

### **ANNUAL REPORT**

2017-2018

### FEDERAL INSTITUTE OF SCIENCE AND TECHNOLOGY

**Mini Jith** 



SHINOY GEORGE (1981-2018)

Assistant Professor

Department of Science and Humanities

#### **Federal Institute of Science and Technology**



#### **ABOUT FISAT**



Federal Institute of Science and Technology (FISAT) is a private self-financing Engineering College, established and run by the Federal Bank Officers` Association Educational Society (FBOAES). The FBOAES is an initiative of the Federal Bank Officers` Association (FBOA), the sole representative body of the entire officers of the Federal Bank.

FISAT has been designed and developed to become a "Centre of Excellence" in professional education, with the slogan "Focus on Excellence." Established in 2002, the institution has made a space for itself in the education sector, as evidenced by its students' outstanding performance in academics, placements, and extracurricular and co-curricular activities.

#### **GOVERNANCE & ADMINISTRATION**

#### **The Team Leaders**



Mr Paul Mundadan Chairman



Dr George Isaac Principal



Dr C Sheela Vice Principal



**Dr KSM Panicker** Director (Academics)



**Dr. Sunny Kuriakose** Dean (Student Affairs)



**Dr George V Antony** Director (FBS)

#### **Management Team of FISAT**

12. Sri.Jenib J. Kachappilly

1.	Sri.Paul Mundadan	Chairman, Governing Body, FBOAES
2.	Sri.V S Pradeep	Vice Chairman, Governing Body, FBOAES
3.	Sri.Sachin Jacob Paul	Treasurer, FBOAES
4.	Sri.Rajaranarayanan V M	Vice President, FBOAES
5.	Sri.Abdul Nazar M P	Associate Secretary, FBOAES
6.	Sri.Jojo K J	Associate Treasurer, FBOAES
7.	Sri.George C. Chacko	Member
8.	Sri.E.K.Rajavarma M.P	Member
9.	Sri.Xavier Gregory	Member
10.	Sri. Thomachan	Member
11.	Sri.Pappachan Thekkekkara	Member

Member

#### **Academic Heads**

**Principal** Dr. George Issac, M. Tech, Ph.D

Vice-Principal Dr. C .Sheela, M.Sc, M. Phil, Ph.D

**Director (Academics)** Dr. K S M Panicker, ME, Ph.D

**Dean (Students Affairs)** Dr. Sunny Kuriakose, M.Sc, Ph.D

**Director, FISAT Business School** Dr. George V Antony, MBA, Ph.D, PDF

Administrative Officer Mr. Prakash C Chandy, MSW,CTA

#### **Governing Council**

As per the guidelines of AICTE, the Governing Council was formed by including Members from the Managing Committee, Officials of the College, Experts from Technology/Education, Representatives of University, State Government and AICTE. The Governing Body meets annually to discuss the various governance aspects of the institution.

The Governing Body is constituted with the following members:

Mr. Paul Mundadan Chairman

Mr. Pradeep V. S. Vice Chairman

Mr. Sachin Jacob Paul

Mr. Rajanarayanan V. M.

Mr. Jenib J. Kachappilly

Mr. Pappachan Thekkekkara

Mr. Abdul Nazar M. P.

Mr. Jojo K. J.

Mr. Xavier Gregory

Mr. Rajavarma E. K.

Mr. George C. Chacko

Mr. Thomachan K. T.

Dr. M. C. Dileep Kumar

Dr. K. P. S. Nair

**Dr. George Issac** Ex-Officio Secretary

#### **Advisory Board**

The Society has enlisted the support of many luminaries from the field of education, technology, administration and banking to guide the functioning of FISAT. The advisory board of the Society consists of eminent personalities with proven capabilities including.

Dr. G. Madhavan Nair, Former Chairman, ISRO

Dr. V. N. Rajasekharan Pillai, Former Executive Vice President, KSCSTE

Mr. K. P. Fabian, IFS(Rtd), Former Ambassador of India to Italy and Gulf Countries

Dr. E. Gopinathan, Former Director, NIT, Kozhikode

**Dr. Jacob Thomas, IPS, DGP,** Former Director (Vigilance)

#### **Heads of the Departments**

The Heads of various departments for the academic year 2017-2018 are as follows

Sl.No	Department	Name of the HoDs
1	Civil Engineering	Mr. Unni Kartha G
2	Computer Science and Engineering	Dr. Prasad J C
3	Electronics and Communication Engineering	Ms. Mini P R
4	Electrical and Electronics Engineering	Ms. Parvathy R
5	Electronics and Instrumentation Engineering	Mr. S Sundararajan
6	Mechanical Engineering	Dr. Jose Cherian
7	Science and Humanities	Dr. C Sheela
8	Computer Applications	Mr. Santhosh Kottam
9	FISAT Business School	Dr. George V Antony

#### **Employee Strength of the Institution**

Teaching: 211

Non Teaching: 127

## **ACADEMICS**



#### No of Programs Offered:

Undergraduate : 6Postgraduate : 8

#### **Students Admitted:**

Undergraduate Programs: 575Postgraduate Programs: 298

#### **University Exam Pass Percentage**

SI. No.	Dept.	No. of Students Registered for Final Semester Examination	No. of Students Passed Final Semester Examination	Pass Percentage
1	CE	123	116	94.31
2	CS	120	109	90.83
3	EE	62	59	95.16
4	EC	121	115	95
5	EI	58	50	94.83
6	ME	120	114	95
7	MBA	116	114	98.2
8	MCA	102	102	100

#### M Tech

SI. No.	Dept/ Program	No. of Students Registered for Final Semester Examination	No. of Students Passed Final Semester Examination	Pass Percentage
1	CE/SECM	24	24	100
2	CS/CSIS	4	4	100
3	EE/PEPS	8	8	100
4	EC/COEN	5	5	100
5	EC/VLSI&ES	2	2	100
6	ME/CIM	0	0	-

#### **Academic Performance Monitoring Committee (APMC)**

As a measure of quality initiative and sustenance, the Academic Performance Monitoring Committee has started its functioning from the beginning of this academic year itself. The Committee, headed by Dr. KSM Panicker, Director, Academics, has had three rounds of classwise meetings with the poor performers and the respective teachers

### **ACCREDITATION**



#### Accreditation By NAAC with 'A' Grade

Based on the recommendation of the Peer Team, the NAAC Executive committee met on 5<sup>th</sup> November 2016, awarded 'A' Grade to FISAT, with a CGPA of 3.06

#### **Post NAAC Accreditation Activities**

In accordance with the mandatory requirement proposed by the National Assessment and Accreditation Council (NAAC), Bangalore, every accredited institution should establish an Internal Quality Assurance Cell (IQAC) as a quality sustenance measure. Since quality enhancement and quality sustenance are two continuous processes, the IQAC becomes an important part of the institution's system and work. The prime task of the IQAC is to develop a system for conscious and consistent improvement in the overall performance of the institution. During the post-accreditation period, institutions need to channelize its efforts and measures towards promoting the holistic academic excellence including the Peer Team recommendations.

FISAT has had its first NAAC accreditation in 2016 with 'A' Grade. The reaccreditation by NAAC is due in 2021. The NAAC has brought in several significant changes in the entire accreditation process and format. Submission of the Annual Quality Assurance Report (AQAR) and a functional IQAC are two mandatory requirements for applying for reaccreditation.

How best the institute acted upon the Peer Team Report of the last accreditation and also the quantum of achievements and performance of the College during the post accreditation 5 years would be the major criterion for the re-accreditation.

The major task of quality initiatives and sustenance is being addressed by the IQAC in the College. The IQAC has met 6 times this year. The following is the list of major activities undertaken:

- ➤ One-Day Orientation Programme for Teaching Staff on 'Equipping Teachers' was conducted on July 21, 2017. Mr. Bhoominathan (Trichi) and Dr. George Issac, Principal were the resource persons.
- Two-day orientation programme for Teaching Staff was conducted during July 21-22, 2017. Fr. Vincent Pereppadan, S.J. on Moulding Students to face the Challenges of today, Dr. Sunny Kuriakose on Student Teacher Relationship, Mr. Prakash C. Chandy, (CAO) on Student Teacher Relationship, Dr. K.S.M. Panicker, (Director Academics) on Better Academics, Dr. George Issac (Principal) on General Attitude, Dr. Chandramohanan on Developing Emotional Quotient of Teachers in Work led the sessions.
- The first AQAR was submitted in the prescribed format on December 22, 2017.
- > The discussion on the Peer Team report in several meetings of the IQAC was completed.

- Planning of the activities, both academic, non academic, has been done at the beginning of the year. The College Calendar and Handbook was produced incorporating the activities.
- Monitored the activities of the Academic Progress Monitoring Committee on the academic performance of the students
- A committee consisting of the Principal, Director, Vice Principal and the IQAC coordinator visited every department and assessed their activities and performances

Putting continuous efforts to introduce the Outcome Based Education (OBE) in the institute:

- ➤ Working towards NBA accreditation for 7 programmes in the College in two phases.
- The Group Advisory system has been made more vibrant.
- Separate Group Advisor format has been designed and distributed.
- Faculty members are encouraged to apply for more research projects and financial assistance from various government funding agencies.
- ➤ The title of the College Research Journal has been approved and waiting for the ISSN registration.

#### **Towards NBA Accreditation**

- The efforts towards NBA Accreditation for all the programmes offered in the College have achieved significant progress. Outcome Based Education (OBE) has already been introduced. As per the new NBA format, there are 10 parameters by which the accreditation of a programme is decided. The accreditation could be either provisional, valid for three years, or full, valid for 5 years. All programmes desirous for accreditation should satisfy the essential conditions mentioned in the Pre qualifier.
- The entire accreditation process in FISAT is being done with help of various committees consisting of HoDs, faculty members and members of the administrative staff. The Committee met frequently and framed several plans of action and prepared various files and documents.
- Practicing Outcome Based Education (OBE) is the first and foremost step towards NBA accreditation.
- A group of 7 teachers were deputed to attend a conference at St. Gits College, Kottayam in which NBA Accreditation was the major theme of the conference.
- Yet another group of 12 teachers were deputed to attend an STP on NBA Accreditation during February 12-17, 2018 organized by CUSAT.
- A one-day programme on NBA Accreditation was conducted on February 17, 2018. Prof. Yamuna Theresa, Amal Jyothi College of Engineering was invited as the resource person.

- A two-day workshop on NBA Accreditation was organized during April 27 28, 2018. Dr. S. Bhaskar, Thiagarajar Engineering College, Madurai was the resource person.
- A two-day orientation programme for staff on the theme 'Where are we as Individuals and as an Institution' by Dr. Thomas Abraham was conducted during July 2-3, 2018.
- A one day seminar on 'The Role of Science and Humanities in NBA Accreditation' was conducted on 7/9/2018. Dr. M. Kameswary, Department of Mathematics, Thiagarajar College of Engineering, Madurai was the Resource person.

#### A series of orientation programmes were conducted as given below

SI. No.	Date	Topic	Speaker
1	25.6.2018	Introduction to OBE	Dr. Sunny Kuriakose
2	04.7.2018	Programme Outcome	Dr. Mini P. R.
3	06.7.2018	Designing Course Plan with respect to Course Outcomes	Ms. Aiswarya Raj & Ms. Jeslin P. Jo
4	09.7.2018	Outcome Based Education	Dr. Arun Kumar M. N.
5	13.7.2018	Target Setting and CourseOutcome Attainment	Ms. Resmi R.

An interactive session by Prof. Prasad Krishna, NIT Suratkal was conducted on November 2, 2018. We expect that by the end of next year, all our B. Tech. programmes and MCA programme will be accredited by the National Board of Accreditation.

#### ISO 9001-2015 Certified Institution

It is a remarkable moment that we have successfully completed the ISO Certification Audit 9001- 2015 in the ISO certification process. It is a creditable achievement that FISAT has received ISO certification in 2004 itself and has ensured that our Quality Policy is up to global standards.

## AWARDS & RECOGNITIONS



- 1. FISAT ranked the '14th Position in the category of Outstanding Engineering Colleges of Excellence in India 2018' by the Competition Success Review, New Delhi.
- 2. FISAT ranked as the 'Third Best Engineering College, Kerala 2018' by the Competition Success Review, New Delhi.
- 3. FISAT won the 'International Award for Best Engineering Institution in Professional Education 2018' instituted by ANRIA, Abu Dhabi
- FISAT won the Award for 'Best Institute for Excellence in Engineering Education -Unfolding Human Elements in Technology' instituted by the Future Kerala Educational Conclave 2018
- 5. FISAT won the Award for 'Best Research Oriented Private Engineering College in Kerala 2018' instituted by Time Cyber Media, New Delhi
- 6. FISAT won the 'Environment and Green Initiatives Award 2018' instituted by Kerala Management Association (KMA)
- 7. FISAT won the International award of 'Premium Brand for Institute of Excellence in Professional Education' at Globe Luxurie Decode by the Indian Chamber of Commerce (ICC) and Indian Business Professional Group IBPG-Abu Dhabi.
- 8. FISAT is awarded as the 'Best Entrepreneurship Enabler Award 2018' instituted by KERALA STARTUP MISSION
- 9. FISAT Governing Body Chairman Mr. Paul Mundadan won the 'Business Deepika Excellence Award 2018' for making FISAT into an Admiring Place of Professional Education.
- 10. FISAT Governing Body Chairman Mr. Paul Mundadan won the 'Ambassador of Education International Award 2018' by National Institute for Education & Research, Srilanka.
- 11. FISAT Governing Body Chairman Mr. Paul Mundadan won the 'Award for Excellence in Academics 2018 Kerala' instituted by Time Cyber Media, New Delhi
- 12. FISAT Governing Body Chairman Mr. Paul Mundadan won the First 'Skill Excellence Award' instituted by Block Panchayath, Angamaly.
- 13. FISAT won 'Best Engineering College in Kerala Award 2018' at the National Achievers Conclave and Awards by Indian Research Media, New Delhi
- 14. FISAT won the 'Best Educational Brands 2017 Award' instituted by The Economic Times As a symbol of Excellence in Educating and Skilling India's future
- 15. FISAT won the 'Excellence award for contribution to Kerala Education' by the DC Media at the Emerging Kerala Education Conclave.
- 16. FISAT won the award for 'Best Quality Institution in Professional Education' instituted by the KHRA.

