walls were constructed for the plot near the north gate of the campus as well.

There was increased demand for both men's and ladies' hostels this year. Hostels saw enhancements, including painting of rooms, new beds, almirahs, tables, and washing machines for the ladies' hostel. Other renovation efforts included installing interactive boards in MBA classrooms, setting up of movable display stands in the canteen and seminar halls and upgrading toilets in the boardroom and south block. Security was increased with additional 30 CCTV cameras. The admission cell received new furniture, and the CSE department got a newly furnished staff room to accommodate the newly recruited staff members. Additional installations included an incinerator, water coolers, and filters, along with landscaping improvements around tree bases.

Water testing is periodically conducted to ensure the safety of drinking water in the campus. The functioning of the sewage treatment plant is periodically reviewed. The cleaning and security of the campus contracts were renewed, ensuring efficient and professional management of these essential services. "Very clean and best maintained campus, well equipped labs and amenities" - the remark by the NBA accreditation team is recognition of FISAT's commitment to providing a conducive learning environment and support system for our students.

## **Laboratory Infrastructure**

Laboratory enhancements during the included the installation of 75 new computers in the CCF lab with the latest configurations and the purchase of new chairs for various laboratories. The CAD labs in the Mechanical Department were also refurbished to improve the learning environment. There were minor additional procurement of equipment and software in various departments.

## **Human resources & Administration**

The management has made significant efforts to improve the benefits of employees. It is ensured that all the benefits are extended to the employees including, Pension, Staff Mediclaim, Parents MediClaim, ESI & EPF.

This year, a 1% hike in DA and 3% annual increment for teaching staff was implemented. The consolidated pay for staff under contract, which was fixed in 2014 has been reviewed and increased by 20%.

New pay scale for the non teaching staff was reviewed and implemented. The minimum salary for non teaching staff has been fixed as Rs. 20,000/-.

New principal was appointed during this year. Dr. Jacob Thomas assumed charges on 01 January 2024. There were 8 new appointments in teaching 6 new appointments in non teaching departments. Two employees retired during the period completing their service in FISAT. This includes Dr. Joshua A J, Director MBA and Ms. Surelaman, Lab Instructor, Civil Engineering.

One day workshop about workplace happiness was conducted for non teaching staff. The new software for HR management was successfully developed and testing is underway before the deployment.

|            | Staff Position - Teaching (As on 01-Sep-2024) |                          |                      |                    |           |       |  |  |  |
|------------|-----------------------------------------------|--------------------------|----------------------|--------------------|-----------|-------|--|--|--|
| Department | Asst Prof                                     | Asst Prof<br>(Spl Grade) | Asst Prof (Sr<br>Gr) | Associate<br>Prof. | Professor | Total |  |  |  |
| CE         | 9                                             | 10                       | 1                    | 2                  | 2         | 24    |  |  |  |
| ME         | 5                                             | 9                        | 6                    | 1                  | 2         | 23    |  |  |  |
| CSE        | 8                                             | 18                       | 6                    | 3                  | 3         | 38    |  |  |  |
| ECE        | 1                                             | 12                       | 9                    | 0                  | 4         | 26    |  |  |  |
| EEE        | 0                                             | 6                        | 5                    | 1                  | 2         | 14    |  |  |  |
| EIE        | 0                                             | 4                        | 5                    | 0                  | 1         | 10    |  |  |  |
| MCA        | 2                                             | 6                        | 3                    | 1                  | 1         | 13    |  |  |  |
| MBA        | 2                                             | 3                        | 3                    | 2                  | 1         | 11    |  |  |  |
| S&H        | 9                                             | 6                        | 4                    | 0                  | 0         | 19    |  |  |  |
|            | 36                                            | 74                       | 42                   | 10                 | 16        | 178   |  |  |  |

|                      | Staff Position - Non Teaching (as on 01-Sep-2024) |                     |                 |                      |       |  |  |  |
|----------------------|---------------------------------------------------|---------------------|-----------------|----------------------|-------|--|--|--|
| Department           | Regular (Male)                                    | Regular<br>(Female) | Contract (Male) | Contract<br>(Female) | Total |  |  |  |
| CE                   | 2                                                 | 2                   | 1               | 0                    | 5     |  |  |  |
| CSE                  | 8                                                 | 10                  | 1               | 2                    | 21    |  |  |  |
| ECE                  | 2                                                 | 4                   | 0               | 0                    | 6     |  |  |  |
| EEE &<br>Maintenance | 12                                                | 0                   | 1               | 0                    | 13    |  |  |  |
| EIE                  | 2                                                 | 0                   | 0               | 0                    | 2     |  |  |  |
| Hostel               | 2                                                 | 2                   | 2               | 4                    | 10    |  |  |  |
| Library              | 3                                                 | 4                   | 0               | 0                    | 7     |  |  |  |
| MECH                 | 8                                                 | 0                   | 1               | 0                    | 9     |  |  |  |
| Administration       | 20                                                | 8                   | 3               | 4                    | 35    |  |  |  |
| S&H                  | 0                                                 | 3                   | 0               | 0                    | 3     |  |  |  |
| STP                  | 4                                                 | 0                   | 0               | 0                    | 4     |  |  |  |
| Total                | 63                                                | 33                  | 9               | 10                   | 115   |  |  |  |

FISAT Staff Welfare and Recreation Forum has been very active and coordinated many activities for the welfare of the staff members during the year. The major activities conducted are Medical Check up, Family meet, Awards for academic excellence of children of staff, financial aid and loan to staff, annual gifts, Onam and Christmas celebrations.

# **Mentoring and Student Support**

The student mentoring and support system in the campus has been strengthened with more focus and attention on slow learners and providing emotional and mental support. Meetings of the Academic Performance Monitoring committee are conducted regularly to help the students with their academics.

Students who need professional counselling are facilitated through the on campus counselling cell headed by a full time qualified clinical psychologist. This support is provided on a one-to-one basis in order to address their challenges in academic, behavioural, affective, emotional developmental aspects. Students referred by staff members were individually counselled with adequate follow up sessions depending upon the nature of the problem. Parental counselling and family therapy have been done in cases where it was found to be necessary. This support is helpful in boosting positive mental health of the students which reflects in terms of higher self-esteem, self-efficacy and realistic expectation, counselling also provides a stress-free learning environment where the students excel in holistic development. In addition to this Mental Health Awareness Classes And Induction Programmes were conducted for students across all departments.

## **Library and Learning Resources**

The library offers the students access to an invaluable collection of books, journals, videos and is continuously furnished with new and relevant reference materials. The library is fully computerised. It functions throughout the year from 8 am to 7 pm on all days except Sundays and other holidays. It has access to online databases such as DELNET, EBSCO-Business Source Elite, IEEE, Elsevier Science Direct, ASCE, EBSCO E books etc. The institution library is fully automated with modern software KOHA and an OPAC system. An e - Library platform Knimbus is provided to the users to access digital library facilities (E Journals and E books) by sitting anywhere in the world.

The 'mLibrarymobile' app brings eLearning and multimedia at the fingertips of the users. The mobile App 'mLibrary' offers a multi-format, content delivery App for users to consume eBook collections, e-Course materials, latest journal issues and multimedia learning content. Patrons can access the entire library on their smart phone from anywhere, at any time.

FISAT Library has improved its collection of books to 82,737 this year. A total of 5000 e-journals are subscribed in addition to 224 periodicals and print journals and 10 news papers. An average 250 users utilise the library resources per day. The library has also organised user orientation programs for all first year students. Book exhibition and reading week celebrations were also organised. FISAT Library has also organised Eight programs in association with National Digital Library Club of India during the year.

## **Research & Development**

One of the areas of improvement identified during the NAAC and NBA visits was in Research and Consultancy. To coordinate such activities, the Institution has reconstituted the Central Research Cell (CRC) as the Research and Development Cell with members from all departments. The Research & Development Cell has been very active during the last one year.

Five new members of the faculty have been approved as research guides by KTU. The total number of approved guides in the campus is currently 24. The total number of PhD holders in the institution is 47 and 71 faculty members are pursuing PhD. Four faculty members were awarded PhDs during this year.

The cell published two Issues of the online journal, JSTEM in the year 2024. R&D cell organised a series of webinars and invited talks on topics like Research publication and journal indexing by Dr. Elammaran Jayamani, Swinburne University of Technology Sarawak Campus (SUTS), Role of Academia in Defense R&D ecosystem by Dr. Ajith Kumar K, Director, Naval Physical & Oceanographic Laboratory (NPOL) under the Prime Ministers Amrit Kaal Vimarsh: Viksit Bharat@2047 scheme and Essence of Research in Academe by Dr. Raman Unnikrishnan, Professor, College of Engineering and Computer Science, California State University, Fullerton, California, USA

Emphasis was also given on hands-on learning and innovation through various competitions and exhibitions. The Women Hackathon 3.0, in collaboration with the Ministry of MSME, provided a platform for women-led teams to present innovative ideas, some of which were shortlisted for funding. Participation in events like the Rural Innovators Meet (RIM) and VSSC's World Space Week 2023 allowed students to pitch ideas and engage with the space sector. Faculty members actively participated in programs like "Women in STEM are vital to Future Development" and took part in KETCON 2024, where student teams won accolades. The college has received funding under the AICTE VAANI scheme to organise seminars promoting Indian languages.

A total of Rs 35,47,898/- has been received/sanctioned for the Academic Year 2023-2024 under various schemes. A total of 6 lakh rupees were granted to 12 principal investigators across 6 departments of FISAT under the newly implemented seed money scheme of the management. Also, as on date, a total of Rs 15,01,000/- has been received/sanctioned for the Academic Year 2024-2025.

A total of 10 patent applications were filed and published at the Indian Patent Office, Chennai, in addition to a copyright registration and a response was drafted and submitted for a patent after examination (FER). The IPR Cell organised two events to promote Intellectual Property Rights awareness. "Understanding Intellectual Property Rights (IPR): An Asset to Engineers," was held on November 24, 2023, in collaboration with DPIIT-IPR Chair and IUCIPRS at CUSAT, focusing on the role of IPRs for engineers. The second event, a workshop on "Patents and Copyright Filing Procedures in India," took place on August 18, 2023, led by Prof. J E Moshe Dayan.

## Innovation and Entrepreneurship Development Centre IEDC & FAB Lab

The Innovation and Entrepreneurship Development Centre (IEDC) at FISAT, an initiative by Kerala Startup Mission, aims to promote innovation and entrepreneurship among students and academics. It provides a platform for aspiring entrepreneurs to develop their skills, focusing on emerging technologies and business aspects. The Fablab at FISAT complements this by offering a technical prototyping environment for creating innovative devices.

Throughout the year, IEDC conducted 10 programs, including ideation sessions, virtual reality development workshops, insights from startup founders, and hands-on experiences with Raspberry Pi, Arduino, 3D printing, and vinyl cutting. A notable event was the Women Entrepreneurship outreach panel discussion held in April 2024.

# **National Cadet Corps NCC**

The NCC unit at FISAT, affiliated with the 22 Bn-Kerala Regiment NCC, commenced in May 2022 and currently comprises 52 cadets, including girls. Parades are scheduled on Saturdays and general holidays at 7:00 am to avoid interfering with academic schedules. These parades encompass a range of activities such as drills, weapon training, and military theory, aimed at fostering the holistic development of cadets in sports, academics, cultural pursuits, and adventure.

The NCC unit has been actively engaged in various activities. One of the major events this year was the Combined Annual Training Camp (CATC) from May 10-19, 2024. Other notable events include invited talk by Col. H. Padmanabhan on November 27, 2023, 'Swachhata Hi Seva' Campaign on October 1, 2023, and a floral tribute to Mahatma Gandhi on October 2, 2024. Cadets also participated in CPR and AED training on October 13, 2023, and assisted the Angamaly Police on October 15, 2023. They were involved in the Women's and Child Development Campaign on March 11, 2024, and launched a Bharatham Stall to fund the 'Amar Jawan' statue on February 27, 2024. Additional

activities included a substance abuse awareness session, a personality development class, and disaster management skills training in the month of May 2024. The unit celebrated Environment Day with a tree plantation drive on June 5, 2024, and observed International Yoga Day on June 15, 2024. They also organised a Metro Water and Train Journey with Kripa Sadan Old Age Home members on September 25, 2023, and conducted a town cleaning campaign on October 2 & 4, 2024. Other initiatives included the Orange the World Campaign Day on November 25, 2023, an essay writing competition on December 15, 2023, and NCC Day celebrations on November 26, 2023.

The NCC unit has achieved notable successes, including Lt. Dr. Prasad J C receiving the Best Coordinator Award and being recognized as the Best NCC Officer of 22 K Bn. Cdt. Vigneswar S Kumar secured the second position, while Lcpl. Annmary Benny achieved fourth place in a district-level quiz competition. Cdt. Pradhamesh Prasad Pillai was awarded the Best Firer Award. Lcpl Vyshnav Rajesh Nair and Lcpl Arjun P were selected for the Ernakulam NCC Group RDC. Lcpl Vyshnav Rajesh Nair, Lcpl Arjun P, LCPL Alvin Varghese, Cdt Abhay Chand E, and Cdt Ashikh P K were chosen for the Guard Team of 22 K Bn. Cdt. Annmary Benny also won second prize in a speech competition on 'Earth Hour Day'.

#### **National Service Scheme NSS**

The NSS unit at FISAT has carried out a diverse range of activities throughout the year, reflecting its commitment to community service and social awareness. In total, 25 activities were conducted, covering blood donation drives, cleaning initiatives, and various awareness programs.

## Key activities include:

- Cleaning Programs: These included cleaning Karukutty railway station (October 1, 2023), a flash mob for anti-drug awareness (October 3, 2023), and cleaning Mookkannoor (October 18, 2023).
- ➤ **Blood Donation Camps**: Multiple camps were organised, such as the Mega Blood Donation Camp (October 4, 2023), Jeevani Rudhirasena camp (November 3, 2023), and another at the Blind School in Aluva (January 25, 2024).
- > Awareness Campaigns: Activities included a quiz competition with the anti-narcotics cell (November 30, 2023), energy conservation orientation (December 14, 2023), and a talk on blood stem cell awareness (August 21, 2024).
- > Special Events: The unit hosted the "Day to Remember" in Aluva (October 28, 2023), organised a lakeside marathon in association with the Rotary Club (November 19, 2023), and conducted a food donation drive for orphanages (August 17, 2024).
- > Traffic Management: Activities included the inauguration of Traffic Karmasena (February 25, 2024) and training at Angamaly police station (April 20, 2024).

The NSS unit supported disaster relief by collecting and donating items for victims of the Wayanad landslide (August 1, 2024) and organised a scrap collection for relief funds (August 13, 2024).

Two volunteers, Agnes Shibu and Anto Tomy, were recognized for their exceptional contributions and selected for the National Integration Camp, highlighting the unit's dedication to national service.

## Institute of Electrical and Electronics Engineers IEEE

The student branch of IEEE FISAT organised a range of impactful events aimed at fostering technical skills, leadership, and professional development among students. These events were conducted under the banner of various societies of the IEEE. The IEEE Women in Engineering (WIE) department focused on bridging the gender gap in technology. On June 28, 2024, Prof. Seema Safar delivered a

talk on closing the gender gap in AI education and careers, providing strategies to encourage more women into the AI field. On July 6, WIE hosted the WIEve Epilogue Bootcamp, coordinated by Ashmin Jayson and Naeema Ziyad, which offered hands-on training in emerging technologies to enhance students' technical skills. WIE also organised a 12-hour hackathon on July 20, 22, and 24, mentored by Dr. Mini Ulanat, encouraging innovation and collaboration among participants.

The IEEE Communications Society held a Quiz Competition COSMOS on May 17 to foster interest in satellite communication and later organised AstroQuest on August 22-23 to celebrate National Space Day with events such as COSMOS 2.0, a quiz, and a Doodle Art Competition. The Robotics and Automation Society hosted online sessions introducing students to emerging technologies like AR and VR on April 27, IoT on May 13, and ROS on July 15. The Power and Energy Society (PES) conducted talks on EV and HEV technologies in April, an Energy Sprout Meetup on May 8, and a debate competition on September 3. The IEEE Signal Processing Society (SPS) held ShePULSE on June 28, discussing Al-driven signal processing, and collaborated on IMPULSE 5.0 in August. They also organised a Web Hunt (Web Wars) on September 3 with the Computer Society, which also hosted the Mindmeld series and a Buildathon in August. These initiatives helped foster innovation, collaboration, and technical growth among students.

## **Achievements Summary:**

- 1. **IEEE SPS SBC FISAT** received a \$200 grant as the "Student Branch Chapter Growth Reward."
- 2. **IEEE FISAT SB** was awarded \$2500 under the IEEE SPS Membership Driven Initiative Program 2024 Cycle 2 for IMPULSE 5.0.
- 3. **IEEE FISAT SB** was recognized as the Outstanding Student Branch 2023 in the Kochi Subsection.
- 4. **IEEE FISAT SB Signal Processing Society** secured the First Runner-Up position for the High Performing Student Branch Chapter in India.
- 5. **IEEE FISAT SB Signal Processing Society** received the Outstanding Student Branch Chapter Award 2023 in Kerala.

# **Indian Society for Technical Education ISTE**

The year 2023-2024 was exceptional for the ISTE FISAT Chapter. The ISTE FISAT Faculty Chapter was honoured with the award for the Best Faculty Chapter of the Kerala Section, presented by Dr. Saji Gopinath, the Vice Chancellor of APJ Abdul Kalam Technological University. The chapter successfully organised various events with the support of the management, executive committee members, and student members. This year, 33 faculty members joined ISTE, taking advantage of the instalment scheme offered by the management. Additionally, 439 students from various departments became members of the student chapter of ISTE.

The 34th Annual Faculty Convention of ISTE Kerala Section was held on January 20, 2024 on campus, featuring key figures such as Dr. Saji Gopinath and Dr. Vijayakumar K. On the same day, a National Seminar on Emerging Technological Trends in the Era of Al was presented by Dr. Lizy Abraham.

Several notable activities have been conducted by ISTE during this year. On October 16, 2023, the Institute Innovation Day featured a technical talk on Ambidextrous Organizations and Structure by Mr. Rakesh Nair. This was followed by a seminar on Energy Materials for a Sustainable Future on November 11, 2023, with presentations by Dr. Vimal Kumar T V and Dr. Anshad A Abbas. A workshop on AWS, led by Dr. Jyothish K John, took place on November 27, 2023. The year continued with the AI Spark Hackathon on February 15, 2024, and an invited talk on entrepreneurial success by Mr.

Navaneeth P K on March 12, 2024. From April 17-19, 2024, a workshop on Building Information Modelling was conducted by Dr. Asha Joseph. Also, Mr. Mahesh C led a workshop on Introduction to Problem Solving on August 16 and 23, 2024.

The ARCANE 1.0 Tech Fest and ISTE Day celebration were held on August 31, 2024, with C Prathap Mohan Nair as a guest. The same day, he also delivered a seminar on "From Challenges to Triumph." Mr. Basil K Jeemon gave a technical talk on Al Tools for Teachers on 10th September 2024.

#### Sports Achievements (2023-24)

The year 2023-24 was marked by significant achievements for the sports teams at FISAT. Our athletes demonstrated exceptional skill and dedication across a range of sports, making a notable impact at both inter-zone and d-zone tournaments.

#### KTU Inter-Zone Achievements:

- > Basketball Men Team: Winners of the APJAKTU Inter-Zone Basketball Tournament.
- > Volleyball Men Team: Winners of the APJAKTU Inter-Zone Volleyball Tournament.
- > Football Women Team: Winners of the APJAKTU Inter-Zone Football Tournament.
- > Tug of War Men Team: Runners-up of the APJAKTU Inter-Zone Tug of War Tournament.
- > Tug of War Women Team: Runners-up of the APJAKTU Inter-Zone Tug of War Tournament.

#### KTU D-Zone Achievements:

- > Basketball Men Team: Winners of the APJAKTU D-Zone Basketball Tournament.
- > Volleyball Men Team: Winners of the APJAKTU D-Zone Volleyball Tournament.
- > Volleyball Women Team: Runners-up of the APJAKTU D-Zone Volleyball Tournament.
- Basketball Women Team: Second Runners-up of the APJAKTU D-Zone Basketball Tournament.
- > Table Tennis Men Team: Second Runners-up of the APJAKTU D-Zone Table Tennis Tournament.

## Individual Achievements:

- > KTU Basketball Men Team: Nikhil Thomas, Althaf Muhammad, Joyal J Joseph, Aswin Binu.
- > KTU Volleyball Men Team: Nithin Das, Amal Krishna M L, Abhijith Udayan, Sebin Binu, Akshav K.
- > KTU Tug of War Men Team: Adith D, Gourinandhan, Adwaith Anand, Joel Joe.
- > KTU Tug of War Women Team: Anusree Prakash, Ananya Ajith K, K Shwetha Sugesh.
- > KTU Football Men Team: Anshath Shareef P, Goutham Krishna.
- > KTU Women Basketball: Diya Sajeev.
- > KTU Women Volleyball: Nandhitha Lakshmanan.
- > KTU Men Chess: Nijai Giri.
- > KTU Men Fencing: Anirudh P.
- > KTU Men Badminton: Anoop Shaji.

## Other Achievements:

- Basketball Men Team: Winners of tournaments conducted by Vishwajyothi College, Providence College, FISAT College, and CET College. Runners-up at MBCET College.
- Volleyball Men Team: Winners of tournaments conducted by Musaliar College, MBCET College, FISAT College, TKM College, and CET College.
- > Football Men Team: Winners of the CET College Tournament.

- > Cricket Men Team: Runners-up of the FISAT College Tournament.
- > Badminton Men Team: Winners of the All Kerala Badminton Championship conducted by DIST, Angamaly.

#### **Parent Teachers Association**

The PTA plays an indispensable role in the development of the students of the campus. The PTA has been the backbone of the Institution, providing support to many activities on campus including the student induction program, awards for meritorious students, financial support for placement training, conferences and seminars, curricular and extracurricular activities of the students throughout the year. The annual general body meeting of the PTA was held on 20th April 2024. The executive committee members for the year 23-24 were elected on the day. The PTA executive committee met two times and has been consistently supporting the Institution in all the student activities.

#### **Alumni Association**

The year 2024-25 was slated to be the alumni year for FISAT as it was necessary to build a link with alumni and a huge number of alumni had already passed out. Rupees one lakh per department was allotted from the alumni fund for the conduct of an alumni meet within the year. The use of ALMASHINES to build alumni networking and engagement continued after clearing the glitches with regard to usage. Alumni as experts have been mooted as a method to boost relationships and get their support for future events.

Throughout 2023-24, several notable events and interactions were organised for alumni and current students. On October 3, 2023, Mr. Hrithudev V gave a talk on "Placements and Higher Studies." Following that, on October 11, 2023, Ms. Devika S from the University of Leeds presented a talk on "Career and Education Abroad." An alumni interaction program on December 21, 2023, featured a discussion with Rakesh Roy, Unni S Sankar, Nitish S J, Renjini M, Faris E M, Cyriac Jose, and Rijo Joseph, who shared their success story with the commissioning of the Mukaddam Hydro Electric Power Project in Idukki.

In January 2024, the FISTAA UAE Chapter gathered for their event "Khisa" on January 27, and on July 20, 2024, the FBS Alumni met for "Memento Vivere '24" with Mr. Roji M John, MLA. The MCA alumni generously contributed ₹1 lakh and donated a laptop for the academic development of deserving students on June 27, 2024. The FISTAA Bangalore Chapter held their meeting on August 14, 2024, and on August 25, 2024, Velliyodan C P, a writer, released the cover page of the alumni book "Smartha" at a function in UAE. Additionally, Yesudas George (MBA 2006-08) delivered a talk titled 'Alumni Insights: Navigating the Journey beyond Graduation.'