- 17. FISAT won the 'Best Institute for Excellence in Engineering Education 2017' instituted by Indywood film carnival, Kerala Chapter.
- 18. FISAT won the award for the 'Best Engineering Institute with Quality and Focus' instituted by Rashtra Deepika Ltd.
- 19. FISAT won the Award for 'Most Promising Private Engineering College of Kerala' Instituted by the Prime Time Research Media New Delhi.
- 20. FISAT won the 'Best Private Institution Award for Project Based Cultivation' instituted by the Department of Agriculture, Govt. of Kerala.
- 21. FISAT was selected as the 'Best IED Centre (Innovation and Entrepreneurship Development Centre)' of Kerala Startup Mission during 2016-2017.
- 22. FISAT Governing Body Chairman Mr. Paul Mundadan won the 'GOLDEN LEAF Award for Excellence in Engineering Education' instituted by Future Kerala.
- 23. FISAT won the Special Jury Award for 'The Environment and Green Initiatives' instituted by Kerala Management Association (KMA).
- 24. FISAT won the Top rank award for 'Outstanding Engineering Colleges of Excellence in India' by Competition Success Review Magazine New Delhi.
- 25. FISAT Governing Body Chairman Mr.Paul Mundadan received the 'Visionary Edupreneur of the year 2017' Award from Business World and Education Post Delhi.
- 26. FISAT Governing Body Chairman Mr.Paul Mundadan won the first 'Proud of Kerala Award' instituted by Dr. APJ Abdul Kalam Institute of Business Management and Skill Development Kochi.
- 27. FISAT Business School received the Award of 'Fastest Growing Business School In South India' from Business World and Education Post.
- 28. FISAT won the 'Best Institute for Excellence in Engineering Education 2017' instituted by the State Govt. of Telagana and Indy wood film carnival, Hyderabad.
- 29. FISAT Governing Body Chairman Mr. Paul Mundadan won the recognition of 'Best Edupreneur of Kerala 2017' Award for making FISAT into an epitome of wisdom instituted by the state body of KHRA.
- 30. FISAT won the Recognition for 'Best Educational Institution for Significant Contribution to Energy Conservation 2017' instituted by the People's Forum of Sustainable Development from MG University.

## DEPARTMENTAL ACTIVITIES



## DEPARTMENT OF CIVIL ENGINEERING



The Department of Civil Engineering started offering a B.Tech programme in Civil Engineering in the year 2011 with an intake of 60, which was increased to 120 in the year 2013. M.Tech in Structural Engineering and Construction Management was added in the year 2014 with an intake of 24. A team of qualified faculty with ample experience is the highlight of the Department. Both the B.Tech and M.Tech programs emphasize on industry and research-based projects, which would enhance their skills to become successful professionals for a holistic development. The department is actively involved in consultancy services in the area of Material Testing and Design.

#### **Major Activities**

- Conducted NIRMAN 2kl 8 (Build Expo) at Angamaly on 8th and 9th March 2018.
- Conducted an invited talk on "Site Mix v/s Design Mix" by Er. Shelly Fernandez on 8th March 2018 as part of Nirman
- Conducted an invited talk on Vasthu by Mr. Joseph on 9th March 2018 as part of Nirman Expo
- Aavishkar 2kl 8 (Project Expo) on 10th April 2018 as part of Nirman 2k18
- Second National Conference on Structural Engineering and Construction Management (SECON' 18) on 17th and 18th April 2018.

#### **Staff Achievements**

Ms. Nincy Jose was awarded the top mentor award by NPTEL for the course Theory and Practice on Non Destructive Testing

#### Student Achievements - External

- Ms. Deepthi Stephen and Mr. Joel Joy won the best paper award for Second National Conference on Structural Engineering and Construction Management
- ➤ 3 Students of seventh semester completed an online course on "Human Trafficking Awareness for the General Public" conducted by Stanford University.
- ➤ 14 Students of seventh semester completed online course on "Natural Capital Approach in Department of Defense Environments" conducted by Stanford University.
- M A Harikrishnan won third place in All Kerala KTU inter zone basketball
- M A Harikrishnan secured first place in KTU zonal basketball
- M A Harikrishnan secured first place in AISAT cup in basketball
- Vinaya Murali won second place in KTU zonal chess competition
- M A Harikrishnan secured third place in NIT cup in basketball
- M A Harikrishnan secured third place in 3's basketball at NUALS

#### **PUBLICATIONS**

#### Mr UnniKartha G

- Development of 1-D Shake Table Testing Facility for Liquefaction Studies, Journal of The Institution of Engineers (India): Series A
- Shake Table Studies on Embankments on Liquefiable Soil, Soil Dynamics and Earthquake Geotechnical Engineering, Part of the Lecture Notes in Civil Engineering book series (LNCE, volume 15), Springer
- ➤ Development Of Low Cost Systems For Structural Health Monitoring, Second National Conference on Structural Engineering and Construction Management (SECON '18) at Federal Institute of Science and Technology, Angamaly

#### Mrs Jiji Antony

Acoustic Insulation With Cement Mortar By Adding Natural Coir - Fibre, Proceedings of Second National Conference on Structural Engineering and Construction Management (SECON '18) at Federal Institute of Science and Technology, Angamaly

#### **Mr Abin Thomas CA**

- Evaluation Of Surface Bond Strength Between Self Compacting Concrete And Conventional Concrete, Proceedings of Second National Conference on Structural Engineering and Construction Management (SECON '18) at Federal Institute of Science and Technology, Angamaly
- Experimental Evaluation On Compatibility Of Ground Granulated Blast Furnace Slag For Greener Self-compacting Concrete, Proceedings of Second National Conference on Structural Engineering and Construction Management (SECON '18) at Federal Institute of Science and Technology, Angamaly
- Analysis Of Compressive Strength Of Concrete And Self Compacting Concrete By Partial Replacement Of Fine Aggregate With Crumb Rubber, Proceedings of Second National Conference on Structural Engineering and Construction Management (SECON '18) at Federal Institute of Science and Technology, Angamaly
- Experimental Evaluation on compatibility of mineral admixtures for greener selfcompacting concrete, IJCRT, April 2018

#### **Ms Nincy Jose**

Study On The Mechanical Properties Of Fly Ash-GGBS Based Geopolymer Concrete, Proceedings of Second National Conference on Structural Engineering and Construction Management (SECON '18) at Federal Institute of Science and Technology, Angamaly

#### Ms Beena B R

Mix Design Optimization Using Particle Packing, Proceedings of Second National Conference on Structural Engineering and Construction Management (SECON '18) at Federal Institute of Science and Technology, Angamaly

#### **Mr Jawahar Saud S**

- Storm Surge and its Effect- A Review on Disaster Management in Coastal Areas with DOI: 10.19080/CERJ.2018.04.555649,Volume 4 Issue 5-May 2018
- A Paper on "Assessment of Preparedness and Mitigation Level of Coastal Residence Ernakulam," Proceedings of Second National Conference on Structural Engineering and Construction Management (SECON '18) at Federal Institute of Science and Technology, Angamaly, Kerala, India
- A paper on "Removal of Flouride from Drinking water by using Vetiver root, Tamrind seed, Rice husk and Banana Peels" Abstract Proceedings of International Conference on Desalination (InDACON -2018) held at National Institute of Technology, Tiruchirappalli held on 20th and 21st of April 2018
- A paper on "Parametric Assessment of Storm Surge Risk Reduction level at Coastal Area Ernakulam", Abstract Proceedings of International Conference on Theoretical and Experimental Advances in Civil Engineering (ICONTEACE 2018), May 10-12, 2018, SRM University, Kancheepuram, Tamil Nadu
- A paper on "Management Of Household Carbon Footprint In Mookkannoor Panchayat, Ernakulam, Kerala" Abstract Proceedings of International Conference on Theoretical and Experimental, Advances, in Civil Engineering (ICONTEACE 2018), May 10-12, 2018, SRM University, Kancheepuram, Tamil Nadu

#### Mrs Asha Joseph

- Structural Behaviour of Welded I-Beam to Box-Column Connections under Dynamic Loading, International Journal for Research in Applied Science & Engineering Technology (IJRASET); Volume 6 Issue V, May 201
- Non-linear static analysis of welded I-beam to Box-column connections using finite element method, Proceedings of Second National Conference on Structural Engineering and Construction Management (SECON '18), FISAT, Angamaly
- Investigation on buckling behaviour of anchored steel tanks, Proceedings of Second National Conference on Structural Engineering and Construction Management (SECON '18), FISAT, Angamaly

#### Ms Akshara S P

Lime and Glass Fiber to Enhance the Performance and Healing Capacities of Self-healing Concrete, Proceedings of Second National Conference on Structural Engineering and Construction Management (SECON '18) at Federal Institute of Science and Technology, Angamaly

#### Ms Preethi M

- Effect of Blending Aggregates on The Compressive Strength of Concrete, Proceedings of Second National Conference on Structural Engineering and Construction Management (SECON '18) at Federal Institute of Science and Technology, Angamaly
- Study On Deflection And Toughness Of Voided Slabs, Proceedings of Second National Conference on Structural Engineering and Construction Management (SECON '18) at Federal Institute of Science and Technology, Angamaly

#### Ms Reshma Prasad

Fracture Study On Glass And Polypropylene Hybrid Fibre Reinforced Concrete, Proceedings of Second National Conference on Structural Engineering and Construction Management (SECON '18) at Federal Institute of Science and Technology, Angamaly

#### Ms Neeraja Nair

- Numerical Investigation Of RC Beams Subjected To Blast, Proceedings of Second National Conference on Structural Engineering and Construction Management (SECON '18) at Federal Institute of Science and Technology, Angamaly
- Numerical Investigation Of Steel Cabin Subjected Into Internal Explosion, Proceedings of Second National Conference on Structural Engineering and Construction Management (SECON '18) at Federal Institute of Science and Technology, Angamaly

#### Ms Resmi K N

- Study On Mechanical Properties Of High Performance Concrete Incorporated With Cenosphere, Proceedings of Second National Conference on Structural Engineering and Construction Management (SECON '18) at Federal Institute of Science and Technology, Angamaly
- Experimental Investigation on M55 grade Concrete using Industrial wastes, IJIRT, Volume 4 Issue 5

#### Mr Sreerath S

Study On Effect Of Self-curing Agents In High Performance Concrete, Proceedings of Second National Conference on Structural Engineering and Construction Management (SECON '18) at Federal Institute of Science and Technology, Angamaly



Meet the Department is the induction program of the first year B.Tech students. The program is organised by ACE, the students association of the department. It was a two day event where the freshers were given a broad idea about the course and curriculum. They were also given some insights into the culture of the campus, academic rigour and the efforts they need to put in mould themselves into professionals. The program provided the students an opportunity to introduce themselves and to meet the faculty from the department. The students were given an opportunity to exhibit their talents. It could also help them appreciate the branch they have chosen and gather an idea about what to expect during their journey of next four years to become a Civil Engineer.

#### 25 September 2017 >> Technical Talk on "Identification of Black Spots in Highways"



An invited talk on "Identification of Black Spots in Highways" was organised as part of the Jnana Lecture Series by ACE, the student association on 25 September 2017. The session was

handled by Mr. Ebin Sam, Scientist, NATPAC, Thiruvananthapuram who has worked extensively in the areas of Transportation Planning, Black-spot management, Road Safety Inspection and Planning of Non-Motorized Transport. He was part of the team who worked on the black spot identification for the Ernakulam district as per the Supreme court directive look into engineering solutions for reducing accidents in The technical session discussed various aspects including the scenario of traffic accidents, traffic infrastructure in the country and where it stands with respect to the world. Mr. Ebin explained in detail, the process of identification and location of over 400 black spots in Ernakulam and how the situation can be improved by small engineering interventions was discussed during the session. Highlighted stretches in National Highways as per IRC definition and software like ArcGIS was also discussed. The session was followed by an interactive session with the participants.

#### 9, 10 March 2018 >> Nirman 2k18



NIRMAN 2K18 was hosted at CSA Hall, Angamaly on 9th & 10th March 2018 with the theme of "Modern Building Materials and Green Initiatives". The expo saw 20+ hall from various industries. In connection with the build expo, there were two technical sessions titled "Modern and Conventional Construction Practices" by Dr. P.V. Ouseph, Dean - Vastuvidya Department, Sree Sankaracharya University of Sanskrit, Kalady, Ernakulam and "Site Mix Vs Ready Mix Concrete" by Er. Shelly S. Fernandez, Director, Q Crete Readymix (India) Pvt. Ltd, Ernakulam. Nirman 2k18 registered a foot fall of 2000+ over a period of two days. http://nirman2k18.fisat.ac.in



Aavishkar18, project expo of the final year students was conducted on 10 April 2018 in the College auditorium. The program was inaugurated by Dr. K.S.M Panicker, (Director-Academics) in the presence of Dr. Sunny Kuriakose (Dean-Student Affairs), Dr. C. Sheela, (Vice Principal) and Mr. Unni Kartha G. (HoD - Civil Engineering). The program was organized by ACE and showcased 32 projects ranging from solutions for low cost ventilation, Water and waste-water treatment, Solid waste management techniques, soil conservation and stabilization, coastal protection evaluation and its solutions, evaluation and solutions to transportation problems and sustainability studies on concrete. The day was engaging as students explained their year long work with great enthusiasm. The awarded projects are:

Best Project: Removal Of Fluoride From Drinking Water Using Vetiver Root, Tamarind Seed, Rice Husk And Banana Peel

Team: Revathy C V, Sneha Ann Johnson, Sreepriya P, Stefi Mary Blessen Guide: Jawahar Saud S

➤ Best Project Constituted By Department: Digitization And Route Mapping For Solid Waste Management In Mookkannoor Panchayath

Team: Manu Devassy, Hendry Poulose, Kiran Thankachan V, Mahesh R Guide: Jawahar Saud S

- ➤ Best Innovative Project: Shoreline Change Analysis Using Remote Sensing And Gis Team: Maryann Stephen, Meghna M Manohar, Susan Maria George, Seetha Krishna Guide: Abhiya Abbas Mundol
- Best Poster: Application Of Geotextiles For Landslide Mitigation Team: Alphy Christo Thomas, Ahmed Abdul Rahiman, Anu Kuriakose, Gayathri R. Guide: Sowmya V. Krishnankutty
- Project With Industrial Relevance: Digitization And Route Mapping For Solid Waste Management In Mookkannoor Panchayath

Team:Manu Devassy, Hendry Poulose, Kiran Thankachan V, Mahesh R Guide: Jawahar Saud S

# DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING



The Department of Computer Science & Engineering was established in the year 2002. Annual intake of students for B.Tech Computer Science & Engineering course is 120, and MTech in computer Science and Information Science is 24 Department is also recognized by APJ Abdul Kalam Technological University as a research center for Ph.D programme. The department has competent and committed faculty which encourages students' involvement in various cocurricular activities along with their academics. The department is active in college NPTEL Local Chapter (rated with 'A' grade) through which students can join online courses offered by IIT's. The department has been organizing programmes like ICE-FOSS (Free Software Conference) in association with FISAT Free Software Cell (FFSC) and International Conference on Advanced Computing & Communication Technologies. The department has also been continuously hosting Ministry of Education (formerly MHRD) funded workshops in association with IIT's through National Mission in Education through ICT (NMEICT) programme. The B.Tech programme is NBA accredited.

#### **Activities**

- Computer Museum was started in CSE Department Library from 7th April 2018. An Exclusive Computer Museum was worth a treat for all. It included an extensive display of both old and new electronic components, particularly PC components and rare processors.
- ➤ CSE Alumni Meet & Launching of Shagheej Memorial Fund: The meeting of CSE alumni conducted on 7th April 2018. Former students and faculty members had a very fruitful discussion regarding the growing industrial needs and challenges and steps that should be taken to mould the Department's Vision and Mission to cater to the modem corporate world's demands. Launching of Shagheej Memorial Award, in memory of late Shagheej (2013-17 pass out batch) was also conducted during the program. Parents of late Shagheej were also there and they contributed an amount of Rs.50,000/- to the already started Shagheej Memorial Fund, initiated by his classmates.
- New CSE Microprocessor Lab Inaugurated: As per the new syllabus of Kerala Technological University, a new lab started in January 2018 with Microprocessors of 8086 and 8051 kits for S6 CSE students. They include Microprocessor Trainer Model STS8086B with IBM Keyboard and 16 X 2 LCD Display, (8051 Trainer kit with LCD display and IBM Keyboard, 8 channel ADC, DAC, Stepper motor controller in circuit programming via boot loader using USB port, ADC I/F modules, DAC I/F Module, stepper motor controller with stepper with economy motor, Peripheral 8255 interface module, Keyboard and display interface 8279.
- Research Grant Received: Mr. Justin Joy, Dept of CSE received a grant amount of one lakh from Centre for Disability Studies, a unit under LBS centre for Science and Technology for the Project "Malayalam Signs: A Malayalam ISL Dictionary Mobile Application" in April 2018.

- Fund Received: To Promote Open Source Technologies, ICFOSS an initiative by Govt. of Kerala released an amount of Rs.20,000/- to CSE Department in February 2018. Department conducted various seminars to promote open source technologies and utilized the fund effectively.
- FOSSHACK: FISAT Free Software Cell (FFSC) conducted a 24 hour open source hackathon, FOSSHack on 18/4/2018 at FISAT. It was conducted in association with Ignitho Technologies and Redpanthers. FOSSHack is an open source hackathon for college students across the state where they can build innovative solutions to problem statements. Winners were awarded cash prizes worth 15k and job offers from Ignitho Technologies and Redpanthers.
- Project Exhibition 'Final Year Project Expo-18', was conducted in a grand manner on April 7th 2018
- Quiz programme 'Celestia 2018' was conducted by ACM, the professional body of Computer Science and Engineering Dept in April 2018.
- ➤ Technical Talk on 'Digital Technologies' conducted by Mr.Jugunu George, CSE Alumni on 7th April 2018.
- Shagheej Memorial Coding Competition SMRITHI 2k18 was started to improve coding skill of CSE students to improve placement on 1st April 2018.
- Machine Learning Workshop: FISAT ACM student chapter organized a workshop on Machine Learning. It was a one day hands-on workshop about Machine Learning concepts and its limitations. The date of workshop was on February 5th Monday from 9am to 4:30pm. The session was led by Mr. Praseed Pai KT, Senior Architect, UST Global.
- ➤ Hour of Code Programme: ACM Student chapter of FISAT has organized Hour of Code is a global movement by Computer Science Education Week programme for the students of Santhome Central School, Mookkannoor on 7th, February 2018. ACM members have taken class on Scratch and the session was very funny, knowledgeable and interactive for the students.

#### FISAT NPTEL Local Chapter Recognized with Grade 'A'.

The National Programme on Technology Enhanced Learning (NPTEL), a joint venture of Indian Institutes of Technology and Indian Institute of Science, funded by the Ministry of Human Resource Development (MHRD) has accorded FISATs local chapter with a rating of A, based on the performance in NPTEL Online Certification courses. During January- April 2018, a total 122 students successfully completed different courses and 79 students got Elite certificates. Ashwin Kumar S, Student - Dept of CSE, got topper award (5 % in the course) for the course Introduction to modem application development.

#### **Special Recognitions**

- ➤ Dr. Arunkumar M. N. associate Professor of CSE Dept. Received approval as research supervisor in CSE Dept. Thus CSE Dept has elevated the research centre from the year 2018 onwards.
- ➤ Dr. Jyothish K John and Dr. Paul Mathai, faculty members of CSE Dept. awarded Ph.D in Computer Science and Engineering from Noorul Islam University in November 2018.
- Akhil Joy & Mehjebin Mujeeb of S6 CS won the best project award for their work titled Disease Diagnosis Machine at the e-Yantra National Finals held on 22nd 24th March 2018 at IIT Bombay. The project was awarded under Most Realistic Category.
- ➤ Chandana S & Ahamed Sinan of S6 CS participated in the Regional Finals of the e-Yantra Idea Competition held at FISAT on 21st February 2018
- Ms. Nandini Menon ofS4 CSE B has secured First position in team championship in Mixed Doubles, Second Position in team championship for women's team event, Second Position in team championship for women's Doubles event, Second Position in team championship for
- Youth Girls team event and Third Position in team championship for Youth Girls team event in the 46th inter district & 65th Kerala State Table Tennis Championship.
- Mr. Rohith Narayanan of S8 CSE B has won the Grand Prize in ACM Ambassadors program 2016-17 and a cash worth \$400
- Ms. Divya Unnikrishnan of S6 CSA was selected for the 22nd National Youth Festival held at Jaipur, Rajasthan from 12'h January to 16'" January 2018. She was one among the 10 NSS volunteers who represented NSS Technical Cell, Kerala.
- Android Workshop: ACM Student chapter organized a workshop on Android on 20th January 2018. The workshop was conducted as a part of Google's Applied CS with Android Programme and sessions were handled by Mr.Visakh Ajith of Eighth semester Computer Science of FISAT. He was selected as Google's CS Facilitator and got training from Google. About 50 students from various batches registered and attended the workshop and the hands-on sessions for developing Android applications were really useful for the students. Participation certificates were awarded to the students.

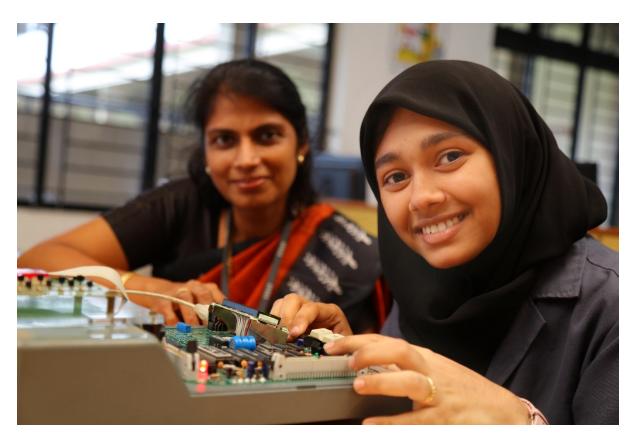


Shagheej Memorial Award Inauguration



Inauguration of Final Year Project expo

# DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING



Established in the year 2002, the Department of Electronics and Communication Engineering is committed to providing quality professional education to aspiring engineers. The department offers UG, PG and PhD programmes. B.Tech in Electronics and Communication Engineering is an accredited programme with an annual sanctioned intake of 120 students.

The department is also an approved research centre for APJ Abdul Kalam Technological University. The department has well experienced and dedicated faculty members and aims to impart sound knowledge and awareness in the latest developments in the field of Electronics and Communication Engineering.

#### **Faculty Achievements**

- ➤ The Department successfully organized a KTU funded Faculty Development Programmes on Robotics and IOT. Ms. Neena KA and Mr. Noble G Coordinated the FDP. Ms. Dhanya S, Ms. Jeslin P Jo, Dr. Krishnakumar S, Dr. Anil Kumar MN, Ms. Bini V K, Ms. Gayathri I K, Ms. Subha Thomas, Mr. Manu Mohan, Ms. Elza George and Ms. Manju C P were the organizing committee members for the FDP.
- ➤ A Faculty Development Programme on Industrial Robotics was organized by the Department under the E-Yanthra initiative in association with IIT, Mumbai. Mr. Bejoy Varghese, Mr. Anoop E G, Mr. Benoy Abraham, Ms. Nisha R and Ms. Minu Kuriakose successfully completed the FDP.
- ➤ Ms. Mini PR, HOD of ECE Department was awarded PhD in Electronics Engineering for her thesis titled "Development of a computationally efficient antenna beamforming algorithm and its implementation using FPGA" from CUSAT.
- Ms. Dhanya S, Ms. Pearlsy P V, Ms. Ambili AR, Ms. Sheelu Susan and Ms. Vinitha V attended a 6 day STTP on "Python Programming and Machine Learning Basics" at Sahrdaya College of Engineering & Technology, Kodakara.
- Ms. Deepa N R, Ms. Nimmy M Philip, Ms. Aiswarya Raj, Ms. Jeslin P Jo attended 5 day FDP on Signal Processing at RSET.
- ➤ Dr. Mini P R and Ms. Jilu George attended a 5 day FDP on Outcome Based Education A gateway for NBA accreditation at CUSAT.
- ➤ Ms. Aiswarya Raj attended the 47th ISTE National Annual Convention at Saintgits College of Engineering
- > Dr. Anil Kumar MN has been approved as research guide of KTU
- An exhibition of the projects of final year ECE "AGNITIO 2018" was successfully organized a 3 day workshop on Robotics and IOT was conducted for the students by Ms. Neena KA, Mr. Noble G, Ms. Bini V K, Ms. Jeslin P J, Dr. Krishnakumar S, Ms. Dhanya S, Ms. Gayathri I K, Ms. Subha Thomas, Ms. Elza George, Ms. Manju C P and Mr. Manu Mohan

- ➤ Ms. Deepa N R and Ms. Nimmy Philip successfully completed AICTE approved FDP on Foundation program in ICT for education and Pedagogy for Online and Blended Teaching Learning process conducted by IIT Bombay.
- Ms. Deepa N R successfully completed FDP on Mentoring Educators in Educational Technology Course conducted by IIT Bombay.
- Ms. Deepa N R, Ms. Nimmy M Philip, Ms. Jeslin P Jo, Ms. Christy Jose, Ms. Bini V K, Ms. Gayathri I K, Ms. Nisha R, Ms. Neena KA, Ms. Vinitha V, Ms. Elza George, Ms. Manju C P, Mr. Manu Mohan, Ms. Sreelekshmy S have successfully completed various NPTEL courses
- ➤ Mr. Basil K Jeemon reviewed a Journal of IEEE Wireless Communication Letters (SCI indexed)
- ➤ Mr. Anoop E G attended a one day seminar on the topic "Role on Intellectual Property Rights (IPR) in Technology Transfer" conducted by Adi Shankara Institute of Engineering and Technology Kalady.
- A 3 day C programming workshop was conducted for students.
- > SMART FISAT Hackathon was organized for the students by ECHO
- ➤ Ms. Neena KA attended one week FDP on Emerging and relevant areas in RF & Wireless Communication, Muthoot Institute of Science and Technology

#### **Student Achievements**

- ➤ Ms Athira S of 2nd year has scored outstanding grades for all subjects in her 3rd and 4th semester KTU exams
- Mr. Alex Jolly of 4th year was the first runner up in the India Skills Kerala 2018
- Mr. Alex Jolly of 4th year also won Robothon 3.0 conducted at College of Engineering, Chengannur
- ➤ Mr. Alex Jolly of 4th year secured 2nd prize for the Path Finder Line Follower Robot in Agnitio 2k17 Second Prize conducted by ECHO FISAT
- Seventy four students of 2014-18 batch secured placements.
- Three students of MTech VLSI and Embedded Systems secured internships in Bosch.
- Three students of 7th semester ECE secured internships in Digital Core Technologies
- Mr. Akhil Roy of 3rd year secured the bronze medal in Javelin throw in the first athletic meet of KTU.
- ➤ Thirty five students successfully completed NPTEL courses
- Sawmiya P George won the best paper award in the National Conference on Emerging Technologies (NACET 2kl 8) conducted by MES College of Engineering And Technology, Kunnukara.