## **Gender Equity Cell**

Gender Equity Cell organised a series of programs aimed at promoting health awareness, gender neutrality, sensitization, women's empowerment and awareness.. During the period, five key events focused on women's empowerment and health were held. On March 11, 2024, Ms. Sandhya V K from the One Stop Centre, Kakkanadu, spoke on "Gender, Justice and Equality Awareness," and Rural Police Ernakulam conducted self-defence training. Dr. Pony M S of MAGJ Hospital, Mookkannoor, led a health talk on "Empowering Women for Better Health" and a haemoglobin screening camp for female staff and students. The series concluded with a panel discussion on "Women Entrepreneurship Outreach" on April 17, 2024, featuring experts such as Ar. Deepa Mathai and Dr. Mumtaz Khalid Ismail.

The report of the Departments in detail follows

## **Department of Civil Engineering**

During this academic year, the Department of Civil Engineering has achieved a significant milestone by getting accredited by NBA for a three-year period, from 2024 to 2027. This achievement is a testament to the department's commitment to excellence in education and research. The admission for the incoming 2024 B.Tech batch has crossed 100. This growth is attributed to targeted outreach programs, academic results and campus placements. The department continued its tradition of academic results, with an overall pass rate of 76.67% in B.Tech with two students achieving honours degree and 100% in M.Tech.

The department hosted 12 workshops, add on courses and seminars covering various topics such as emerging technologies and industry trends. These events featured distinguished speakers from academia and industry. To bridge the gap between academia and industry, the department arranged 5 industrial visits and guest lectures. These provided students with real-world exposure and insights from experienced professionals. The three day international conference SECON'24 and a project exhibition was conducted focusing on promoting research among students and faculty members. Over 95 research papers were presented, and several innovative projects were showcased.

The students of the department received 49 job offers during this academic year. Leading companies from various sectors participated in the campus recruitment drive, with several students receiving multiple offers. Overall, the period was marked by significant progress and achievements in both academic and extracurricular domains.

## **Major Activities:**

- Three Days National Seminar on Recent Advances in 3D Printing of Buildings, by Dr. Rahul A V, Asst. Professor, IIT Tirupati from 17.01.2024 to 19.01.2024
- > Add-on Course on BIM for B.Tech Final year students by BIMLABS Global, from 22.01.2024 to 13.06.2024
- ➤ National seminar on Navigating the Future of Sustainable Built Environment, Mr. Hariram N P, Research Scholar, UMPSA Malaysia Pahang on 29.01.2024
- > Seminar on Opportunities In Quantity Surveying by Shafeer P P, (FIDIC Trained) (Saudi Arabia) on 26.02.2024
- Q-GIS Training Program: Introductory Level by Mr. Bibin Hezakiel V, GIS Specialist, CDM Smith from 16.04.2024 to 17.04.2024
- Three Day Workshop on BIM by Dr. Asha Joseph, Associate Professor, Department of Civil Engineering, from 17.04.2024 to 19.04.2024
- AAVISHKAR 2024 Student Project Expo from 01.05.2024 to 10.05.2024
- > SECON'24 International Conference from 05.06.2024 to 07.06.2024
- > Add-on Course on Building Planning & Drafting from 22.07.2024 to 26.07.2024
- Concrete: An Enigmatic Designed Construction Material- Invited talk by Er Shyju Nair, CEO
  -DH Academy and Secretary Indian Concrete Institute, Kochi Chapter on 23.08.2024
- > Add on course on Latex on 13.08.2024

## **Achievements of Students and Staff**

- > KSCSTE funding for Three Day FDP conducted during April 2024
- > KTU funding for SECON'24 International Conference August 2024
- Panjami K Received Seed Money for Research from FISAT during March 2024
- > Dr. Sumayya Naznin P H Awarded Ph.D for the thesis titled "Analysis and Prediction of Road Accident Cost" during August 2024
- ➤ Dr. Unni Kartha G completed three consultancy works for FACT, Skyline foundations and BPCL totalling an amount of Rs. 2,18,300/-

## **Publications:**

- Panjami K: A Study on the Effectiveness of Various Geophysical Methods in Detecting Naturally Formed Cavities in Lateritic Deposit, Indian Geotechnical Journal.
- > Panjami K: Unknown Urban Cavities Formation, Problem & Possible Mapping, Current Science Journal
- > Panjami K: Evaluation of dispersive nature of soil in the piping affected regions of Kerala, Journal of Applied Science, Engineering, Technology and Management
- Panjami K: Role of artificial intelligence in effective subsurface characterization, National seminar on emerging technological trends in the Era of AI hosted by Federal institute of science and Technology
- ➤ Panjami K: Underground urban cavities—consequences and identification through an integrated approach, Women Indian Geotechnical Conference 2024
- Anagha K V, Unni Kartha G & Neeraja Nair: Presented and published paper titled Study Of TLDs In Irregular Building by in World Conference on Earthquake Engineering, held at Milan, Italy
- ➤ H Aiswarya, Unni Kartha G & Neeraja Nair, Presented and published paper titled Simulation Of Tuned Liquid Damper Using Particle Finite Element Method (PFEM) by in World Conference on Earthquake Engineering, held at Milan, Italy

| No | Admission<br>Year | Class &<br>Semester | Number of students | Number of students passed | Results (%) | Program<br>pas |
|----|-------------------|---------------------|--------------------|---------------------------|-------------|----------------|
| 1  | 2023              | S1 CEA              | 49                 | 27                        | 55.1        |                |
| 2  | 2023              | S1 CEB              | 47                 | 23                        | 48.94       |                |
| 3  | 2023              | S2 CEA              | 47                 | 20                        | 42.55       |                |
| 4  | 2023              | S2 CEB              | 47                 | 16                        | 34.04       |                |
| 5  | 2022              | S3 CEA              | 38                 | 23                        | 60.53       |                |
| 6  | 2022              | S3 CEB              | 38                 | 18                        | 47.37       |                |
| 7  | 2022              | S4 CEA              | 38                 | 27                        | 71.05       |                |
| 8  | 2022              | S4 CEB              | 38                 | 22                        | 57.89       |                |
| 9  | 2021              | S5 CEA              | 52                 | 34                        | 65.38       |                |
| 10 | 2021              | S5 CEB              | 50                 | 30                        | 60.00       |                |
| 11 | 2021              | S6 CEA              | 52                 | 36                        | 69.23       |                |
| 12 | 2021              | S6 CEB              | 50                 | 34                        | 68.00       |                |
| 13 | 2020              | S7 CE               | 60                 | 54                        | 90          |                |
| 14 | 2020              | S8 CE               | 60                 | 53                        | 88.33       | 76.67          |
| 15 | 2023              | S1 SECM             | 13                 | 11                        | 84.62       |                |
| 16 | 2023              | S2 SECM             | 13                 | 9                         | 69.23       |                |
| 17 | 2022              | S3 SECM             | 19                 | 19                        | 100         |                |
| 18 | 2022              | S4 SECM             | 19                 | 19                        | 100         | 100            |

## **Department of Computer Science and Engineering**

The department of Computer Science and Engineering has been dedicated to achieving its strategic goals for years. THYRA, FFSC, ACM, CSI, and FCS were among the organisations and associations that hosted significant events on behalf of the department during this year. Faculty and students have achieved many accomplishments, in academic, co-curricular and extracurricular areas. The placement statistics of the 2024 pass-out batch were 214 offers for 106 students. The programme result was 83% in B.Tech. Additionally, faculty and students contributed by publishing their work in journals as well as national and international conference proceedings.

# **Major Activities:**

- > Renascence' 23- Introduction to Open Source and Linux Invited talk by Joel Boby M, Alumni FISAT on 7 Oct 2023
- ➤ Invited Talk Introduction to GIT & GITlab by Akhil Babu M K, Timothi M Abey on 25 Oct 2023
- ➤ A talk on Entrepreneurship by Mr. Geemon N J (CEO , Techbright Solutions), for the final year B-Tech Students on 28 Oct 2023
- National Workshop on Deep Learning on 3 Nov 2023
- > Second National Conference on Artificial Intelligence & Cognitive Computing from 3-4, Nov 20236
- ➤ Edge+3.0 Chief guest Mr. Riyas Abdul Kader, SBU Head of Delivery Media NA & UK. from 11-12. Nov 2023
- ➤ Hour of Code' 23- Class taken by students of ACM Student Chapter FISAT for Govt HSS, Mookkannoor school students 6 Dec 2023
- ➤ ICEFOSS 2024 Chief guests Mr. Sunil TT, Director of ICEFOSS, and Mr. Paul Mohan, Engagement Delivery Head at Cognizant from 18-20, Aug 2024
- > Beginner's Workshop on Digital Essentials in association with Health Department on 23 Aug 2024

#### Achievements of students and staff

- > Dr. Jyothish K John NPTEL Elite Silver Certificate in "Introduction to Internet of Things" Jan-Apr 2024
- > Dr. Jyothish K John Patent Published "A method of image transferring by neural evolution and reinforcement learning using adaptive fractal compression" Dec 2023
- ➤ Funding Financial Assistance for Project from APJ Abdul Kalam Kerala Technological University for Mr. Pankaj Kumar G, Dr Arun Kumar M N Eby Kurian, Edric Bijoy Paul, Hisham Muhammed (CSE A 2020 admn) Jun 2024
- > Dr. Hema Krishnan Recognized as Research supervisor, KTU
- > Dr. Paul P Mathai as Resource Person Thesis Evaluator and Final Public Viva Examiner of two scholars Ms. Karthikayani and at Dr. M G R Educational and Research Institute, Chennai
- Ms. Simi Stephen (AP,CSE) NPTEL Elite Certificate in "Introduction to Embedded System Design" and Toppers Certificate in "Introduction to Internet Of Things"
- ➤ Antony Varghese Byju, Bharath Venugopal, Adwaith Shaju, Ananthu Lavjen (CSE A 2021) received Seed Money Funding of Rs. 7,00,000/- under the mentorship of Mr. Mahesh C hosted by EIMR, Bangalore
- ➤ Achyuth Anilkumar, (2020-24) CSE A passout 2023-24 Ambassador for ACM Grand Prize, a Microsoft Surface Go2.
- > Agnes Shibu and Kevin Rex (CSE 2021) Offered Internship at IBM for 6 months

- ➤ Sahil Shefeek, Rozalia C Varghese, Susan Joy, Shifa Mol K H (CSE C 2022) Winners IEEE Hackathon WIEve Epilogue-2.0
- ➤ Vishnuhari V A, Stiya Johnson, Sandra Mariya George, Nandana J (CSE C 2022) 1st Runners Up IEEE Hackathon WIEve Epilogue-2.0
- ➤ Vishnuhari V A, Stiya Johnson (CSE C 2022) First prize in Design Challenge as a part of Mantra 2024
- ➤ Sooraj C R (CSE C 2022) won 2nd prize in District Level Quiz Competition organised by The Kerala Excise Department at Ernakulam Zonal Office Complex, Kacheripady
- ➤ Neeraj Suresh (CSE C 2022) won 2nd prize in District Level Quiz Competition organised by The Kerala Excise Department at Ernakulam Zonal Office Complex, Kacheripady
- ➤ CPL Vyshnav Rajesh Nair (CSE C 2022) Successfully completed IGC-RDC 2023 NCC camp held at Naval Base, Kochi
- > Rhithika M Pradeep (CSE C 2022) secured 3rd prize IEEE Web Quiz-1
- ➤ Midhun K, (S5 CSD-2022) won First Prize in Design Dash-1, UI/UX Design Competition held as part of Impulse 5.0
- ➤ Sanjay Njarakkattil (CSE C 2022) won First prize and Sooraj P (CSE C 2022) won Second prize in COSMOS 2.0, National Space Day Quiz held as part of AstroQuest by IEEE
- ➤ Amrit Lal P Siv (CSE A 2022) secured NPTEL Elite Certificate 'The Joy Of Computing Using Python
- ➤ Alan Antony (CSE A 2022) securedNPTEL Elite Certificate 'The Joy Of Computing Using Python
- > Polwin Davis (CSE B 2021) Paper Presentation Third prize
- ➤ Ann Maria Paul (CSE A 2022) Most Promising Student Volunteer Award of 2023 | IEEE FISAT SB. First prize in Mind Meld March Edition | IEEE CS SBC FISAT Third position in RJ Hunt | IEEE COMSOC SBC FISAT First Prize in Cloud Quest | IEEE CS SBC FISAT
- > Hana O P(CSB 2023) won Second prize in Hackathon Arcane 1.0