- Mr. Kevin, Mr. Joseph Sebastian, Mr. Pranav and Mr. UnniKrishnan secured a grant for their project "Multifabricator" undertaken in Fablab.
- ➤ Ms. Josna, Ms. Nandhita Varma, Ms. Jemy and Mr. Nevin George secured a grant of Rs 75,000/- from Kerala Start Up Mission, for their project "Cooling Blanket" undertaken in Fablab
- Eleven students of 7th semester qualified for the TCS common corporate test.

#### **Publications**

- ➤ Dr. Anil Kumar MN published a paper in International journal. Computer aided detection of clustered microcalcification- a survey (CMIR)
- ➤ Mr. Basil K Jeemon and Ms. Prathyusha published a paper in the Proceedings of IEEE International Conference on new trends in Engineering and Technology- 2018.
- ➤ Mr. Anoop E G, Mr. Benoy Abraham, Ms. Ann Treesa Jenson, Ms. Gisma George, Ms. Joshmy Jose, Ms. Meritta Tony, Ms. Sawmiya P George, Ms. Sethulakshmi KS and Ms. Sinta Antony presented research papers in the National Conference on Emerging Technologies (NACET 2kl 8) conducted by MES College of Engineering And Technology, Kunnukara.

# DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING



The Department of Electrical and Electronics Engineering started functioning in the year 2002. The department is fortified by a team of highly qualified faculty members and is well equipped with the latest hardware and software lab facilities. The department has a Centre for Advanced Research in Power Converters. The Department received an AICTE grant of five lakhs under the Research Promotion Scheme. Our Simulation labs are equipped with software like MATLAB, Pspice, ETAP and PSCAD. The department is also recognized by APJ Abdul Kalam Technological University as a research centre for Ph.D programme.

#### **Activities**

- ➤ Conducted Design Project Expo as part of the college level TechFest Nautilus 2Kl8 on 5th and 6th February 2018.
- ➤ Organised Four Events Bug master, Light it up, Kurukshetra and paper presentations in the college level TechFest Nautilus 2Kl8 on 5th and 6th February 2018..
- ➤ The Department of EEE won the Best Project Exhibit in college level TechFest Nautilus 2K18.
- ➤ Conducted a hands own workshop on "Autodesk Eagle" a tool for PCB circuit making on 28th February, 2018 as part of IEEE meet. Mr. Muhamed Noufal C, Assistant Professor, Dept. of EEE was the resource person.
- ➤ Conducted the Seventh Session of "Learn from Great Minds", a lecture series organised by the Dept. of EEE. Mr. Reji John, Deputy General Manager, Head of Engineering Section, TELK shared his experience through a talk on "Power Transformers Design and Testing" on 9th March, 2018.
- ➤ The Dept. organized the yearly final year project expo "Illuminar" on 13th April, 2018. Our Alumni Mr. Anto Varghese, Testing Engineer, Strands Energy Ltd., accepted our invitation to judge the students' projects. Three awards were distributed Edison Award for best innovation, Accomplishment award for completion of project and Poster Excellence Award for best poster were distributed in the closing ceremony of event
- ➤ Conducted a three days in-house Add-on Program on "C Programming Fundamentals" for 2017 Admission EEE students from 9th to 11th July 2018. The resource person was Mr. Muhamed Noufal C, Assistant Professor, Dept. of EEE.
- ➤ The Department organised a two day Faculty Development Program on "Distributed Generation and Smart Grid" on 27th and 28th July 2018. Around 30 Faculty from various engineering colleges around Kerala participated and the program was well appreciated. Following were the sessions conducted.
- "Smart grid and smart substation" by Dr.K.Shanti Swamp Professor, IIT Chennai.
- Two sessions by Dr. Harikumar. R, Professor, College of Engineering, Trivandrum on "Smart grid communication infrastructure" and "Micro grid and its control". A session by

- an industrial expert Mr. Christo George, Chairman & Managing Director, Hykon India Ltd. He shared his experience in Grid connected solar power plant projects.
- ➤ Dr. Kumaravel S, Professor, NIT Calicut lectured on "Technical challenges of grid connected distributed generation". Mr.Brijesh P, Principal Engineer, Power Electronics Group, CDAC, Thiruvananthapuram shared a case study on Design and implementation of off-grid micro grid using renewable sources.
- ➤ "Meet the Department" on 1st August, 2018 a familiarization session organized by the Dept of EEE yearly, where the first year students get an opportunity to meet all the faculty of the Department.
- ➤ The department is coordinating "Energy Quiz" an All Kerala Quiz competition organized by the KSEB Engineers' Association on 21st November 2018.

#### **Faculty Achievements**

- ➤ Ms. Parvathy R submitted the PhD Thesis and she has received the Best Teacher Award for the year 2018.
- Ms. Surya Susan Alex submitted the final synopsis of PhD Thesis.

The following faculty got admission for PhD in various institutes.

- Anil J Thomas Cochin University of Science and Technology
- Rakhee R Cochin University of Science and Technology
- Sreeja E A Cochin University of Science and Technology
- Veena Wilson Cochin University of Science and Technology
- Rinku Scaria Annamalai University

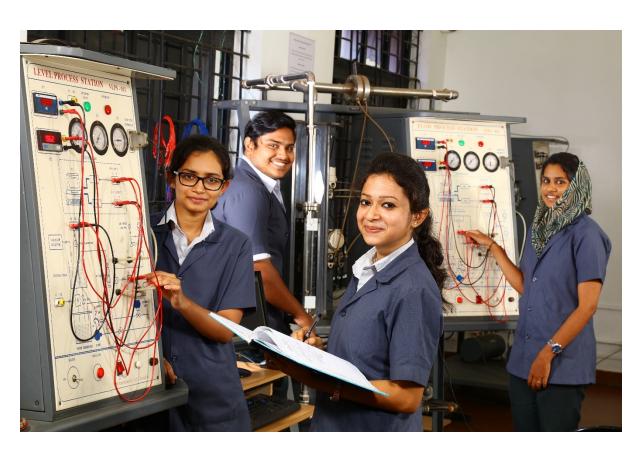
#### Student Achievements - External

- ➤ Mishal, Hains Justin, Arjun Cherayil Members of KTU Zone D Basketball Tournament winning team.
- Muhamed Sahal, Jerin K Sebastian, Amal Suresh, Muhamed Sahad, Abdul Saleel Khader -Members of KTU Zone D Football Runner up team.
- Dilshada, Asulabha Sathyan Member of KTU Zone D Women's Volleyball Runner up team.
- ➤ Neeraj PM, Sani Sajan Members of the II runner up of Project Expo at Saintgits College of Engineering , Kottayam
- Uwais Abdulla and Neeraj PM-participated in FISAT-ENS UAE Maker Fair.

### **Publications by Faculty and Students**

- ➤ "Analysis of Extended State Observer and Active Disturbance Rejection Control in the Speed Control of DC Motor System, Parvathy Rand Asha Elizabeth Daniel, accepted for publication in "Mechatronic Systems and Control" published by Actapress, an ESCI indexed Journal, Parvathy R, Asha Elizabeth Daniel
- ➤ "An Efficient Position Tracking Smoothing Algorithm for Sensor less Operation of Brushless DC Motor Drives", published in Modelling and Simulation in Engineering, published by Hindawi, an ESCI indexed Journal, Surya Susan Alex, Asha Elizabeth Daniel
- ➤ "Single phase reconfigurable grid tied inverter using DQ controller", IEEE International Conference on Control, Power, Communication and Computing Technologies, March 2018, at YJEC, Kannur, Surya Susan Alex, Anupama Narayanan
- ➤ "A Novel Single Switch Transformer less Buck-Boost Converter with noninverting Output", IEEE International Conference on Current Trends towards Converging Technologies (ICCTCT 2018) at SYS College of Engineering, Coimbatore, Resmi, Retnan, Sreeja E.A.
- ➤ "PI Control Strategy for a DC-DC Interleaved Boost Converter", National Conference of Emerging Technologies at MES College of Engineering and Technology, Kunnukara, Amala Joy, Soumya Simon.
- ➤ "Multiple Input Bidirectional DC-DC converter for DC Drive Applications", Asha KA, Rakhee R
- ➤ "A Photovoltaic System with Adaptive MPPT with ZETA converter and Single Source Multilevel Inverter", International Conference on Control, Power, Communication and Computing Technologies at Yimal Jyothi Engineering College, Thalassery, Ruveena, Anil J Thomas
- ➤ "Sepic Cuk Converter For PY Application Using Maximum Power Point Tracking Method", IEEE International Conference on Control, Power, Communication & Computing Technologies, YJEC, Kannur, Devika, Rosemin Parackal.
- ➤ "A Reduced Switch Multilevel Inverter Topology Utilizing a Capacitive Divider", International Journal of Electronics Engineering (IJEE), Rabiya Rasheed, Dr. Saju K.K
- ➤ "Development of low cost systems for structural health monitoring", Second National Conference on Structural Engineering and Construction Management, SECON' 2018, FISAT Angamaly, Firzeena Firoz, Unni Kartha G, Mahesh C, Muhamed Noufal C
- ➤ "Harmonic Analysis of Single Phase Inverter", International Multi-Conference on Computing, Communication, Electrical and Nanotechnology (I2CN-2K18), Mangalam College of Engineering, Ettumanoor, Arun Gopan, Muhamed Noufal C

# DEPARTMENT OF ELECTRONICS AND INSTRUMENTATION ENGINEERING



The Department of Electronics and Instrumentation Engineering was started in the year 2002 with the aim of imparting technological knowledge in the field of Electronics & Instrumentation Engineering. The B.Tech EIE program is NBA accredited (2020-2023). The department has an intake of 60 students. The department has secured 13 University ranks over the 20 years of its existence. The department has well qualified faculty and laboratory infrastructure and equipped with latest software like LABView, MATLAB etc

### **Major Activities**

SI No.	Date	Association Activities	Participants
1	05/2/2018	Workshop on Wireless power transmission(in NAUTILUS 2K18)	External participants + students of all years
2.	06/2/2018	Workshop on Introduction to Matlab(in NAUTILUS 2K18)	External participants + students of all years
3.	22/1/2018	Almuni Interaction with Edwin Devassykutty,Research Associate, Germany	2014-2018(S8),2015-2019(S6) 2016-2020(S4), 2017-2021(S2)
4	18/1/2018	Talk on NSDC Training Program	2014-2018(S8), 2015-2019(S6)
5.	26/7/2018	Alumni Interaction with Vishnu S MenonSub Leuitant,Indian Navy	Students of all years

### **Faculty Achievements**

SI No	Faculty Name	Course	Achievements
1.	Ms. Lakshmi Nandakumar	Embedded system Design Jan -April 2018. (12 weeks)	All India Topper (1%)
2.	Ms. Lakshmi Nandakumar	Introduction to Machine Learning Aug - Oct. 2018 (8 weeks)	All India Topper (2%)
3.	Ms. Raji P	Problem Solving Through C Programming Jan -April 2018 (12weeks)	All India Topper (5%)
4.	Ms. Shruthi Bhaskaran	Effective Engineering in Teaching Practices	Elite
5.	Ms. Raji P	Introduction to IOT Jul - Oct 2018 (12 weeks)	Elite
6.	Ms. Anila Mathew	Introduction to IOT Jul - Oct 2018 (12 weeks)	Elite

### For mentoring students in NPTEL Courses

SI No	Faculty name	Course	No of students passed the course
1	Ms. Lakshmi Nandakumar	Embedded System Design	
1.	IVIS. Laksiiiii Nailuakuiilai	Jan -April 2018 (12 weeks)	18 (All pass)
2	NAC Lakshooi Nandakumaar	Introduction to Machine	
2. Ms. Lakshmi Nandakuma		Learning Aug-Oct2018 (8Weeks)	17 (All pass)
3.	Ms. Anila Mathew	Introduction to IOT	
3.		Jul - Oct 2018 (12 weeks)	10

### **Funds Received**

Nature of the Project	Project	Name of the funding agency	Total grant Sanctioned	Amount Received
Industry sponsored Projects	EGG Candling Device Vertical Pro-Farming	TEXAS Instrumentsin association with my GOV initiative	Rs.30.000/-	Rs.30,000/-
Students Research	EGG Candling Device	KSCSTE	Rs.13,000/-	Rs.13,000/-