#### **Publications**

- Hema Krishnan, Joseph Gladwin, Navneeth M Nambiar, Samanuai A, Vyshakh Madhu T (CSE 2024-passout) An Intelligent Interactive Chatbot For Handling Academic Queries In International Conference On Computational Intelligence, Networks and Security (ICCINS), March 2024
- ➤ Hema Krishnan, Joseph Gladwin, Navneeth M Nambiar, Samanuai A, Vyshakh Madhu T (CSE 2024-passout) Scene Text Recognition In Malayalam, Second National Conference on Artificial Intelligence and Cognitive Computing, November 2023
- ➤ Sreekutty C S (ADS 2023) Sentiment Analysis of Twitter Data using Logistic Regression, Second National Conference on Artificial Intelligence and Cognitive Computing, November 2023
- ➤ Riny Roy (ADS 2023) Seq2Seq Chatbot, Second National Conference on Artificial Intelligence and Cognitive Computing, November 2023
- ➤ Kavya A S (ADS 2023 admn) Sentiment Analysis Of IMDb Movie Reviews Using LSTM, Second National Conference on Artificial Intelligence and Cognitive Computing, November 2023
- ➤ Shafaf Musthafa (ADS 2023) Fake News Detection Using Logistic Regression, Second National Conference on Artificial Intelligence and Cognitive Computing, November 2023
- ➤ Pankaj Kumar G, Edric Bijoy Paul, Eby Kurian, Hisham Muhammed (CSE 2024-passout) Advancements in Video Analysis and Processing: A Comprehensive Literature Review, Second National Conference on Artificial Intelligence and Cognitive Computing, November 2023

- ➤ Anitha T Nair, Anupama R H, Ayisha E A, Emmanuel Jojy, Joju Jose (CSE 2023-passout) Generating Clothing Visualization from Sketches, Second National Conference on Artificial Intelligence and Cognitive Computing, November 2023
- ➤ Pankaj Kumar G, Ebin J Alapatt, Emil Martin, Gautham Suresh (CSE 2024-passout) V.E.R.D-Net: Video Enhancement And Recognition In The Dark Pipeline, Second National Conference On Artificial Intelligence and Cognitive Computing, November 2023
- ➤ Meera Treesa Mathews, Sabir Ebrahim, Richard T S, Sabarinath R, Mohammed Shehzad Hanif, Remya R, (CSE 2021-passout) Literature Survey Real Time Video Based Fire detection, Second National Conference on Artificial Intelligence and Cognitive Computing, November 2023
- ➤ Pankaj Kumar G, Akhil Babu M K, Timothi M Abey (CSE 2021 admn)cTiny Model Manager: A Scalable Deployment Framework, International Conference On Advances In Sensor, Control and safety Networks, NIT Puducherry
- ➤ Reshmi R, Angel Shaju, Ann Maria Anto, Aparna Joshi, Ashmi Subramanian (CSE 2023-passout) Image Steganography: A Short Literature Review And Suggested Improvement For OMR Based Steganography Technique, Second National Conference On Artificial Intelligence And Cognitive Computing, November 2023
- ➤ Pankaj Kumar G, Abhinav K B, Ancy Ann Philip, Akhil Babu MK (CSE 2021) Soil Classification And Moisture Content Estimation From Soil Images Using Image Processing And Deep Learning, KETCON, February 2024
- ➤ Nithya Paul Breast Cancer Detection Using Machine Learning Algorithms A Survey, February 2024 Journal

#### **Academic Results**

| No | Admission<br>Year | Class &<br>Semester | Number of students | Number of students passed | Results (%) | Programme<br>Pass % |
|----|-------------------|---------------------|--------------------|---------------------------|-------------|---------------------|
| 1  | 2020              | S8 CSE              | 124                | 114                       | 91.94       | 84.68               |
| 1  | 2020              | S7 CSE              | 124                | 119                       | 95.97       |                     |
|    |                   | S6 CSE              | 129                | 113                       | 87.60       |                     |
| 2  | 2021              | S6 CSD              | 63                 | 57                        | 90.48       |                     |
| 2  | 2021              | S5 CSE              | 129                | 101                       | 78.29       |                     |
|    |                   | S5 CSD              | 63                 | 58                        | 92.06       |                     |
|    |                   | S4 CSE              | 197                | 180                       | 91.37       |                     |
| 3  | 2022              | S4 CSD              | 63                 | 53                        | 84.53       |                     |
| 3  | 2022              | S3 CSE              | 196                | 182                       | 92.86       |                     |
|    |                   | S3 CSD              | 65                 | 53                        | 81.54       |                     |
|    |                   | S2 CSE              | 197                | 175                       | 88.83       |                     |
| 4  | 2023              | S2 CSD              | 64                 | 50                        | 78.13       |                     |
| 4  |                   | S1 CSE              | 198                | 170                       | 85.86       |                     |
|    |                   | S1 CSD              | 64                 | 52                        | 81.25       |                     |
|    |                   | S1ADS               | 3                  | 3                         | 100         | 100                 |
| _  | 2022              | S2ADS               | 3                  | 3                         | 100         |                     |
| 5  | 2022              | S3ADS               | 3                  | 3                         | 100         |                     |
|    |                   | S4ADS               | 3                  | 3                         | 100         |                     |
| 6  | 2022              | S1ADS               | 4                  | 4                         | 100         |                     |
| 0  | 2023              | S2ADS               | 4                  | 4                         | 100         |                     |

## **Department of Electronics and Communication Engineering**

The Department of Electronics and Communication had a very fruitful year, engaging in diverse activities, enhancing skills of students and faculty, factoring in a holistic development. The department activities were designed to offer a blend of learning, creativity and collaboration. The department had the best admissions for this year with a total of 133 students admitted in UG and 4 students in PG. The department has successfully coordinated technical talks, project expo, workshop and add-on courses. Many faculty in the department had successfully completed online courses in NPTEL with excellent scores. The department received financial assistance for four projects. Two final year projects grabbed the first prize in KETCON paper presentation and one patent was published.

## **Major Activities**

- ➤ Alumni Interaction program by Jose Ben, Conducted by FISTAA on 3/10/2023 and by by Hrithudev on 11/10/2023
- > Field visit -ICAR CUSAT for S8 students on 26/10/2023
- ➤ Technical Talk on "6G OTFS-Based Wireless Communication Systems" by Basil K Jeemon /Christy Jose/Dhanya S on 27/03/2024
- > Final year project expo EXPO ZEST 2k24 and Project Evaluation by Industry Experts on 09/05/2024
- ➤ Electrivia Quiz Competition conducted on 7/5/2024
- ➤ Ideathon 24 competition on 8/5/2024
- > EXPO EXPEDITION 2k24, Treasure Hunt Competition on 09/05/24
- > Two Days Hands on Workshop on Vega Processors by Dr. Krishna Kumar S, Aiswariya Raj, Jilu George from 20/06/2024 to 21/06/2024
- > Add-On-Course (NeST) from 24/06/2024 to 29/06/2024
- ➤ Workshop on Introduction to problem solving and computing by Leena Thomas, Minu Kuriakose, Benoy Abraham 16/8/2024, 23/8/2024
- > Field visit to CIAL solar power plant for S8 Students on 15/02/2024

#### Achievements of students and staff

- ➤ Gayathri I K Top 5% in NPTEL course on "Introduction to Wireless and Cellular Communications"
- > Noble G, Adithya K V, Alexander Jacob, Aswin J, Godly Laiju Published Patent
- ➤ Joshua Alex Mathews, Sandra Babu, Ambili A R & Dhanya S, First prize in KETCON 2024 paper presentation in ECE track
- ➤ Neena J Ukken, Ambili A R & Dhanya S, First prize in KETCON 2024 paper presentation in CSE track
- > Ambili A.R and Noble G Granted seed money for research from FISAT
- ➤ Benoy Abraham: Resource person for panel discussion on the topic "Navigating Gen Z job aspirations: Aligning dreams with future careers and companies" at Tryzens, Technopark, Trivandrum
- > Neena K A Completed NPTEL online course on Medical Image Analysis with Elite grade
- > Dhanya S Completed NPTEL online course on Medical Image Analysis with topper Elite Silver
- ➤ Ambili A.R Judge for Annual Student convention of International Society of Automation Bangalore, iIACT24,
- ➤ Dhanya S, Ambili A R Secured a n amount of Rs. 27,260/- sanctioned as Financial Assistance to Student Projects 2024-25

- > Jilu George Awarded Certificate of Appreciation in recognition of the role as a mentor for the NPTEL Online Certification course "Introduction to programming in C"
- > Rohit R, Sathpriyan Subash, Nandagopal, Sutheerth B P. secured an amount of Rs. 27,260/sanctioned as Financial Assistance to Student Projects 2024-25
- ➤ Deepa N R Awarded "Top mentoring" Certificate of Appreciation in recognition of the role as a mentor for the NPTEL Online Certification course " CMOS DIGITAL DESIGN" Jan-April 2024
- Nimmy M Philip Placed in top 5% for the NPTEL Course computer Architecture conducted on July- October23.
- > Sreelekshmy S: Resource person at the seminar Unlocking Empowerment: Social Media security and Opportunities for Women in collaboration with Kayamkulam Municipality and Women Empowerment Cell of Datatec IT Campus.
- > Bini V K Secured Silver Medal for NPTEL course DeepLearning

#### **Publications:**

- Neena J Ukken, Navya Jose, Megha P Chandran,K Sreerag Student BTech (ECE) Ambili A.R Assistant professor(ECE), Dhanya S Assistant Professor (ECE) Published a paper "A CNN-Powered Surveillance: A Human Computer Interface for Real-Time Detection of Offensive Malayalam Language" at Kerala Technological Conference (KETKON 2024) organised by APJ Abdul Kalam Technological University 16/02/2024-18/02/2024
- ➤ Joshua Alex Mathews, Sandra Babu, Muhammed Nihal T,Rosemary Thomas, (Student BTech ECE), Ambili A.R, Faulty (ECE), Pankaj Kumar G Faculty (CSE), Dr. Anilkumar M.N Faulty (ECE) Published a paper "A Multimodal Fusion Approach using Image and Audio for Effective Bird Detection in Agriculture" at Kerala Technological Conference (KETKON 2024) organised by APJ Abdul Kalam Technological University 16/02/2024-18/02/2024
- Aiswariya Raj Published a paper in SCOPUS indexed Journal titled as Raj, Aiswariya, and Deepa Sankar. "A texture descriptor of the camera fingerprint for source camera model and device identification." International Journal of Intelligent Systems Technologies and Applications 22, no. 2 (2024): 213-235.

| No | Admission<br>Year | Class &<br>Semester | Number of students | Number of students passed | Results (%) | Program<br>pass |
|----|-------------------|---------------------|--------------------|---------------------------|-------------|-----------------|
| 1  | 2020              | S8ECEA              | 57                 | 48                        | 84.21       | 72.73           |
|    |                   | S8ECEB              | 53                 | 50                        | 94.34       |                 |
|    |                   | S7ECEA              | 57                 | 44                        | 77.19       |                 |
|    |                   | S7ECEB              | 53                 | 44                        | 83.02       |                 |
| 2  | 2021              | S6ECEA              | 61                 | 42                        | 68.85       |                 |
|    |                   | S6ECEB              | 61                 | 45                        | 73.77       |                 |
|    |                   | S5ECEA              | 61                 | 49                        | 80.33       |                 |
|    |                   | S5ECEB              | 61                 | 51                        | 83.61       |                 |
| 3  | 2022              | S4ECEA              | 63                 | 47                        | 74.6        |                 |
|    |                   | S4ECEB              | 62                 | 51                        | 82.26       |                 |
|    |                   | S3ECEA              | 63                 | 48                        | 76.19       |                 |
|    |                   | S3ECEB              | 62                 | 50                        | 80.65       |                 |

| 4 | 2023        | S2ECEA | 65 | 54 | 83.08 |     |
|---|-------------|--------|----|----|-------|-----|
|   |             | S2ECEB | 65 | 46 | 70.77 |     |
|   |             | S1ECEA | 66 | 51 | 77.27 |     |
|   |             | S1ECEB | 65 | 55 | 84.62 |     |
| 5 | M.Tech 2023 | S1     | 4  | 1  | 25    |     |
| 6 | M.Tech 2022 | S3     | 1  | 1  | 100   | 100 |
|   |             | S4     | 1  | 1  | 100   |     |

## **Department of Electrical and Electronics Engineering**

The department has shown consistent progress in both admissions and student achievements in 2023 and 2024. The department successfully admitted 62 students in the year 2023 and 70 in 2024. Students secured 11 placement offers for the 2020 admission out of a total 35 students. A good number of students secure more than 8 SGPA in university examinations. The most notable event organised by the department was the international conference SPECon-2024 featured keynote sessions by distinguished professors from India and abroad, including University of Nottingham, Malaysia, Aalborg University, Denmark University of Priština in Kosovska Mitrovica, University of Nottingham, U K, Kempten University of Applied Sciences, Germany, covering topics like electric vehicles, wind power, and renewable energy integration, along with paper presentations to foster innovation in power and renewable energy.

Several events were organised by Electra, the Students Association of the EEE Department, including sessions on study-work opportunities in Europe and management education in October 2023. Notable events such as the Power Quiz 2023, Mini Project Expo - Techfuse, Iluminar 2k24, and Energy Quiz 2024 provided students with knowledge in electrical engineering and showcased their projects.

## **Major Activities:**

- > Second International Conference on Smart Technologies for Power and Renewable Energy (SPECon), April 2-4, 2024
- ightharpoonup Add on course- " Embedded controllers "2020-2024 batch, NeST , Kochi, 21-08-23 to 31-08-2023
- > Add on course- "AUTOCAD -REVIT MEP", 2020-2024 batch, CAD centre from 15 th to 24 th FEB 2024
- ➤ Intra-college quiz competition on 'Energy Conservation & Sustainability', Energy Audit Cell on 17-10-2023
- ➤ Abroad higher education guidance program Study=Work Settle Opportunities in Europe by Mr. James Ellis, Director of Edvantage International Consulting Limited on 6-10-2023
- ➤ Career Guidance Talk, Mr. Hardy Joseph, Senior General Manager of T.I.M.E., Kochi on 27-10-2023
- > Power Quiz 2023 by KSEB Officers on 21-11-2023
- > Techfuse 2023- Mini Project Exhibition on 5-12-2023
- ➤ Iluminar 2k24 Main Project Exhibition on 7-05-2024
- ➤ Energy Quiz KSEB Engineers on 4-9-2024

## Achievements of students and staff

- > Dr.Rinku Scaria awarded PhD
- > Jayanth Philip Jacob IEEE PES Kerala chapter quiz competition on 04/11/2023
- > Sayooj T, Abhinav M K,S7 EEE, Winners, Energy quiz, KSEB Engineers on 4/09/2024
- > Dr. Parvathy R, Gold Certificate, All India Topper of Control System Swayam NPTEL, Oct 2023
- > Dr. Archana R, selected as Member, Board of Studies. APJAKTU
- Ms. Deepa K, Member, Syllabus revision committee APJAKTU

#### **Publications**

- > Dr. Rabiya Rasheed, Designing of MPPT Solar charge controller, International Conference
- > Dr. Rabiya Rasheed, Microgrid solutions for sustainable railway networks, International Conference
- Surya Natarajan, Control Signal Generation for Novel Nine level Switched Capacitor Multilevel using analog circuits, International Journal of Power Electronics by Inderscience Publisher
- > Jyothi G K, Designing of MPPT Solar charge controller, International Conference
- > Dr. Rinku Scaria, Microgrid solutions for sustainable railway networks, International Conference

| No | Admission Year | Class &<br>Semester | Number of students | Number of students passed | Results (%) | Program<br>pass |
|----|----------------|---------------------|--------------------|---------------------------|-------------|-----------------|
| 1  | M.Tech (2022)  | S3 PEPS             | 1                  | 1                         | 100         |                 |
| 2  | M.Tech (2022)  | S4 PEPS             | 1                  | 1                         | 100         | 100             |
| 3  | B.Tech (2021)  | S6 EEE              | 60                 | 37                        | 61.67       |                 |
| 4  | B.Tech (2021)  | S5 EEE              | 60                 | 39                        | 65          |                 |
| 5  | B.Tech (2020)  | S8 EEE              | 35                 | 23                        | 65.71       |                 |
| 6  | B.Tech (2020)  | S7 EEE              | 35                 | 23                        | 65.71       | 48.57           |
| 7  | B.Tech(2022)   | S4 EEE              | 62                 | 31                        | 50          |                 |
| 8  | B.Tech(2022)   | S3 EEE              | 62                 | 25                        | 40.32       |                 |
| 9  | B. Tech (2023) | S2 EEE              | 62                 | 39                        | 62.9        |                 |
| 10 | B. Tech (2023) | S1 EEE              | 62                 | 36                        | 58.06       |                 |

# Department of Electronics and Instrumentation Engineering

The Department of Electronics and Instrumentation had a highly successful year in terms of results and admissions. The University results for the 2022 admissions were 100% for semesters 7 and 8. The passing rate for the program improved from 68% (2023 graduating batch) to 75% in the 2020-2024 batch.

The admission statistics for the Department of Electronics and Instrumentation were impressive during the 2023-24 academic year, with 100% admission, representing the enrollment of 60 students and 70 students in 24-25.

Six students from the 2019-2023 batch, with the guidance and support of Ms. Lakshmi Nandakumar, achieved remarkable success in technology-related project work by winning Xplore 2023, an international project competition hosted by Phoenix Contact, Germany. The students and their mentors had the privilege of attending the finals in Germany on October 18, 2023, with all travel and accommodation expenses covered by the host company. Two faculty members completed PhD during this year.

The Department of Electronics and Instrumentation team emerged as the winner of the state-level Student Innovation Competition IEEE KREEPA GREEN POWER EXPO 2023, South India's largest Renewable Energy Expo, held in December 2023. The team from EIE was among the three finalist teams globally for the STE Student Awards, which took place in Finland in March 2024. Mr. Akash Pradeep had the opportunity to attend the finals held in Helsinki, Finland, with all travel and accommodation expenses covered by the organisers. Six faculty members published four patents during this period through the FISAT IPR cell.

## **Major Activities**

- "Challenge Yourself" Workshop, Sanju P Cherian, Certified trainer, 13th,14th Oct,2023
- > Technical Talk- Open Ecosystem for the Future of Industrial Automation, Mr. Vishal Kumar, Global trainers of PLCnext, Phoenix contacts, 1st Nov, 2023
- > Workshop on Verilog HDL, Ms. Shruthi Bhaskaran, Assistant Professor, EIE, 24th Nov, 2023
- > Social Reach Out Workshop at nearby Schools, Hobby Electronics Club, EIE-S5 EIE students, 6th Dec, 2023
- ➤ iACT24-Students convention of ISA (Professional society)- Bangalore section, ISA Bangalore section leaders and faculties,19th & 20th April 2024

#### Achievements of students and staff

- > Dr. Anil Johny Completed his PhD from Cochin university in "Prediction of Malignancy in Histology Image with Deep learning Model Using Resource Limited Embedded Devices and Edge Computing
- > Dr. S Sudararajan Completed Ph.D. on the topic of "Synthesis and Analysis of Low Power and High-Speed Translinear Circuits for the Linearization of Sensors" at Cochin University of Science and Technology, Cochin
- Aaron Sabu Joseph, Aakash Shaji, Amala Joy, Allen Simon Antony, Clinto Jose, Aravind Surendran, Mentors: Lakshmi Nandakumar & Dr. Abi P Mathew, Winner XPLORE Technology Awards 2023, FISAT won the international competition organised by German Multinational -Phoenix Contact in the category "Smart Technology", 18th Oct, 2023
- ➤ Alfred Antony, Austin Dennis, Sana Yasmin, Sneha G, Vidhun, Ashwin E R, Mentor: Sreevidya P, FINALIST- Smart India Hackathon The team from FISAT, EIE reached the finals of Smart India Hackathon 2023. Finals were held at D. Y. Patil College of Engineering, Pune, Maharashtra, 19th-23 Dec, 2023
- Aaron Sabu Joseph, Aakash Shaji, Amala Joy, Allen Simon Antony, Clinto Jose, Aravind Surendran Mentor: Lakshmi Nandakumar, Winner of IEEE KREEPA Student Innovator, Team from EIE was the Winner of the state level Student Innovation Competition IEEE KREEPA GREEN POWER EXPO 2023, South India's Biggest Renewable Energy Expo

- Akash Pradeep Kumar, Parthiv A, Nikita Susan Binu, Mentor:Abi P. Mathew, Finalist- STE Award 2024, Team from EIE, FISAT were one among the three finalist teams globally for STE Student Awards 2024, during International Conference on Smart Technologies & Education held at Helsinki, Finland on 8th March 2024
- ➤ Justin Jacob & Fathima TI, Mentor:Lakshmi Nandakumar, Top 5 %: NPTEL course Sensors and Actuators in by IISc Bangalore -May 2024, May 2024
- Ms. Lakshmi Nandakumar, Top Performer- NPTEL course on Sensors and Actuators in by IISc Bangalore, May 2024
- ➤ Adarshraj T B, Top 1 %: NPTEL course on Sensors and Actuators in by IISc Bangalore -May 2024
- ➤ Ms. Lakshmi Nandakumar, Translated files of course Analog Circuits (108101094) by IIT Bombay Nov 2023
- Ajanya S, Joseph Vincent, Vinry Mary Melvin mentored by Sreevidya P, 3rd Prize in paper presentation competition EEE & EIE track at KETCON-2024, March organised by KTU , March 2024
- ➤ Ms.Sreevidya P, Top 5% NPTEL course on Introduction to Embedded System Design July-Sep 2023, Sep, 2023
- ➤ Ms.Sreevidya P Panellist, Discussion on Navigating Careers in Digital Age at NSSCE, Palakkad 27th Dec 2023
- > Ms.Sreevidya P Resource Person: Workshop on NI LabVIEW for S6EEE , 16th Dec 2023
- Raji P and Honey Devassy, Consultancy work done for RUSA project of CUSAT worth INR 80000, April 2024
- > Raji P, Yukti Innovation challenge Finalist, April 2024
- ➤ Raji P and Honey Devassy, Resource persons for Marketing orientation training programme for women entrepreneurs hosted by School Of Management Studies CUSAT as a part of RUSA project 15-01-2024
- > Raji P and Honey Devassy, Received a grant of INR 6 lakh from Kerala StartUp mission (women productization grant), Feb 2024
- ➤ Raji P and Honey Devassy, Attended the round table conference on Academia and Entrepreneurship along with Dr Saji Gopinath and higher officials of various engineering college as part of TiECON Nov 2023
- > Raji P and Honey Devassy, Attended the biggest startup conclave Huddle global by KSUM, Oct 2023
- ➤ Raji P and Honey Devassy, Represented IIC FISAT at the IIC regional meet Ernakulam and put up a stall, 16-01-2024
- ➤ Raji P, Mentored St Aloysius college Jabalpur and Symbiosis institute of Technology Pune for National Entrepreneurship challenge by IIT Bombay and received INR 5000 for exemplary performance as mentor, Nov 2023-Jan 2024
- > Raji P, Attended the SelectUSA Investment summit at Washington DC with funding support from Kerala Startup Mission, June 23 to 26 2024
- ➤ Raji P, Resource person at KMEA Engineering college for a seminar on "Lean startup and MVP", 25 Aug 2023

## **Publications**

- ➤ Dr. Abi P Mathew, Pooja C P, Sandeep Prem & Sreeram Modi, A Cost-Effective System Of Controlling Position And Temperature For Dhara Therapy, Patent Application Publication, 27/10/2023
- Dr.Abi P Mathew, Dr.S Sundararajan, Lakshmi Nandakumar, Akash Pradeep Kumar, Parthiv A, Nikita Susan Binu, A System For Conserving Water On Urinal Closet Using Two Solenoids And Double Check Mechanism, Patent Application Publication, 02/02/2024