### **Publication of Faculty**

S.No	Title of the Paper	Conference/ Journal	Mon.&Yr.
1.	Estimator Based Inferential Control of an Ideal Quaternary Endothermic Reactive Distillation with Feed-Forward and Recurrent Neural Networks by Dr. Anish Mathew	Chemical Product	Sep' 2017
2.	Reaction-separation interaction on the control of ideal two feed, two product exothermic reactive distillation columns By Dr. Anish Mathew	The Canadian Journal of Chemical Engineering	Nov'2017
3.	Mathematical modelling of data clustering using kernel support vector machine of adaptive neuro fuzzy inference system	ICMSCE 2017	Feb'18
4.	The Non-Uniform characteristics of a Photo- diode	International advancedResearch Journal in Science, Engineering and Technology	Jan'18

### **Students Achievements: External**

Class	Name of the Students	Event	Month	Achievements
S3EIE	Jins George	KTU Football	Nov. 2018	Runners up KTUZoneD
63515		National Kickboxing Championship, Delhi	Jan 2018	Gold Medal
S3EIE	Akash Anil	FISAT Sports	Oct 2018 Bronze for 4x40 relay, Bronze for 200m	relay, Bronze for
S8EIE	Zulfigur, Romario Team	MG UniversityArts Festival	Jan 2018	Participated

### DEPARTMENT OF MECHANICAL ENGINEERING



The Mechanical Engineering department at FISAT offers a B.Tech programme in Mechanical Engineering and M.Tech programmes in Computer Integrated Manufacturing . The B.Tech programme is NBA accredited. Right from its inception in 2009, the department has been focusing on high-quality teaching along with integrated laboratory experience. Its strong and interactive curriculum and hands-on learning will make the students capable of taking their career to the next level, whether it is in the professional engineering practice or in advanced studies. The department has a sanctioned intake of 120 students for B Tech and 24 for M Tech programme

### **Major Activities**

- ASME (American Society of Mechanical Engineers) organized a one-day Technical Event EFx at the Federal Institute of Science and Technology (FISAT). The event was organized to bring the excitement, community experience, innovation and vibrant experience of an ASME Engineering Festival. The programme consisted of various interactive sessions and workshops with industry experts such as Mr.Prashant Dhawan, Founder of Biomimicry Lab, India, Mr.Sandith Thandassery, CEO Navalt Solar and Electric Boats, Mr. Sunder Raman Mohan, General Manager Siemens India and Mr. Viswa Mohan Senior Manager Bosch India. ASME EFx FISAT was officially inaugurated by Mr. P Vijayan IPS IG, Mr. Sanith Thandassery (CEO, Navalt Solar and Electric Boats), Dr. KSM Panicker (Director, FISAT), Mr. Madhukar Sharma (President, ASME India), Dr. Jose Cherian (HOD, ME), Ms. Erin Dolan (ASME International), Mr. Siddharth Jadeja (SRA ASME Asia Pacific), Mr. Viswa Mohan (Senior Manager, BOSCH India), Mr. Prashant Dhawan (CEO, Biomimicry India), Mr. Sunder Raman Mohan (General Manager, Siemens India). The lead coordinators for ASME EFx FISAT, Mr. Afan T Mohammed (Chairman, ASME FISAT) and Mr. Abhijith J Kumar (Zonal Representative, ASME India) were also seated on the dais
- ➤ Invited lecture: Marking the occasion of National Science Day on 28th February 2018, where Padma Bhushan award recipient Dr. A.S. Pillai, Founder CEO & MD of BrahMos Aerospace was the resource person. This was the 3rd lecture in the Erudite Lecture Series organized every year.
- ➤ ASME organized a one day seminar on 'Gas Turbines' in association with the ASME GT India Panel at the Federal Institute of Science and Technology (FISAT) on 7th April 2018.
- ➤ SAME organized "How to Engineer Yourself' programme: The Students Association of Mechanical Engineering (SAME) arranged a session for the students on 5th November 2018. The seminar going by the name "How to Engineer yourself' was conducted by Dr. Prasad Krishna NIT Surathkal
- ➤ GO KART CLUB: The Go Kart Club is operating under the Department of Mechanical Engineering. It is a club with a vision of revolutionizing the automobile industry. The main objective of this club is to prepare Mechanical Engineering Students to participate in BAJA (Baja SAE is an intercollegiate Design Competition run by the Society of Automotive

- Engineers). The club was established in 2018 after a group of Mechanical Engineering Aspirants created a fully functioning Go Kart named KARMA 1.0. The next immediate motive of the students is to bring out advanced vehicles, fitted with superior technology.
- ➤ Hydraulic Machines Lab inauguration: Renovation work of HM lab was completed in March 2018. Old turbines of low capacity were replaced by new ones of high capacity and test rig was done open type. New Turbines 1. Pelton wheel (5HP), 2. Francis turbine (5HP), 3. Kaplan turbine (5HP). The opening ceremony was carried out by Mr. Paul Mundadan, Chairman, on 18th April 2018. The upgraded lab will be highly beneficial to Mechanical and Civil Engineering students for UG programmes
- ASME GT INDIA NATIONAL SEMINAR 07.04.18



FISAT hosted the ASME National Seminar and Top officials of world's most branded companies like Rolls Royce, GE Electricals; DRDO etc have participated in the function. GE Electricals CEO Mr Hithesh Kumar Mistry inaugurated the Event. Mr.Paul Mundadan, Chairman FISAT presided over the function

### **Achievements**

- Faculty awarded with PhD
  - Mr. Suman Lal, Asst. Professor has been awarded Ph.D
  - Mr. Midhun Paul, Asst. Professor has been awarded Ph.D
  - Mr. Reejesh C R, Asst. Professor has been awarded Ph.D
- Student Outstanding Achievement
  - ➤ Namitha Krishnakumar, S2 ME has secured 'O' (Outstanding) position in all semester 2 examinations.

## DEPARTMENT OF BUSINESS ADMINISTRATION (FISAT BUSINESS SCHOOL)



Started in 2006, FBS was first affiliated to Mahatma Gandhi university and had an approved seat strength of 60. As the institute grew in reputation, in four years we were able to apply and get approval for an additional 60 more seats making the total intake 120 by the year 2011. In fifteen years, FBS has been able to establish itself as one of the most preferred B-Schools in Kerala. The demand for MBA from FBS is such that all the seats are filled with good quality students every year without much promotional efforts. Strong emphasis has been given to the holistic development of the students through rigorous academic processes, regular industry interactions, and corporate exposure. The excellent learning ambience and enriching facilitation of the learning experience by a rich and high calibre faculty pool makes FBS unique.

### **Activities and Extended Programmes**

- > SAP training for the senior batch students on Finance/ HR and Marketing domain.
- Training on professional etiquettes.
- Sessions on aptitude and reasoning.
- Workshop on time management and stress management.
- Session on Six Sigma Methodology in Indian Software companies by Mr. Brijesh Krishna, Director-Organizational Excellence, Sutherland Global Services.
- Soft skills training for enhancing their communication skills.
- > Session on Internet of Things (IoT) application in different industries.
- Union budget live streaming session and analysis.
- Microsoft Excel 2016 training.
- Industrial Visit to Mangalore.
- FBS and Nitta Gelatin have jointly organized a ludo-Japanese football tournament toencourage student-corporate interaction and to boost FBS brand visibility at corporate level.
- > CIFRS certification programme was offered to the entire T1 students.
- > Talk on Indian Capital Market Legal and Regulatory issues from governance perspective.
- Seminar on regulatory issues in the Indian Financial System

### Achievements

### **MOUs**

- ➤ MOU with EME for offering SAP training for the MBA students.
- MOU with Affable Fresher's for national level placement opportunities.

### Students

- 1. Ms. Meera Premachandran, Ms. Shilpa Johnson, Ms. Soumya Saleen Varghese & Soun Meriam Roy secured 2nd Prize in Ad Age competition in National Commerce Festival conducted by KMM College.
- 2. Mr. Febin George Jacob of T3 MBA has secured ITC Paid Internship & Pre-placement offer of Rs. 4.5 Lakhs.

- 3. Mr. Anit Itoop Vattoly ofT3 MBA has won the All Kerala Malayala Manorama Scholarship exam.
- 4. Ms. Anjaly Joy, Ms. Anu Josem, Ms. Geethu P Nair & Ms. Gilymol George have participated in the EMERGENCE 2K18 organised by Illahia School of Management Studies and won the Best Management Team award.
- 5. Mr. Raghav Swaminathan has received the All Kerala Best Management Student Award 2018 from KMA.

### Faculty

- 1. Ms. Sindhu George has been awarded PhD from CUSAT.
- 2. Mr. Prasanth V, has cleared Google Digital Sales Certification.
- 3. Dr. George V Antony, Dean, FBS has been nominated as the Director of Asia Africa Global Scholar Network (UK)
- 4. Dr. George V Antony, Dean, FBS has been recognized as the Ambassador Asia Pacific Region for JAAP (UK)
- 5. Dr. George V Antony, Dean, FBS has been awarded the DEAN of the Year 2018 award by Integrated Chamber of Commerce and Industry.

### **Academic Results**

FBS could achieve excellent academic results for all trimesters during the report period with the latest T6 (2017 Batch) as 99.13% pass

### **Placements**

FBS could attract many new companies that offered placement opportunities to our students. These organisations include Robert Bosch, TCS, ITC, OYO Rooms, S&P GLOBAL, IBS Software Services, Zinemind Technologies, Software Associates, Inter-Continental Hotels Group (IHG), Apollo hospital, Radisson Blu, Jaycee Ads, Taj Group, Tata Edge, Glenmark Pharmaceutical, TripleDe Technologies, Axis Bank, L&T Finance, ESAF Bank, Kempegowda International Airport, Bangalore etc

Total No of Companies	65
Total No of offers received	70
Highest Salary	9 Lakhs



Dr. Ahammed Hashim Vice President, Malaysian Open University inaugurated the function. Mr. Paul Mundadan, Chairman FISAT Governing Body, Mr Joseph Thomas Country Head Malaysian Open University, Dr. George Issac, Principal Dr. George V Antony Dean FISAT Business School are also seen

### DEPARTMENT OF COMPUTER APPLICATIONS



Started in the year 2006, the Department of Computer Applications is now offering a two-year MCA programme with an annual intake of 120. The department aims to achieve academic excellence by focusing on the key activities like providing quality education to students, enhancing their learning skills and giving them training to acquire the professional skills required for their career with an objective of making them socially committed professionals. A team of qualified and committed faculty with ample experience is the highlight of the department. The students of the department consistently bagged top spots in the University Examinations.

### **Activities:**



PRAYAAN 2k18: A two-day National Level IT Fest held on 16th and 17th of February 2018 was an initiative taken by FIESTA, the students association of the department. Around 230 students actively participated in all the challenging technical events. The prize amount was worth a total of One Lakh Ten Thousand with placement offers from UST Global exclusively for the winners of the Coding event. Ms. Eesha Priya IAS, Assistant Collector of Ernakulam inaugurated the Fest on 15<sup>th</sup> February 2018.

The students were presented with an array of technical events such as Coding, Web Hunt, IT Quiz, Gaming, Mock CID, Best Gang, Photography and 3D ball game. The events on the first day ended with a Cultural Extravaganza' in which the MCA students showcased their talents through dance & music. On the 17th February, all the semi-final and final rounds were held from which the winners were selected. A live interview was held by Mr. Praseed Pai, Senior solutions architect, UST Global in the final round of the Coding Event. During the valedictory function, prizes were distributed to all the winners. M.A College, Kothamangalam emerged as the overall champions of the Fest.

➤ ORIENTATION PROGRAMME-KTU BATCHES - Organized orientation programme for KTU first year regular and lateral batch students on 8th, 9th ,11th and 18th August 2017. Mr. Chandramohan Nair, Mr.Sino Varghese, Prof. Molly Joseph were resource persons of the programme.

### **Achievements**

➤ Dept of Computer Applications is selected as Advanced Skill Development center by ASAP and Higher Education Department for conducting Machine learning/ Artificial Intelligence course. Dr. Sreeraj M is selected as Nodal Officer/ Trainer

### **Faculty Achievements**

- Mr. Santhosh Kottam won the FISAT best teacher award for the year 2017.
- ➤ Ms. Rose Mary Mathew won Elite + Gold medal certificate in NPTEL online Certification. Subject: Introduction to R Software.
- Two faculty members completed Ph.D course work in Computer Science from Mahatma Gandhi University.
- Ms. Deepa Mary Mathews and Ms. Shahna KU participated in the 'From Labs to industry' Programme (FLI) 2018 organized by Mahatma Gandhi University, Business Innovation and Incubation Centre (BIIC) and was selected for student start-up grant.
- Dr.Sreeraj M is selected as Co-Principal Investigator for funded research project by Ceds, TVM May2018.
- Dr.Sreeraj M is selected as research supervisor at APJ Abdul Kalam Technological University

### **Student Achievements**

- Mr. Adarsh Kadameri, MCA Lateral 2014 batch secured third rank in M G University 2016-2017 MCA degree examination
- For 2015-18 academic year- MCA Regular 2014 and MCA Lateral 2015 batches achieved good placement records. More than 35 placement offers achieved by our students in reputed IT companies. Our students completed internship programmes at UST Global and Opentrends., 18 students got placement in the same company.
- ➤ Disney Devassy and Anishma .S. Kumar of S3 MCA (Regular) won the P.V Mathew Memorial Trophy for Inter-Department Mathematics Quiz Competition organized by the Maths Club of Fisat on 7th November 2017.
- The students of MCA Department participated in the Inter-collegiate IT Fest ZENORIX organized by the Department of Computer Science, Naipunnya Institute of Management and Information Technology, Pongam on 28th and 29th October 2017 and won the First prize for Treasure Hunt
- The students of MCA Department participated in the Inter-collegiate IT Fest ZENORIX organized by Saintgits on 9th and 10th November 2017 and won the first Prize for Project presentation and Second Prize for Best Gang Event.