- ➤ Dr. Anish Mathew K, Shruthi Bhaskaran, Smruthy S, Akhilkumar M, A Method Of Generating Electric Power From Solid Waste Materials By Harnessing Thermopiles , Patent Application Publication, 02/02/2024
- Sreevidya P, Ambily A R, Abhishek E P, Amritha M, Rishikesh Biju, A Novel Apparatus For Detecting Invasion Of Bugs In Petrol, Patent Application Publication, 02/02/2024
- ➤ Alfred Antony, Austin Dennis, Sreevidya P, Indian Sign Language Interpreter A Portable Device 15th International Conference on Soft Computing and Pattern Recognition (SoCPaR 2023), Springer(SCOPUS indexed) Dec 13-15 2023.
- ➤ Vidun R, Sneha G, Mohammed Sanad Nishad, Sreevidya P, Auto-adjusting Arm for Monitor Control, Second National Conference on Artificial Intelligence and Cognitive Computing(NCAICC-23) by CSE dept, FISAT on 3rd and 4th Nov-23
- ➤ Ajanya S, Josph Vincent, Vinry Mary Melvin, Sreevidya P, Automatic Biogas Plan Second National Conference on Artificial Intelligence and Cognitive Computing (NCAICC-23) by CSE dept, FISAT on 3rd and 4th Nov-23.
- ➤ Ms. Lakshmi Nandakumar, Water management system at home for a sustainable world using IoT, Recent Advances in Intelligent Computational Systems(RAICS) 2024 at MCE, Kothamangalam-May 2024

| No | Admission<br>Year | Class &<br>Semester<br>(eg:S2 CE) | Number of students | Number of students passed | Results (%) | Program<br>pass |
|----|-------------------|-----------------------------------|--------------------|---------------------------|-------------|-----------------|
| 01 | 2020              | S8EIE                             | 17                 | 17                        | 100         | 75              |
| 02 | 2020              | S7EIE                             | 17                 | 17                        | 100         |                 |
| 03 | 2021              | S6 EIE                            | 28                 | 17                        | 61          |                 |
| 04 | 2021              | S5 EIE                            | 29                 | 19                        | 66          |                 |
| 05 | 2022              | S4 EIE                            | 31                 | 22                        | 71          |                 |
| 06 | 2022              | S3 EIE                            | 31                 | 21                        | 68          |                 |
| 07 | 2023              | S2 EIE                            | 58                 | 33                        | 57          |                 |
| 08 | 2023              | S1 EIE                            | 60                 | 20                        | 33          |                 |

## **Department of Mechanical Engineering**

The Mechanical Engineering department at FISAT offers a B.Tech programme in Mechanical Engineering (NBA Accredited) and M.Tech programme in Renewable Energy. The department is also recognized by APJ Abdul Kalam Technological University as a research centre for Ph.D programmes. Since its inception in 2009, the department has focused on high-quality teaching and hands-on learning, providing students with a strong, interactive curriculum that prepares them for advanced studies or professional engineering careers.

In the year 2023-24, the department conducted a variety of activities, including workshops on drones and SolidWorks, guest lectures on green building concepts, and technical quizzes. Key achievements include faculty and student projects securing grants, several students receiving prestigious certifications and awards, and the ASME student section earning a distinguished award. SAE FISAT's

Team ASTRA also excelled in a nationwide autonomous drone competition, and faculty members published research in reputable journals. These activities and achievements highlight the department's focus on practical learning, research, and industry engagement. Students also secured scholarships from ASME.

## **Major Activities**

- ➤ Online Drone Workshop, Mr. Aashish C, Assistant Professor of Aeronautical Engineering at KCG College of Engineering and the visionary Head of Drishyam Drones on 30/10/23
- ➤ SAE Tier 1 Competition on 08/11/2023
- ➤ Drone Workshop by ASME on 15/11/2023
- ➤ Launching of All Terrain Vehicle Magna by SAE FISAT on 25/11/2023
- > Add on Course on Solid Works by Conceptia, Bangalore from 28/11/2023 to 02/12/2023
- ➤ Erudite Lecture Series Eighth in Series Annual Guest Lecture Topic "Green Building Concepts and Sustainable Energy Solutions" Dr. Dibakar Rakshit, Associate Professor, Dept. of Energy Science and Engg., IIT Delhi on 20/12/2023
- > Value added course on ON "MS EXCEL" by Mr. Harish Aboobacker & Mr. Martin Antony 16/02/2024 to 24/02/2024
- Online Webinar "Fresh Engineer's at Work navigating Entry level challenges ASME FISAT As a part of international women's day celebration, Ms. Thejus Ajay TCS, Bangalore Alumnus 2018 Admission on 08/03/2024
- ➤ The Mech FISAT Alumni Connect (MFAC) Scholarships 2024, Alumni Group 2013 passed out, 21/04/2024
- > ASME FISAT conducted "Tech Trivia" Technical Quiz Competition, 06/05/2024
- > Five day Add on Course on "CFD for Engineers" For 2021 Admission, Mr. Martin Antony
- ➤ ASME EFx Tech Fest 300 External Participants from. Participation from Gujrath, Orissa, Karnataka, Tamil Nadu and Maharashtra by ASME FISAT on 24/08/2024

#### Achievements of students and staff

- Dr. Harish T M, Asst. Professor (Spl. Grade), Mechanical Engineering Dept., A project titled "Methodological Analysis in to Mechanical and Microstructural Attributes of Functionally graded inconel 825-SS304L Manufactured Using Wire Arc Additive Manufacturing selected under KTU student project scheme and eligible for a grant of Rs.35,000/-.
- ➤ Dr. Rejeesh C R, Associate Professor, Rs 2 Lakh financial grant received for 3 Day Seminar on Green Energy and Sustainability under AICTE-VAANI (Vibrant Advocacy for Advancement and Nurturing of Indian Languages) scheme
- > Dr. Rejeesh C R, Associate Professor & Mr. Tom Anto, Assistant Professor (Spl. Grade) secured Rs 3.5 Lakh grant for AICTE Funded ATAL FDP
- Mohammed Hashim and Jeevan P V of S3 ME Won Third prize in the P V Mathew Memorial Mathematics Quiz Competition organised by S&H dept, FISAT 19/10/23
- ➤ Mr. Renjith R, Asst. Professor, Mechanical Engineering Conducted a 2-day workshop on "Finite Element Analysis using ANSYS", for Faculty and Research scholars of College of Engineering, Thiruvananthapuram 26/10/23
- > Mr. Ranjith R, Successfully filed patent through college IPR cell
- ➤ ASME FISAT achieved a massive Triumph at EFX x MACE, securing 2nd and 3rd place in Bridge building competition and 3rd place in Design hackathon 09/12/2023
- Students of final year Mechanical Engineering 32 students of final year Mechanical Engineering achieved the prestigious Certified SOLID WORKS Expert(CSWE - Mechanical Design) certification, awarded by Dassault Systems
- Mr. Rythin Varghese, S8 ME B Selected to receive the 2024 ASME Charles T Main Student Section Leadership Silver Medal "for the outstanding leadership of ASME FISAT section and

for the development of transformative initiates, building multiple partnerships between academia and industry and promoting student involvement in Engineering societies". The award consists of a \$ 2000 honorarium, a silver medal, a certificate and a travel supplement not to exceed \$ 750. The award distribution will be held in the USA.

- Ms. Rima Varghese of S8 ME B, Selected for receiving a honorarium of \$ 500 for her contributions to ASME FISAT
- Mr. Jiju P P, Received certificate of appreciation for mentoring the NPTEL course "Manufacturing Process Technology". 12 students completed the course with high grades 12/06/2024
- > Anto Tomy, S6 ME A ASME Marcus N Bressler Memorial Scholarship of \$5500
- > Anand Shivan, ASME Foundation Scholarship of \$1000
- > Vaishnav S Kumar, ASME Foundation Scholarship of \$1200
- → 4 students of 2020 admission graduated with honours degree and 8 students graduated with minor degree
- ➤ The ASME student section received the Distinguished student section Award. Eligible for a grant of Rs. 10000/-
- > Dr. Harish T M, ASME India Faculty All star Supporter Award
- > Rhythin Varghese, ASME India Star chair Award
- > Team ASTRA, powered by SAE FISAT, secured an impressive 4th position nationwide and 1st in KERALA out of 47 teams at the SAEISS Autonomous Drone Development Competition 2024, held at KCG College of Engineering, Chennai

#### **Publications**

- ➤ Renjith R, An insight into the mechanical and morphological properties of palm oil plasticized high-density polyethylene-chitosan composites, Sustainable Chemistry and Pharmacy, 41, 101663.2024. https://doi.org/10.1016/j.scp.2024.101663 SCIE Indexed (IF: 5.5)
- ➤ Tom Anto, Rejeesh C R, Investigation of Mechanical Properties of 3D Printed Biodegradable Polylactic Acid Reinforced with Paper Microcrystalline Cellulose Applied Science and Engineering Progress, 17 (4), 7540 (1-9), DOI: 10.14416/j.asep.2024.08.007 (Scopus Q2).
- ➤ Rejeesh C R, Tom Anto, Effect of Borax-Boric acid treatment on Fire resistance, Thermal stability, Acoustic, and Mechanical Properties of Mycelium Biocomposites Applied Science and Engineering Progress, 17 (4), 7271 (1-11), DOI:10.14416/j.asep.2023.11.007 (Scopus Q2).

| No | Admission Year | Class &<br>Semester | Number of students | Number of students passed | Results (%) | Program<br>pass |
|----|----------------|---------------------|--------------------|---------------------------|-------------|-----------------|
| 1  | 2020           | Program Pass        | 87                 | 53                        | 60.91       |                 |
| 2  | 2020           | S8 ME               | 87                 | 75                        | 86.21       | 60.91           |
| 3  | 2020           | S7 ME               | 87                 | 71                        | 81.61       |                 |
| 4  | 2021           | S6 ME               | 99                 | 43                        | 43.43       |                 |
| 5  | 2021           | S5 ME               | 99                 | 42                        | 42.42       |                 |
| 6  | 2022           | S4 ME               | 113                | 42                        | 77.17       |                 |
| 7  | 2022           | S3 ME               | 113                | 58                        | 51.33       |                 |
| 8  | 2023           | S2 ME               | 117                | 64                        | 54.7        |                 |

| 9  | 2023 | S1 ME        | 118 | 64 | 54.23 |  |
|----|------|--------------|-----|----|-------|--|
| 10 | 2023 | S1 M.Tech RE | 4   | 3  | 75    |  |
| 11 | 2023 | S2 M.Tech RE | 4   | 2  | 50    |  |

## **Department of Science and Humanities**

The Department of Science & Humanities hosted several notable events in 2023-2024. On January 6th, the department organised FISAT SCIQUEST, an All Kerala Inter-School Quiz Competition, which saw participation from around 100 students representing 50 schools across the state.

TEDx FISAT 2024 was held on April 16th. The event featured 10 distinguished speakers who shared their insights on the theme "Refashioning the Elementary."

An international conference titled "Advanced Energy Materials for a Sustainable Future," sponsored by ANRF (DST SERB), took place on August 22nd and 23rd. This conference included keynote and invited addresses from 10 prominent speakers, including former MG University Vice-Chancellor Dr. Sabu Thomas, former Calicut University Vice-Chancellor Dr. M. K. Jayaraj, and former Chief Advisor R&D at Apollo Tyres, Mr. P. K. Mohamed.

The department continued its annual tradition with the P. V. Mathew Memorial Mathematics Quiz Competition and the English Elocution competitions.