### DEPARTMENT OF SCIENCE & HUMANITIES



The Department of Science & Humanities started functioning in the year 2002. The department comprises a team of highly qualified faculty members and is well equipped with the latest laboratories and related facilities. The department of Science and Humanities involves teaching Engineering Mathematics, Calculus, Physics, Chemistry, Economics, Life Skills, Professional Ethics & Communication Skills connected with all the programs offered by all other departments. The department also provides assistance in technical projects. The department has a language lab for the students to enrich their communication competence. It also aims to maintain good linguistic proficiency through accuracy in grammar, pronunciation and vocabulary. The Department has access to all streams of students irrespective of their subject specialization. It helps them mould the right attitude towards Mathematics, Physics, Chemistry, Economics and English. The department offers remedial and reinforcement sessions. The well-equipped labs for subjects like Physics and Chemistry fosters the much-required practical experience.

### **Activities Organized by various Clubs**

### **Rolling Stone (Literary Club)**

Rolling stone resumed its activities vigorously from the beginning of the academic year involving the Fresher's also from various branches in B.Tech classes. For Toastmaster's sessions, they met regularly twice a week Tuesday and Thursday in the evenings after class hours (4.30 - 6 PM) in the Seminar Hall. The senior students involved the juniors and inspired them to take part after observing Toast Masters norms for one session or two. In fact, there were 10 Toast Master's session in full swing followed by debates and discussions.

- A series of Book Talks were conducted on 10th and 11th November 2017 in collaboration with Library and Information Centre and had a Book Exhibition. The Principal, Teaching and Non teaching Staff and students gave book Talk and introduced their books.
- ➤ The Annual Event of Rolling Stone was conducted on 20th February 2018 with the Eminent Chief Guest from Bangalore, Ms. Saranya Francis.
- The Chairman, Mr. Paul Mundadan instituted P.V. Mathew Memorial Ever Rolling Trophy and it was given over to Abraham Jeevan Roy (S8 CS) with a cash Prize of Rs. 3000/-. The second prize went to Dhiyeri. P Joy (S8 ME) with a cash money Rs. 2000/-, and the third prize given to Lisabeth Maria George (S6 EEE).
- An Endowment Fund instituted in the name of Vinaya Menon (EC) to the winners of Art and Literary Competitions was handed over to 5 students (Rs. 1000/- each).

### **Maths Club FISAT**

- Celebrated National Mathematics Day on 22nd December 2017.
- Conducted a video-talk 'Ramanujan-A brief profile' by Dr. A. Sunny Kuriakose.

- A Memorandum of Understanding was signed between the Department of Science & Humanities and Kerala Mathematical Association (KMA). Mr. Paul Mundadan (Chairman, FISAT) and Dr. T. Thrivikraman (President, KMA) signed the MoU on 31st January 2018.
- Conducted Fourth All Kerala Inter-Collegiate Mathematics Quiz Competition in association with Department of Science and Humanities and Kerala Mathematical Association (KMA) on 31st January 2018. Dr. T. Thrivikraman (President, KMA) was honoured for his contributions in the field of Mathematics. Dr. Sunny Kuriakose (Dean Student Affairs) was the Quiz master. 37 teams from various colleges participated in the competition.
- A seminar on 'Foundations of Mathematics' was given by Dr. T.Thrivikraman (President, KMA) on 31st January 2018.
- ➤ Conducted a refresher course on 'Foundations of Engineering Mathematics' for S2 B.Tech students. The course was conducted for 10 days from 26-02-2018 to 09-03-2018. Around 30 students attended the course.

### **Student Achievements**

- Unnikrishnan (S8EC-B) won the first prize in the Mathematics Relay Competition in the intercollegiate Maths Fest held 5 March 2018 at U.C.College, Aluva.
- Renjith Prasad (S8EC-B) won the first prize in the Teaching Skill Competition, and Unnikrishnan (S8EC-B) won the first prize in the Sudoku Competition held on 26th February 2018 at St Pauls Kalamassery
- Renjith Prasad (S8EC-B) won the second prize in the Teaching Skill Competition held on 21st February 2018 at KKM College, Thrikkakara

### **Faculty Achievements**

### Dr. C. Sheela

- Function Approximation with Deep Neural Network for Image classification in Fuzzy Domain, Appl. Math. Inf. Sci 11 (2017) 1725-1730. (International Journal).
- Delivered a lecture for plus-two students in an 'EMPOWER' camp.
- Invited talk for college students at NSS Hall, Aluva.
- Delivered a talk at Manicamangalam Higher secondary School.
- Inaugurated Science Exhibition in SHOHS Mookkanoor

### Dr. Sunny Kuriakose A

He published 62 research papers so far in various national/ international research journals. His publications during 2017-2018 are as follows:

➤ On Intuitionistic Fuzzy Rough Sets, International Journal of Advanced Research in Computer Science 8(5) (2017) 787 - 792. (Co-authored with Sheeja T. K.)

- ➤ On Multi-granulation Rough Sets, International Journal of Engineering and Computer Science 6(6) (2017) 21796- 21801. (Co-authored with Sheeja T. K.)
- ➤ Rough Topology on Approximation Spaces, International Journal of Advanced Research in Computer Science 8(9) (2017) 379-384. (Co-authored with Sheeja T. K.)
- A Novel Feature Selection Method Using Fuzzy Rough Sets, Computers in Industry 97 (2018) 111-116. (Co-authored with Sheeja T. K.)
- ➤ Divergence Based Generalized Fuzzy Rough Sets, International Journal of Computer Sciences and Engineering 6(6) (2018) 809 815. (Co-authored with Sheeja T. K.)
- A New Measure of Fuzzy Rough Uncertainty and Application to Image Processing (Communicated) (Co-authored with Sheeja T. K.)
- ➤ Efficiency of Basis Elements and Fuzzy Weighted Graph, Applied Mathematical Sciences, Vol11, 2017, no. 59, 2941 2949 RIK.ARI Ltd, www.m-hikari.com https://doi.org/10.12988/ams.2017. 74153 (Co-authored with Manjusha R.)
- Graphs Generated by Linear structure with constant Metric Dimension, Bulletin of Kerala Mathematical Association, June 2018. (Co-authored with Manjusha R.)
- A unique fixation of the locus of basic elements in graphs, Scientific Transactions in Environment and Technovation, March 2018.(Co-authored with Manjusha R.)

### Invited Lectures given during 2017 - 2018

- Introduction to Fuzzy and Intuitionistic Fuzzy Set Theory at one-day seminar on Fuzzy and Intuitionistic Fuzzy Set Theory in Optimization held on September 12'\ 2017 at Gonzago College of Arts and Science, Kathampallam, Elthagiri, Krishnagiri Dist, Tamil Nadu.
- Fuzzy Logic and some issues in Data Communication on November 11th, 2017 at the three-day National Seminar on Mathematics for Computer Science and Annual Conference of Kerala Mathematical Association held during November 9-11, 2017 at Amal Jyothi Engineering College, Kanjirappally.
- Introduction to Cryptography, on January 9th, 2018 at one-day Mathematics Teachers Training Programme, organized by Department of Mathematics, MES College, Nedumkandam
- Evidence Theory, at the two-day National Seminar sponsored by M.G. University, Kottayam on Graph Theory and its Applications on February 2nd, 2018 at Bharata Mata College, Thrikkakkara
- ➤ Towards successful research on March 191 2018 at the State level Seminar on Faculty Enrichment 'Incubating Future Research Leaders' organized by Little Flower College, Guruvayoor.

### Programmes attended during 2017 - 2018

➤ 47th ISTE National Annual Convention during January 27th - 29th, 2018 at Saintgits College of Engineering, Kottayam.

- Five-day programme on Outcome Based Education A Gateway for NBA Accreditation, during February 12th -16th 2018 organized by division of Mechanical Engineering, CUSAT
- ➤ Workshop on Quality Initiatives in Technical & Higher Educational Institutions (in compliance with NBA & NAAC Accreditation) during May 16th 18th, 2018 at Engineering Staff College of India, Hyderabad.

### Dr. Molly Joseph

- Received Poiesis Award of Honour International on 20th May, 2018 as an international Jury.
- ➤ KalaPrathibha award by Chithrasala Film Society, Kerala and Vijaya Vasudeva Puraskaram by Aksharasthree, Malayalam group of Poets, Kerala in March, 2018.
- Conferred with Kala Pratibha Samarppanam by Kerala State Service Pensioners Union.

### **Dr. Binimol Punnoose**

- Attended a Faculty Development Programme on Graph Theory at Rajagiri school of Engineering and Technology, Kakkanad on 27th June 2018.
- Participated in NPTEL workshop conducted by HT Madras at FISAT on 20th July 2017.

### Dr. Sona Narayanan

- Low Band Gap Donor-Acceptor Phenothiazine copolymer with Triazine Segment: Design, Synthesis and Application for Optical Limiting Devices, Journal ofLumniscence 198, (2018) 449-456 (International Journal).
- > Synthesis and Experimental Investigations on the Photoconductivity of p-Aminoazobenzene based Non-conjugated Polybenzoxazine, Polymer, 137 (2018) 330-337 (International Journal).
- > Study on the Photoconductive Properties of Charge Carriers in Donor-Acceptor Copolymer P (EDOT-FL) and P(EDOT-FL):PCBM blend, Synthetic Metals, 233 (2017) 52-57 (International Journal).
- Attended Short term Course on 'Polymer and Hybrid Electronic: Physics and Device Applications' conducted by GIAN at NIT Calicut.

### Dr. Ayswarya E P

➤ Effect of Aluminium Hydroxide on Thermal, dynamic Mechnical and Dielectric Properties of Hexafluoropropylene-vinylidinefluoride Elastomeric Composites, Journal of Advances in Nanomaterials, 2(2017) 83-96 (International Journal).

### Mr.Antu P.J.

Received NPTEL Online Certification for the courses on Graph theory, Advanced Graph Theory and Developing soft skills and personality.

### Ms. Seena Varghese

- Received NPTEL Online Certification for the courses on Graph theory and Advanced Graph Theory
- ➤ Delivered a lecture on the topic "Introduction to graph labeling" on 07/06/2018 for the final year B. Sc students at St. Xavier's College for Women, Aluva.

### Ms. Vidya T.P.

- Participated in NPTEL workshop conducted by IIT Madras at FISAT on 20th July 2017.
- > Dr. Paulson T I & Vidya T. P. have published a book on Engineering Physics (Sree Krishna HiTechPub. Chennai).
- > Dr. Paulson T I & Vidya T. P. have published a book on Engineering Physics (Sree Krishna HiTechPub. Chennai).

### Ms. Sajana Shamsudeen

- ➤ Attended AICTE approved Faculty Development Programme on 'Pedagogy for Online and Blended Teaching-Leaming Process conducted by IIT Bombay during 14 September -12 October 2017
- ➤ Attended AICTE approved FDP on 'Foundation Program in ICT for Education' conducted by IIT Bombay during 3rd August-7th September 2017

### Ms Nyci Ignatius

- ➤ Attended AICTE approved Faculty Development Programme on 'Pedagogy for Online and Blended Teaching-Leaming Process conducted by IIT Bombay during 14 September -12 October 2017
- ➤ Attended AICTE approved FDP on 'Foundation Program in ICT for Education' conducted by IIT Bombay during 3rd August-7th September 2017

### Mr. Nizamuddin Akber

- ➤ Attended AICTE approved Faculty Development Programme on 'Pedagogy for Online and Blended Teaching-Leaming Process conducted by IIT Bombay during 14 September -12 October 2017
- ➤ Attended AICTE approved FDP on 'Foundation Program in ICT for Education' conducted by IIT Bombay during 3rd August-7th September 2017

### Mr.Sumesh G

Attended FDP on 'Technical Communication' conducted by IIT Bombay

### Mr. Prince Joseph

➤ Attended two day workshop on Stochastic Models organized by centre for Research in Mathematics at CMS College on 17th- 18th July 2017

### **Dr. Reethamma Thomas**

> Participated in the NPTEL workshop conducted by IIT Madras at FISAT on 20th July 2017.