## **Major Activities**

- > PV Mathew Memorial Inter Departmental Elocution Competition 20/10/2023
- > PV Mathew Memorial Inter Departmental Mathematics Quiz 19/10/2023
- ➤ National Seminar on Energy Materials for a Sustainable Future & Poster Presentation Competition 11/11/2023
- National Seminar on Energy Materials for a Sustainable Future Dr. Sreekala M S, MG University 24/2/2024
- ➤ National Webinar on National Mathematics Day by Mr. Anand, Research Scholar, IIT Madras 18/12/2024
- > FISAT SCIQUEST, All Kerala Inter School Quiz Competition 6/01/2024
- ➤ Shinoy George Memorial Lecture by Dr. Manju K Menon, St. Paul's College, Kalamassery 9/04/2024
- > TEDx FISAT 16/4/2024
- ➤ Technical Talk on Battery Storage systems by Mr. G Sivaramakrishnan, CEO, Konark Systems 22/6/2024
- ➤ ANRF(DST SERB) sponsored International Conference on Advanced Energy Materials for a Sustainable Future(ICAEMS 2024) 22 & 23/8/2024

## **Achievements of staff**

- > Dr. Keerthi G Nair APJ KTU-CERD secured grant under Research Seed Money Scheme 11/07/2024
- ➤ Dr. Sona Narayanan ANRF(DST-SERB) secured Funding for International Conference on Advanced Energy Materials for a sustainable future (ICAEMS 2024) 30/07/2024
- Dr. Keerthi G Nair secured Seed Money for Research Scheme -FISAT 01/03/2024
- Dr. Sona Narayanan secured Seed Money for Research Scheme -FISAT 01/03/2024
- ➤ Ms. Vidya T P secured Seed Money for Research Scheme -FISAT 01/03/2024

➤ Ms. Anisha Joseph secured Seed Money for Research Scheme -FISAT 01/03/2024

#### **Publications**

- ➤ Ms. Anisha Joseph An investigation of the structural and optical properties of Nb-doped SnO2 thin film. MaterialsToday: Proceedings (2023)
- ➤ Ms. Anisha Joseph Deposition Temperature as a Crucial Process Parameter in Tuning the CO2 Sensing Properties of Spary- Pyrolyzed SnO2 Thin Film. ECS Journal of Solid State Science and Technology 12.11 (2023): 117005.

# **Department of of Computer Applications [MCA]**

The year 2023-24 was a standout period for the Department of Computer Applications, marked by significant milestones and achievements. The department significantly improved academic performance, built strong industry partnerships, and enriched the educational experience. This was reflected in the admissions, the department securing full enrollment during the last two years.

A notable initiative is the launch of FM Code Solutions, a Mini IT Company on campus powered by Logix Space Technologies Pvt. Ltd, Kochi. This innovative venture provides students with a unique opportunity to gain hands-on experience and first hand exposure to industry practices during their academics. The department organised a National Conference on Advancements in Computer Applications and, in collaboration with TCS, Kochi, conducted a 6-day National Level Faculty Development Program (FDP). The 2023 batch achieved remarkable results in their 1st semester exams, with an impressive pass rate of 96.64%. Similarly, the 2022 batch excelled with an overall pass rate of 95.87%. Three students of the department earned top university positions: Ms. Suhaila Salam secured second, Ms. Meenu Joseph came in fourth, and Mr. Eldhose Kurian ranked seventh. The students of MCA represented FISAT in various university-level sports competitions, bringing home numerous accolades.

## **Major Activities**

- ➤ 6 Day National Level Faculty Development Programme on "The Generative AI Revolution -Navigating the opportunities and Challenges" in collaboration with TCS, Kochi. 12-08-2024 to 19-08-2024
- ➤ NCACA2023, National Conference on Advancements in Computer Applications. 18-04-2024 to 19-04-2024
- > FM Code Solutions Initiated a Mini IT Company at Campus In association with Logix Space Technologies Pvt Ltd, Kochi
- ➤ Extension Activity TechShare Session Tech Expo Judging Event at Viswajyothi Public School, Vengoor 04-10-2023
- ➤ Technical Talk on Hardware Modeling using Verilog (2023) Ms. Sreelakshmi S, Asst. Prof, Dept. of ECE, FISAT 01-12-2023
- ➤ Technical Talk on Single board Computers (2023 Batch) Mr. Noble G, Asst. Prof, Dept. of ECE, FISAT 04-12-2023
- Expert talk on "Importance of User Stories" (2022 Batch) Ms. Senu Abi, Asst.Prof, Dept. of Computer Applications, FISAT 04-01-2024
- Webinar on Latest Trends in Software Development (2022 Batch) Mr. Anish S Nair, Senior Corporate Software Trainer & CEO, Logix Space Technologies Pvt Ltd 11-01-2024

- ➤ MERN Stack Mastery Bootcamp (2022 Batch) Mr. Anish S Nair, CEO & Ms. Kavya Nair, Associate Software Training Instructor of Logix Space Technologies Pvt Ltd 25-01-2024 to 03-02-2024
- ➤ Bootcamp on Full-Stack Mobile App Development using Google Flutter (2022 Batch) Mr. Anish S Nair, CEO & Ms. Kavya Nair, Associate Software Training Instructor of Logix Space Technologies Pvt Ltd 05-02-2024 to 14-02-2024
- ➤ Hands-on Training on "Python Programming" (2023 Batch) Mr. Mathew Kurian, Manifold, Kochi 22-02-2024 to 24-02-2024
- ➤ Webinar on Latest Trends in IT (2023 Batch) Mr. Anish S Nair, Senior Corporate Software Trainer & CEO, Logix Space Technologies Pvt Ltd 31-05-2024
- ➤ Bootcamp on MERN Stack Mastery (2023 Batch) Mr. Anish S Nair, Senior Corporate Software Trainer & CEO, Logix Space Technologies Pvt Ltd 05-06-2024 to 14-06-2024
- ➤ Merit day of 2022 MCA Batches (Luminous Destinies 2k24) Ms. Aswathy Venugopal, Head, Campus Relationship and Recruitment, Cognizant Technologies. 05-08-2024
- > Social Visit (A batch) Deivadan Centre (Old age home) 07-08-2024
- > Social Visit (B batch) Guardian Angel Peace Mission Centre (Palliative Care Unit) 07-08-2024
- ➤ Induction Ceremony 2024 Batch Mr. Sarji R Mohammedali, CEO, Citrus Informatics (India) Pvt Ltd, Kochi 21-08-2024
- Expert Talk on Redefining Skills and Reinventing yourself: A path to team Dynamics (2024 batch) Mr. Nitheesh Kurian, Asst. Prof, Rajagiri School of Engineering & Technology, Ernakulam 22-08-2024
- > EIT Talk on Lean Startup and Minimum Viable Product or Business: Mentoring Session (2024) Ms. Raji P, Assistant Professor (Special Grade), Department of EIE 23-08-2024
- ➤ EIT Talk on Building Your Entrepreneurial Edge: Critical Skills for Today's Leaders (2024 batch) Dr. Sindhu George, Associate Professor at FISAT Business School 23-08-2024
- ➤ Talk on Balanced Beginning: Wellness, Focus & Joy (2024 batch) Ms. Remitha Rajan P T, Counsellor, FISAT 23-08-2024
- ➤ Industry Readiness Training Talk on "Kick Start to Placements 2024" Dr. Bejoy Varghese, Placement Officer, FISAT
- ➤ Talk on Your Journey to a Dream Career (2024 Batch) Dr. Bejoy Varghese, Placement Officer, FISAT 22-08-2024
- > AlgoRhythm2k23 2-day Intradepartmental Techno-Cultural Fest 10-11-2023, 11-11-2023.
- > Read & Share: Book Donation Drive 16-02-2024
- Scientia 2K23 Paper Presentation Contest 19-04-2024
- > Project Evo 2K23 Project Exhibition S4 MCA 2022 Batch 22-04-2024
- > Ormacheppu 2k24 Farewell Programme to 2022 Batches 23-04-2024
- > A Day for our Teachers Teacher's Day Celebration 05-09-2024
- ➤ My Stories: Talk on New Realities: AR/VR Ms. Anjana P K, Research Scholar, Christ University, Bangalore (2013 Batch) 20-03-2024
- ➤ My Stories: Talk on From Code to Strategy: Crafting your Career as a Technical Business Analyst Mr. Vishnu Das, Senior Technical Business Analyst, Datacom Systems, New Zealand (2013 Batch) 27-03-2024
- > Alumni Meet 2024 2006 Batch Students 15-05-2024
- > Hands-on Workshop on IoT Mr. Krishna Kamal M (2022 batch) 08-08-2024
- ➤ My Stories: Kickstarting your Tech Journey: Essentials Mr. Deepak C Sebastian, Cloud Operations & Engineering Lead GS, SAP Labs India (2012 Batch) 23-08-2024
- > My Stories: Talk on Elevate to IBM: Alumni Advice for Placement Success Mr. Amalraj Joseph, Ms. Anjana Rajeev (2021 Batch) 09-09-2024

#### Achievements of students and staff

- ➤ Dr. Rose Mary Mathew Defended Ph.D. Thesis titled "Enhancing Multiclass Skewed Data Classification using Resampling and Explainable AI Techniques 27-06-2024
- ➤ Ms. Suhaila Salam (2022 B batch) Secured Second Position in APJAKTU University Exam (2022-2024)
- Ms. Meenu Joseph (2022 B batch) Secured Fourth Position in APJAKTU University Exam (2022-2024)
- ➤ Mr. Eldhose Kurian (2022 A batch) Secured Seventh Position in APJAKTU University Exam (2022-2024)
- ➤ Ms. Rinza Nasar, Ms. Sneha T K, Ms. Jafna K, Ms. Gopika M P (2023 batch) Secured Third Prize with a Cash Award of Rs.5000/- in the SINOVA-24 National Level Hackathon in Hack 4 Health theme for their project "Smart Care 360" 05.09.2024
- Mohammed Suhail (2021 B) Developed the 'Easy Report' app for the Public Health Centre, Mookkannoor Panchayath and handed over the app and its user manual to Sri Biju Palatty, President, Mookkannoor Panchayath. 08-12-2023
- ➤ Dr. Santhosh Kottam Resource Person, Seminar on "Enhancing Employability: The Crucial Role of Curriculum Projects in Placement Drives", Viswajyothi College of Engineering and Technology, Vazhakulam 07-12-2023
- ➤ Ms. Rose Mary Mathew Elite + Silver Certificate for NPTEL Course on Data Analytics using python Jan 2024
- > Mr. Eldhose Kurian Best Project Award 2022-24 22-04-2024
- ➤ Mr. Joby George (2022 B) Ms. Sabeeha K Thekkuri (2023 B) Best Paper Presentation, Scientia2k24 17-04-2024
- ➤ Mr. Joby George (2022 B) Ms. Anjana Joseph (2022 A) Coordination Excellence Awards 2022-24
- > Ms. Shafna Shakeer S M (2023 B) Poster Design Competition, Arangu 2024 29-04-2024
- ➤ Mr. Edison M G Photography Competition, Arangu 2024 29-04-2024
- Mr. Krishnakamal M Vishnu Venumohan Memorial Endowment Award 27-09-2024

#### **Publications**

- Rose Mary Mathew A Hybrid Resampling Approach for Multiclass Skewed Datasets and Experimental Analysis with Diverse Classifier Models, International Journal on Recent and Innovation Trends in Computing & Communication (Scopus Indexed) International Journal
- ➤ Deepa Mary Mathews Meenu Mathew Solar Radiation Prediction System using Machine Learning Algorithms A Review, Proceedings of National Conference on Advancements in Computer Applications, 2024
- > Santhosh Kottam, Amalraj Joseph "Enhancing Autonomous Driving Through Real-Time Steering Angle Prediction with Convolutional Neural Networks", International Journal of Scientific Research in Science and Technology
- Suhail P P, Joice T, Rakhi Venugopal, Nithin Rajan Sewage Monitoring System for Blockage Point Detection, 2023 International Conference on Innovations in Engineering and Technology (ICIET)
- > Santhosh Kottam, Leaya Joseph Real-time facial Emotion Detection System, Proceedings of National Conference on Advancements in Computer Applications, 2024 National Conference
- > Senu Abi Jeffin Jose Fashion Accessories Labelling Using YOLOv8, Proceedings of National Conference on Advancements in Computer Applications, 2024
- ➤ Rose Mary Mathew Lakshmi Balu Hotel Recommendation System using TF-IDF Vectorization and Cosine Similarity, Proceedings of National Conference on Advancements in Computer Applications, 2024

- Rose Mary Mathew Suhaila Salam P Fashion Recommendation System: Leveraging TF-IDF Vectorization and Cosine Similarity, Proceedings of National Conference on Advancements in Computer Applications, 2024
- Manju Joy Nithin Das Handwritten Equation Solver using Convolutional Neural Networks, Proceedings of National Conference on Advancements in Computer Applications, 2024
- ➤ Rakhi Venugopal Shamil Mohamed T K Stock Market Price Prediction and Investment Advice, Proceedings of National Conference on Advancements in Computer Applications, 2024
- > Senu Abi Joby George Eye Disease Classification using CNN, Proceedings of National Conference on Advancements in Computer Applications, 2024 National Conference
- > Dr. Sujesh P Lal, Ms. Joice T and Mr Krishnakamal M A patient-matched device for diagnosis and early warning of cardiovascular disease based on deep-learning method" 05-01-2024
- ➤ Signed an MoA with Logix Space Technologies Pvt Ltd to set forth the terms and conditions to start the Mini IT Company on Campus on 14th June 2024.

| No | Admission<br>Year | Class &<br>Semester | Number of students | Number of students passed | Results (%) | Program<br>Pass |
|----|-------------------|---------------------|--------------------|---------------------------|-------------|-----------------|
| 1  | 2023              | S1                  | 119                | 115                       | 96.64       | -               |
| 2  |                   | S4                  | 121                | 120                       | 99.17       |                 |
| 3  | 2022              | S3                  | 121                | 117                       | 96.69       | 95.87           |
| 4  |                   | S2                  | 121                | 114                       | 94.21       |                 |

## FISAT Business School [FBS]

FISAT Business School had an eventful year, marked by a diverse range of activities and accomplishments. Throughout the year, the department organised various activities including global academic collaborations, industry expert talks, and student exhibitions, aimed at enhancing learning experiences. Students participated in industrial visits, both domestic and international, including a notable visit to Malaysia. The department also conducted quality enhancement programs and training sessions on strategic growth, case analysis, and advanced analytics. Major events included the MBA Induction Ceremony, Alumni Meet, and farewell ceremonies. Significant achievements included faculty members receiving awards, PhD registrations, and students securing placements with reputed companies. These initiatives underscore the department's dedication to providing a comprehensive educational experience and fostering both academic and professional growth.