### INAUGURATION OF PV MATHEW MEMORIAL DEBATE COMPETITION

The literary and Cultural association of FISAT called 'Rolling Stone' conducted P V Mathew Memorial Debate Competition. Veteran Poet Ms. Shalini S inaugurated the function. Paul Mundadan Chairman, Dr. George Issac Principal, Dr. C Sheela Vice Principal, Prof. Molly Joseph Program coordinator and other dignitaries were also seen



## SCIENCE AND TECHNOLOGY PARK AND RESEARCH CENTER (SPARC)



FISAT has now become a brand name in the field of Educational Technology, Product Development, Entrepreneurship and Social Services. As a continuation of its growth, management has decided to constitute Science & Technology Park and Research Centre (SPARC) as a new Department for the overall development of the students, faculty and common man in the field of science and technology. The center aims to foster a new scientific perspective within the youth and thus mould young entrepreneurs and scientists for tomorrow. Also the centers will co-ordinate the activities of Fablab, Federal Labz Incubation Centre, Technology Business Incubator (TBI), Multimedia Centre, Science Park and Research centre, Innovation Entrepreneurship Development Cell (IEDC), Community Research Centre and Outreach programmes, National Service Scheme, SCOPE, FOCUSS, Community Outreach Programmes, Rural Innovation Centre, Unnat Bharath Abhyaan (UBANodal Center), Astronomy Club, Fab@School, Industry Institute Interaction Cell, Intellectual Property Rights Cell (IPR Cell), Centre for Renewable Energy, Centre for Cyber Innovations, State Resource Centre (SRC), Centre for Acoustics, Production Centers / Factories / Mini Factories, Science Library, Children's Science Park, Planetarium, Centre for Logistics, Innovation Cell / Weather Stations at Schools / Rural areas

**FabLab**: Federal Institute of Science And Technology (FISAT) has started a mini fabrication laboratory (FabLab) with the support of AP J Abdul Kalam Technological University and Kerala start up mission (KSUM) in the college campus. FISAT Fablab will function as an auxiliary body of Science & Technology Park and Research Centre. A Fabrication Laboratory (FabLab) is a technical prototyping platform for innovation and invention which aims at providing stimulus for studentsand serves as a platform for learning and innovation. It is a small scale workshop offering digitalfabrication which empowers the students and other users to create smart devices for themselves which can be tailored to local or personal needs. The FabLab also becomes a medium for connectingto a global community of leamers, educators, technologists, researchers and innovators - essentially becoming a self-sustaining global knowledge sharing network.

**Federal Labz**: FISAT has setup a fully fledged facility called federal labz for incubating startups inside the campus. It is a fully air-conditioned space with all modem amenities required for the functioning of a start-up company. The centre plays a catalytic role in promoting indigenous technology development and carrying out research activities at low cost. The potential technology aspirers and entrepreneurs with innovative ideas are nurtured through different phases of growthuntil their research takes off to a maturity level where it becomes a viable venture. The cutting edge facilities provided in the Institute, and the expertise offered by faculty who are experienced in their specialized areas, help the aspirants to implement their idea.

**Mobile Fablab**: FISAT Fablab has realized a concept of a" Mobile Fablab". Mobile Fablab is an extension of FISAT Fablab which aims to support rural innovators and student to convert their ideas into product. A vehicle is transformed into mobile fabrication unit with necessary

machine for prototyping a product. The machines used in the mobile Fablab are indigenously developed by the students of FISAT using our Fablab facility. Following Machines are seen in a typical Mobile Fablab: 3D Printer, Multifabricator - (3 in 1 Machine), PCB Milling Machine, 3D Scanner, Electronics Workbench etc.

### **Flagship Programmes**

**Idea to Product Maker Workshop**: It's a 3 Day hands on workshop. The workshop gives an opportunity to experience real time challenges in different stages of product development such as problem identification, feasibility study, technology development, prototyping, testing, market survey, development of marketing strategy etc.

**Digital Fabrication Technique**: The digital fabrication technique is a programme initiated by FISAT Science and Technology Park and Research Centre to spread awareness of digital fabrication and to promote technical and training services given by FISAT FabLab and Mobile Fablab. The programme is indented to student community, rural innovators, manufacturing industries, research scholars etc.

**Professional Enhancement programme**: The professional enhancement programme aims for enhancing the creative thinking and innovative product making capabilities of participants. Its 5day residential programme meant for teaching faculty, research scholars and industry people.

**Fab@School**: Fab@School is a project intended for school students to enhance their knowledge, skills and practical wisdom in STEM (Science, Technology, and 'Engineering & Mathematics). It aims to enhance a "maker mind" in young generation by providing them the state of art facilitates of FISAT Fablab and to mould them as a competent citizen for meeting the national imperative.

**Additional Skill Development Programme:** Additional skill development programme is being offered to public which aims to improve their knowledge in latest technology. Technical staffs, students community, self helping groups are the targeted group for this programme

**FISAT Weather Station**: students from Fab Lab created a weather station for the general public to know the weather conditions of the state in different locations.



A mini FABLAB (Fabrication laboratory) with the support of A P J Abdul Kalam Technological University and Kerala Start up Mission (KSUM) has started functioning inside the campus. FISAT has also built a fully fledged facility called Federal Labz for incubating start-ups inside the campus. The Inauguration of FISAT FABLAB, Federal Labz and Fab@School project was done by Shri. P. Sreeramakrishnan, Hon'ble Speake of Kerala Legislative Assembly on 27th May 2017. Shri. Roji M John, Member of legislative assembly Angamaly Constituency, Dr. M Abdul Rahman, Pro Vice Chancellor, KTU and Smt. Molly Vincent, President, Mookkannoor Grama Panchayath were present on the occasion.

### **Project Completed in the Academic Year 2017-18**

SI.No	Project title	Status
1	Design and development of commercial 3D printer	Completed(equipped in Fablab and Mobile Fablab)
2	IoT monitoring and controlling for 3D printers.	Completed (equipped in Fablab)
3	Design and development of PCB milling machine.	Completed(equipped in Fablab and Mobile Fablab)
4	Design and development of Water Bicycle	Completed first phase
5	Design and development of cooling blanket for therapeutic hypothermia in neonates	Funded by KSUM, completed the first version
6	Design of coconut grating machine	Completed
7	Design and development of Braille printer	Applied for Patent
8	A novel design for door closing/ holding system	Patented
9	Feasibility study & detailed project report preparation of sky-pass in Angamaly Municipality	Report submitted
10	Digital FISAT	On-going

11	Multi fabricator	Completed (patent application processing)
12	Innovative design for household equipment's	Applied for Patent
13	Al based smart mirror	Completed (Installed in Fablab)
14	Al Chat-bot.	Completed
15	Green house automation & monitoring using IoT (Proto).	Completed & applied for KSCTE funding
16	FABLAB automation using AI.	Completed
17	Automatic coin counter and supporter.	Completed & applied for KSCTEfunding
18	People counting module using image processing.	Completed
19	Smart waste basket.	Completed
20	Smart duster.	Completed
21	Devices for FISAT weather station.	Completed
22	VR console set-up	Completed
23	VR future home walks through.	Completed
24	New 3d printer and laser cutter.	Completed
25	Satellite data collection.	Completed
26	Data logger.	Completed
27	Alcohol breath analyser.	Completed

- All Kerala FABLAB orientation Training for faculty on 27<sup>th</sup> July 2017- FISAT Science & Technology Park and Research Centre has organized all Kerala FABLAB orientation programme in association Kerala Startup Mission (KSUM) at FISAT FABLAB on 26<sup>th</sup> and 27<sup>th</sup> July 2017 for faculty members of engineering college across Kerala. *Mr. Luciano Betoldi*, Director, International FAB Foundation handled the session.
- ➤ Entrepreneurship Training programme for Students on 30<sup>th</sup> August 2017- A Entrepreneurship orientation programme called 'Margadeepam' was organised in association with Directorate of Industries and Commerce, Kerala Government at FISAT

- on 30<sup>th</sup> August 2017. Around 200 students from B.Tech and MCA courses attended the orientation programme. The session was handled by Mr. Praveen M, District officer, Directorate of Industries and Commerce.
- ➤ Workshop on "DIGITAL FABRICATION TECHNIQUES" Edition 1 on 14<sup>th</sup> & 15<sup>th</sup> July 2017-FISAT FABLAB has organized hands on workshop titled "Digital fabrication techniques" for teaching and non teaching staff of FISAT. 15 staff participated in the 1<sup>st</sup> edition of workshop.
- Professional enhancement programme for UKF college of Engineering and technology, Kollam on 21<sup>st</sup> & 23<sup>rd</sup> July 2017- FISAT Fablab has conducted a 3 day professional enhancement programme for faculty members from UKF College of engineering and technology, Kollam. 21 faculty members attended the programme and they successfully presented 6 innovative products at the end of programme.
- ➤ Workshop on "DIGITAL FABRICATION TECHNIQUES" Edition 2 on 25<sup>th</sup> & 26<sup>th</sup> August 2017- 12 staff members participated in the 2nd edition of workshop.
- ➤ Workshop on "DIGITAL FABRICATION TECHNIQUES" Edition 3 on 15<sup>th</sup> & 16<sup>th</sup> September 2017- 20 staff members participated in the 3rd edition of workshop.
- Porientation programme on Astronomy and Astrophysics on 31st Oct & 1st Nov 2017-Astronomy Club constituted under FISAT centre for astronomy and astrophysics has organized a two day orientation cum hands on workshop on astrophysics area. Prof. Avinash Deshpande, Raman research Institute, Bangalore handled the session for the astronomy club members.
- Inauguration of MOBILE FAB LAB on 6<sup>th</sup> November 2017- Mobile Fablab is an extension of FISAT Fablab which aims to support rural innovators and student to convert their ideas into product. A vehicle is transformed into mobile fabrication unit with necessary machine for prototyping a product. The machines used in the mobile Fablab are indigenously developed by the students of FISAT using our Fablab facility.
- Launch of Fab International programme on 6<sup>th</sup> November 2017
- Launch of Weekend Fab Programme on 6<sup>th</sup> November 2017- FISAT Fablab in association with State NSS technical cell has launched "Weekend Fab programme". The programme is a 3 day residential programme for school students where students imagine, invent, design, test and collaborate to solve compelling problems.
- ➤ Visit By Rajastan Technical University on 8<sup>th</sup> November 2017- A team from Rajastan Technical University headed by Vice chancellor, PRO Vice chancellor and Principals of 3 Engineering colleges visited Fablab and Mobile fablab.
- Addressed Students & Teachers of The Emirates National School, Sharjah on 12<sup>th</sup> November 2017
- ➤ FISAT Fablab Team Participated in Bangalore Maker fair 2017 on 17<sup>th</sup> & 18<sup>th</sup> November 2017

- FISAT Fablab has participated in National level Maker fair conducted in Bangalore. The maker fair was an excellent platform for showcasing FISAT Fablab projects and got wide appreciation from the technocrats and the public.
- Innovation and Entrepreneurship Development cell (IEDC) of FISAT has been recognized as best performing IEDC in Kerala. Mr. Jiby Varghese and team received certificate of appreciation from Kerala startup mission (KSUM).
- Federal labz- incubation centre currently incubating 4 start-up companies.
- A 'start-up meet up' for mentoring incubatees of federal labz, conducted on 1<sup>st</sup> Novemeber. Mr. Jiteesh P V, Federal Bank Launch pad and Chandara Vadhana K, Entrepreneur-Trainer were the resource persons.
- National media DNA INDIA and CNBC news channel visited for news featuring FISAT Fablab and Mobile Fablab.

### **SPORTS & GAMES**



### **Individual Achievement**

SI.No	Name of the Student	Achievement	Level of Tournament
1	Nandini Menon	Bronze Medalist & Gold medallist	<ul> <li>National Youth Tabletennis         Tournament 2018-19         Dr. APJ Abdul Kalam Technological         UniversityTabletennis Tournament         2017-18     </li> </ul>
2	Hajira Althaf	Team member	■ Dr APJ Abdul Kalam Technological UniversityVolleyball team 2017-18
3	Rosemol Wilson	Team member	■ Dr APJ Abdul Kalam Technological UniversityVolleyball team 2017-18
4	Dilshada Sabnam	Team member	■ Dr APJ Abdul Kalam Technological UniversityVolleyball team 2017-18
5	Swathi S	Team member	■ Dr APJ Abdul Kalam Technological UniversityVolleyball team 2017-18
6	Anan Ashraf	Team member	■ Dr APJ Abdul Kalam Technological UniversityVolleyball team 2017-18
7	Ajay Diji	Team member	■ Dr APJ Abdul Kalam Technological UniversityBasketball team 2018-19

### **FISAT Team Achievements**

Sl.No	Name	Achievement	Level of Tournament
1	FISAT Cricket Team	Third position	■ Dr APJ Abdul Kalam Technological University Zone D
2	FISAT Football Team	Winners	■ All Kerala inter collegiate Foot ball tournament Rajagiri Trophy2017-18
3	FISAT Volleyball	Runner Up	■ Dr APJ Abdul Kalam Technological University D Zone for Women 2017-18 & 2018-19
4	FISAT Basketball Men	Winners	■ Dr APJ Abdul Kalam Technological University D Zone for Men 2018-19
5	FISAT Table Tennis Men	Winners	■ Dr APJ Abdul Kalam Technological University D Zone for Men 2018-19
6	FISAT Basketball Men	Second Runner Up	<ul> <li>Dr APJ Abdul Kalam Technological University Inter Zone for Men 2018- 19 at Mohandas college of Engg, Thiruvananthapuram</li> </ul>
8	FISAT Football Team	Winners	<ul> <li>Penalty Shootout Competition</li> <li>Organized by Kerala Excise</li> <li>Department for college students at</li> <li>MA College, Kothamangalam</li> </ul>

7	FISAT Football Team	Runner Up	■ Dr APJ Abdul Kalam Technological University D Zone for Men 2018-19
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### Tournaments Hosted by FISAT- Department of Physical Education

SI.No	Tournament	
1	Dr APJ Abdul Kalam Technological University Interzone Cricket Tournament 2017-18	
2	Dr APJ Abdul Kalam Technological University Table Tennis Tournament 2017-18 Zone D (Men & Women )	
3	FISAT Trophy – All Kerala Intercollegiate Cricket Tournament 2017	
4	FBOA Zonal Cricket Tournament	
5	Dr APJ Abdul Kalam Technological University Table Tennis Tournament 2018- 19 Zone D (Men & Women )	
6	FISAT Annual Athletic Meet 2018	

### **Faculty Achievements**

Presented Scientific paper on "Grappling Technique Analysis of 35th National Games 2015 Judo competition for men "in the SAICON 2017 Delhi -An International conference on sports medicine and sports sciences organized by Ministry of Youth Affairs and Sports, Government Of India., New Delhi

### FISAT INTER COLLEGIATE TWENTY TWENTY CRICKET



Rajagiri College of Engineering has won the Trophy of FISAT Inter Collegiate Twenty Twenty Cricket. Former Indian Team Cricketer Tinu Yohannan gave away the trophy to the winners. Dr. George Issac, Principal, Mr. Arun Surendran, Sports Coordinator, Mr. Amal participated in the event

### OTHER ACTIVITIES

### Major Highlights during 2017-2018

### Academic Excellence

Students of FISAT have passed out with flying colors and bagged a good number of ranks in the University examinations right from the very first batch. Till now we have got 58 University Ranks (first 3 positions) from different streams from MG University. Highly qualified and motivated faculty with 30 Ph.D holders from leading Institutions, regular, academic progress organizing students chapter of technical and professional bodies, systematic staff development program, internship program in leading institutions supplement effort for academic excellence. The College is accredited by the Tata Consultancy Service for placement activities. Professional bodies like IEEE, ICI, ISTE, CSI, ASME and ISA are actively functioning in the College. Technical forums like Thyra, Echo, Electra, Idea, Matrix, Forum, and MCA Association. Civil Students Association and FFSC are also very active in the College.