# **Major Activities**

- ➤ Global academic collaboration- talk with S3 students Ms. Carolina Duval, Director of ESDES BUSINESS SCHOOL France October 10th 2023
- ➤ Invited Talk: Strategies in the stock market Mr. Nachiket Save, Marketing Manager FINTOPEDIA talked about Bazaar Shastra November 1, 2023
- > ARTECHINNOVATION Exhibition cum sale of self made items Organised by MBA S3 Students
- > Three teams from MBA S3 participated in the event with their self made products on November 9th, 2023
- ➣ 'Start young in Entrepreneurship- Experience Sharing Session Mr. RijeeshRajan, Chief Executive Officer Simplify Agripvt limited November 11th, 2023

- ➤ FORUM 2K24 Intercollegiate Management Fest MBA S2 and S4 STUDENTS February 27 and 28, 2023
- > International Industry visit to Malaysia S4 Students March 7-11th, 2024
- Management Seminar at Faculty of Business Management, UITM, Malaysia S4 Students, 4 faculty members March 8th, 2024
- ➤ Ademptio'24: Farewell and course completion Ceremony Ms Sujata Madhav Chandran, TCS, Kochi June 26th, 2024
- ➤ Alumni Meet of FBS: 'MEMENTO VIVERE '24: REMEMBER TO LIVE Alumni members across 16 batches Mr Roji George MLA Chief Guest July 20th, 2024
- ➤ MBA 2024 Batch Induction Ceremony Batch members of 2024-24 batch Mr Sreenath Vijayan, CMO, Manjilas group, Double Horse as Chief Guest August 12th, 2024
- ➤ Alumni Interaction Yesudas George, (2006-08 Batch) Partner and Strategist, Amalgam Box and ARK Productions, Kochi August 13, 2024
- ➤ Counseling Interaction Balanced Beginnings: Wellness Focus Ms. Remitha Rajan P T, Counselor (Psychologist August 13, 2024
- ➤ Industrial Visit to Anna Aluminium August 14th, 2024
- Industrial Visit Akay Spices Pvt Ltd August 16th 2024
- > Industrial Visit Kancor, Angamaly, Kochi August 22, 2024
- > Expert Talk- From Vision to Venture: An Entrepreneur's Journey Mr. P J Kunjachan, Chairman, Managing Director, Arjuna Natural Pvt. Ltd August 17th 2024
- ➤ Wellness talk- Smart Living: Youth Lifestyle and Nutrition Awareness Ms. Christy, Dietician, MAGJ Hospital, Mookkannoor August 19th 2024
- Quality enhancement program Strategic Growth : Transforming Ambitions into Reality Dr Jose Varghese, Associate Professor, FBS August 16th
- Quality enhancement program Case Analysis Excellence: A Hands-On Approach Mr Prashanth P John, Assistant Professor, FISAT August 21, 2024
- Quality enhancement program Building Bonds: Fun & Games for Better Collaboration Dr Sreenish S. R August 19th 2024
- ➤ World suicide Prevention day program by Dr Neeraj H, Consultant Psychiatrist, Ms. Maria Babu C- clinical Psychologist September 10, 2024
- Student training placement preparedness S3 MBA Sparkle by Krishnakumar and Mridula-Vertical Eye
- > MBA Orientation program mPower by Krishnakumar and Mridula, Vertical Eye August 29th to September 6
- ➤ POWERBI Training for S4 and S3 Students by Synergy Profilez, Kozhikode August 5-10 and March 14-19th, 2024
- > Aptitude training for S3 students by Prgamatix from July 31st to august 14th 2024
- > Excel advanced analytics course for S1 MBA by Mr Jomon Joseph September 2-September 12, 2024

## Achievements of students and staff

- Ms Biji U Nair Awarded PhD September 10, 2024
- ➤ Dr Anoo Anthony Awarded M.A in Population Studies from International University of Population Studies, (UGC Approved and Deemed University), Mumbai May 2024
- > Dr. Sonia Elizebeth Thomas Resource person for Integrated Statistics for Decision Making held at Santhigiri Institute of Management, Thodupuzha November 4, 2023
- ➤ Dr. Sonia Elizebeth Thomas Resource person for "Statistical Tools for Project Work" held at Santhigiri Institute of Management December 16, 2023
- ➤ Dr Sreenish S R Evaluator for funded research Project Albertian Seed Grant for Research (ASGR) 2023 by Albertian Institute December 4, 2023

- ➤ Dr Sreenish S R Resource person for Team Building titled "Empowering Young Minds" at Model Technical Higher Secondary School December 10, 2023
- > Mr Prashanth V Invited Article in Times of India, Kochi edition May 25, 2023
- ➤ Dr Sindhu George Resource person at Marthoma college of Management and Technology Perumabayoor August 13th 2024
- ➤ Dr Sreenish S.R Resource Person for 'Analysis of Union Budget 2024-25,' organised by the School of Management, De Paul Institute of Science & Technology (DiST), Angamaly, February 13th 2024
- ➤ Dr Sreenish S.R resource person for the seminar on "Bridging Knowledge Gaps: A Practical Approach to Equity Research," organised by the School of Management, De Paul Institute of Science and Technology, Angamaly, March 14th 2024.

#### **Publications**

- ➤ Sonia Elizebeth Thomas E S, Yeldo S A, Denny M A, A New Dimension of Productivity: Ergonomic Interventions Reshaping the Modern Work Environment, ISBN:978-81-962550-1-5 proceedings of the Two-Day International Conference on The Future of Economics, Finance & Management in the Cosmopolitan Era, organised by Bharata Mata Institute of Management in association with University of Colombo on 24th and 25th April 2024).
- Sonia Elizebeth Thomas E S, George J, Joshua A J, Work-Life Balance Practices: Drivers of Job Engagement and Mitigators of Turnover Intention, Vol-09, No-03, March-2024, 178-190, RESEARCH REVIEW, International Journal of Multidisciplinary, eISSN:2455-3085, UGC Listed Journals (Journal no.44945), https://doi.org/10.31305/rrijm.2024.v09.n03.019
- Sonia Elizebeth Thomas E S., Joshy A, Boban E, Leadership Agility in the face of Change: A Holistic Approach, ISBN:978-81-962550-1-5 Proceedings of the Three-Day International Conference on Global Strategies for Sustainable Commerce and Innovative Management Practices in the 21st Century (GSSCIM 21C) organised by the Department of Commerce (Marketing), Bharata Mata College, Thrikkakara, Kerala on 15, 19 and 20 February, 2024).
- ➤ Sonia Elizebeth Thomas E S., George J, Emotional Intelligence as a predictor of Job Satisfaction and Job Performance, ISBN: 978-81-955934-5-3 (proceedings of the Social Sciences Research Colloquium, held at SCMS Cochin on 01 and 02 December, 2023).
- ➤ Sonia Elizebeth Thomas E S., George J, Redefining HR practices: An in-depth analysis of Agile Methodologies, Their Application in HR Processes, and Implications for Organisational Performance, Vol. II, No.2, October 2023, Lux Montis, International Journal of Management and Commerce Peer Reviewed Annual Research Journal, ISSN: 2321-8053
- ➤ Jose Varghese Varghese, J., Factors influencing propensity to purchase premium smartphones among young professionals (ISBN:978-81-962550-1-5) Three-Day International Conference on Global Strategies for Sustainable Commerce and Innovative Management Practices in the 21st Century (GSSCIM 21C) organised by the Department of Commerce (Marketing), Bharata Mata College, Thrikkakara, Kerala on 15, 19 and 20 February, 2024.
- Jose Varghese Varghese, J., Transforming Perspectives: Understanding Consumer Attitudes Towards Electric Vehicles for Sustainable Mobility" 7th National Research Conference on Emerging Paradigms on Business and Management in the Analytical Era held at TKM Institute of Management, Kollam on 11 January, 2024.
- ➤ Jose Varghese Varghese, J,. Influence of customer satisfaction on repurchase intention with special reference to online shopping", ISBN: 978-81-955934-5-3 Social Sciences Research Colloquium, held at SCMS Cochin on 01 and 02 December, 2023.

| No | Admission<br>Year | Class & Semester<br>(eg:S2 CE) | Number of students | Number of<br>students<br>passed | Results<br>(%) | Program<br>pass |
|----|-------------------|--------------------------------|--------------------|---------------------------------|----------------|-----------------|
| 1  | 2022-24           | Semester 2                     | 118                | 105                             | 88             |                 |
| 2  | 2022-24           | Semester 3                     | 118                | 116                             | 99             |                 |
| 3  | 2022-24           | Semester 4                     | 118                | 118                             | 100            | 78              |
| 4  | 2023-25           | Semester 1                     | 119                | 106                             | 88             |                 |
| 5  | 2023-25           | Semester 2                     | 119                | 88                              | 74             |                 |

Placements of the batch have been impressive with 94 offers received and 67 students placed. The average CTC has varied from a minimum of 3 lakhs to a high of 9.5 lakhs. The students were able to secure good offers in IT and ITES service sector with students entering the big four auditing firms (DELOITTE, EY, KPMG and PWC)

| SI No | Company                                 | CTC (LPA) | Job Offers# |
|-------|-----------------------------------------|-----------|-------------|
| 1     | TalentServe                             | 9.5       | 16          |
| 2     | EY                                      | 3.99      | 11          |
| 3     | Niva Bupa Health Insurance              | 3.5       | 11          |
| 4     | Reliance Retail                         | 3.25      | 10          |
| 5     | ICICI Prudential                        | 2.85      | 8           |
| 6     | ESAF SMALL FINANCE BANK                 | 4.25      | 7           |
| 7     | KPMG                                    | 5         | 5           |
| 8     | Walkaroo International                  | 3.5       | 5           |
| 9     | Aditya Birla Fashion and Retail         | 4.75      | 4           |
| 10    | Eduport                                 | 3         | 3           |
| 11    | Asian Heart Institute & Research Center | 3.6       | 2           |
| 12    | Asian paints                            | 7.8       | 2           |
| 13    | HDFC Life                               | 4.75      | 2           |
| 14    | ITC Ltd.                                | 4.5       | 2           |
| 15    | LEARNING ROUTES PVT LTD                 | 6.06      | 2           |
| 16    | Asianet Broadband                       | 3         | 1           |
| 17    | Decathlon                               | 4.7       | 1           |
| 18    | More Retail Private Ltd                 | 4         | 1           |
| 19    | RDC Concrete (India) Pvt Ltd            | 4.36      | 1           |
|       |                                         |           | 94          |