### **Collaboration with Foreign Universities**

In international collaboration FISAT has signed MoUs with Baekseok University, Republic of Korea, Hyogo University, Japan, Open University Malaysia and Edinburgh Naipur University Scotland. For add-on courses, exchange programmes, twinning programmes, student exchange and interaction programmes etc. Collaboration with some of the British Universities is also on the pipeline for Twinning MBA programmes. These tie-up arrangements have enhanced our profile with an international edge which will certainly benefit our students to have better exposure and more international opportunities.

### *Ph.D. Programmes:*

Started New Ph.D Programmes in Electronics and Communication Engineering, Computer Applications and Computer Science & Engineering.

### Quality Initiatives in Curriculum, Teaching and Learning

The institution is adopting a well-structured outcome-based education (OBE) system by actively involving all the stakeholders (students, faculty members, parents, employers and alumni). The institution uses different mechanism and practices to communicate program outcomes, program specific outcomes and course outcomes to all stakeholders which include print and digital media.

Contact classes including theory and laboratory sessions, lab exams, university exams are conducted as per the instructions of the university, adhering to Covid protocol. Faculty members ensured that all the required learning materials including lecture videos, power point presentations etc are made available to the students to help them in their studies. In spite of all the hurdles, the IQAC has taken quality initiatives to improve the curriculum, teaching and learning by offering the following programmes.

### Invited talks, workshops

To provide the essential skill set that one needs to reach their goal faster in an efficient manner, the institution offers a wide range of invited talks, workshops etc every academic year. The following are the programs conducted by the various departments of FISAT during 2017-2018

Department of Civil Engineering				
Name of the Event	Resource Person/ Guests	Date		
Invited talk on "Black Spot identification"	Mr. Abin Sam. Scientist, NATPAC	25 <sup>th</sup> September 2017		
The ICI students chapter conducted a one day workshop on "Building Planning"	Mr. Johny Kaitharth, Architect, SOLIDS, Kochi	9 <sup>th</sup> October 2017		
NIRMAN 2K18		9 <sup>th</sup> and 10 <sup>th</sup> March 2018		
Technical session on "Modern and Conventional Construction Practices" as part of NIRMAN 2K18		9 <sup>th</sup> and 10 <sup>th</sup> March 2018		
Technical session "Site Mix Vs Ready Mix Concrete" as part of 2K18	Er. Shelly S. Fernandez, Director, Q Crete Readymix (India) Pvt. Ltd, Ernakulam	9 <sup>th</sup> and 10 <sup>th</sup> March 2018		
SECON18, National level conference	Panel of 12 experts from various sectors	17 <sup>th</sup> and 18 <sup>th</sup> April 2018		
Aavishkar 2k18 Project Expo		10 <sup>th</sup> April 2018		

Department of Computer Science Engineering					
Name of the Event	Resource Person/ Guests	Date			
6 <sup>th</sup> National Conference on Free Software, ICEFOSS-2017	Dr. Sreeraj M, Mr.Pankaj Kumar G	6th- 7th Oct 2017			
Machine Learning Workshop	Me Prasad Pai K T ,UST Technologies	5 <sup>th</sup> February 2018			
Hour of code for students of Santhome Central School	ACM Student members	7 <sup>Th</sup> February 2018			
FOSSHACK	Ignitho Technologies and Redpanthers	18 <sup>th</sup> April 2018			
CSE Alumni meet and launching of Shagheej Memorial Fund	Parents of Late Shagheej (2013-2017 batch)	7 <sup>th</sup> April 2018			
Final year Project Exhibition		7 <sup>th</sup> April 2018			
Technical talk on Digital Technologies	Jugunu George	7 <sup>th</sup> April 2018			
Shagheej Memorial coding contest SMIRITI 2k18		1 <sup>st</sup> April 2018			
CELESTIA 2018, Quiz Program	ACM ,CSE Dept	April 2018			

Department of Electronics and Communication Engineering					
Name of the Event	Resource Person/ Guests	Date			
Technical Talk on"Latest trend in	Mr Thomas S,CEO,Digital	30 <sup>th</sup> August			
Embedded System Technology"	Core Technologies	2017			
Mobile Making and IoT workshop		15 <sup>th</sup> and 16 <sup>th</sup> March 2018			
AGNITIO 2k18 : A Technical fest		11 <sup>th</sup> April 2018			
Workshop on Python	Jestin Joy, Asst Professor, CSE Dept				

Department of Electrical and Electronics Engineering				
Name of the Event	Resource Person/ Guests	Date		
MOU with TELK ,Angamaly	Mr Prasad S, Managing Director TELK	15 <sup>th</sup> November 2017		
Power Scenario with special reference with TELK's contribution- A technical Talk	Mr Prasad S,Managing Director, TELK	15 <sup>th</sup> November 2017		
Honouring of Ms. Reeshma Rameshan, All India Civil Service Examination Rank holder & Newsletter Release of Electra- STROM	Ms Reeshma Rameshan	23 <sup>rd</sup> September 2017		

Hands on workshop on PCB circuit	Mohammed Noufal ,Asst	28 <sup>th</sup> February
making Autodesk Eagle:	Professor ,EEE Dept	2018
Lecture Series "Learn from Great Minds" topic "Power transformer design and testing"	Mr Reji John, Deputy General Manager, TELK	9 <sup>th</sup> March 2018
"Illuminar " project expo	Mr Anto Varghese, Testing engineer, Strands Energy Itd	13 <sup>th</sup> April 2018

Department of Electronics and Instrumentation Engineering			
Name of the Event Resource Person/ Guests		Date	
Workshop on MATLAB	Ms Lakshmi Nandakumar, Mariya Susan John, Vijay Rajiv, Krishnaugrah	6 <sup>th</sup> February 2018	
Tech talk on "Instrumentation Engineering"	Mr Edwin Devassykutty	22 <sup>nd</sup> January 2018	
Tech talk on NSDC training		18 <sup>th</sup> January 2018	
Workshop on "TinkerCad"	Ijas Mohammed,Sarath KK		

Department of Mechanical Engineering			
Name of the Event	Resource Person/ Guests	Date	
3 <sup>rd</sup> Erudite lecture series on National Science Day	Padma Bhushan Dr A S Pillai,MD& CEO BrahMos Aerospace	28 <sup>th</sup> Feburary 2018	
One day seminar on"Gas Turbines"	ASME GT India	7 <sup>th</sup> April 2018	
Inaguration of Hydraulic Machine Laboratory	Mr Paul Mundadan,Chairman FISAT	18 <sup>th</sup> April 2018	

Department of Business Administration (FISAT Business School)			
Name of the Event	Resource Person/ Guests	Date	
One day Symposium on WOMEN ENTREPRENEURSHIP: ISSUES AND CHALLENGES"	Dr. Deepa Mathai, Arkind		
	Architects, Ms. Manju		
	Mathew, Burger Junction,	14 December	
	Ms. Riya Ann Cheriyan,	2017	
	Guiders Academy, Ms.		
	Jeemol Varughese, Eva's		

	Healthy Bakes, and Ms. Molly	
	Babu, Adona Diamonds	
Seminar on Six Sigma Methodology in	Mr. Brijesh Krishna, Director-	
Indian Software companies	Organisational Excellence,	5 January 2018
indian software companies	Sutherland Global Services	
Seminar on Internet of Things (IoT)	Mr. Rajith Krishna	23 January 2018
Union budget Live streaming	Mr. Prasanth V, Assistant Professor, FBS	1 <sup>st</sup> February 2018

Department of Computer Applications			
Name of the Event Resource Person/ Guests		Date	
Organized seminar on "Raspberry pi and Arduino"	Mr. Pankaj Kumar G, Asst. Professor, Department of CSE	10 November 2017	
Seminar on IEEE Explorer-how to use?	Mr. T S Nandalal	26 October 2017	
Seminar on Wireshark		23 November 2017	
PRAYAAN 2k18, a two-day National Level IT Fest held on	Mrs. Eesha Priya IAS Asst. Collector	16,17 February 2018	
Add-on course On "Advanced Java Programming"	Mr. Pankaj Kumar G, Asst. Professor, Department of CSE	3-12 July 2017	
Memorandum of Understanding (MoU)	Opentrends, Barcelona	21 November 2017	

Programmes & Workshops Conducted by FabLab				
Date	Event	Type of Programme	No of participants	Organizers
27/05/2017	Inauguration of FABLAB	Entrepreneurship/ Technology popularization	500	
27/7/2017	ALL Kerala Fablab trainingfor IEDC nodal officers	Training/ Workshop	15	FISATIEDC& KSUM
30/8/2017	Entrepreneurship orientation programme	Training/ Workshop	150	FISATIEDC & Directorate of Industries and Commerce.
14/7/2017, 15/7/2017	Workshop on Digital Fabrication Techniques	Training/ Workshop	12	FISATIEDC, FABLAB

21/7/2017- 23/7/2017	Professional Enhancement Program	Training/ Workshop	21	FISATIEDC & FABLAB
25/8/2017- 26/8/2017	Workshop on Digital Fabrication Techniques	Training/ Workshop	12	FISATIEDC & FABLAB
15/9/2017- 21/9/2017	Workshop on Digital Fabrication Techniques	Training/ Workshop	17	FISATIEDC & FABLAB
6-11-2017	Mobile Fablab inauguration	Entrepreneurship/ Leadership	300	FISATIEDC & FABLAB
6-12-2017	Symposium on Women Entrepreneurship	Entrepreneurship/ Leadership	200	FISATIEDC &FBS
25/1/2018- 29/1/2018	FISAT- ENS maker fair	Training/ Workshop & Entrepreneurship	2500	FISATIEDC & FABLAB
5/2/2018, 6/2/2018	Makers Workshop	Competition	18	FISATIEDC & FABLAB
5/2/2018, 6/2/2018	3D Printing workshop	Training / Workshop	28	FISATIEDC & FABLAB
02-06-2017	Make In India Conclave (MII CON 2k18) - Panel Discussion	Entrepreneurship/ Leadership	200	FISATIEDC & FABLAB
30/4/2018	Digital fabrication coursesfor school students	Training/ Workshop	15	FISATIEDC & FABLAB
22/5/2018	Career orientation at Angamaly using mobile Fablab	Entrepreneurship/ Leadership	600	FISATIEDC & FABLAB, CSI Angamaly

# Experiential Learning Initiatives – Project Exhibitions

# a) Nautilus 2K18

A mega inter-college technical fest conducted by FISAT, NAUTILUS offered a platform for the technically aspiring engineering students on 5th and 6th February 2018. More than 2500 delegates participated in this event. The major events of Nautilus 2K18 were GAME OF DRONES, APPSPRINT, ARGONOUTICA, MICON, ROBOWAR, TRIIPLEX, TOUR DE FORCE, SIM CITY, INSTRIDGE, GAMEATION, ROBOTRON, VR ROOM, KANDUPIDITHAM, AR TREASURE HUNT, PHOTOGRAPHY, AI WORKSHOP, ROBOTICS, VR WORKSHOP, AUTOMOBILE WORKSHOP etc NAUTILUS 2k18 was a great opportunity for the students of FISAT to enhance their skills in the field of engineering and management



# b) TECHATHON

A Tech event called Techthon was conducted by the department of Electronics and Instrumentation in two stages. The event invited participants from all over the stage. Various technical events like technical quiz, talk, workshops were conducted. As part of Nautilus 2k18 a project exhibition of final year students were also exhibited.





# c) ILUMINAR 2K18

ILLUMINAR, a project expo to unleash the talents of all students was held on the behalf of the Electrical and Electronics department at FISAT. 16 projects were displayed in the expo with utmost care and overwhelming enthusiasm. More than 200 visitors have visited the project fair. Mr. Mahesh C Asst Professor CSE dept, Mr. Bejoy Varghese Asst Professor ECE dept, were the judging panel members. They analyzed all the projects thoroughly and selected the winners on the basis of novelty, innovation, creativity, research content and commercialization of the projects. The best project of the day was awarded with the Edison Award for Real time monitoring of crop health and the best successfully accomplished project was Automatic speed regulation of fans by linear regression. The best poster was the poster for Wireless animatronic hand using control gloves. The best mentor was Mr.Noufal C, for

providing the best guidance. The certificates were given away for participants of Arduino workshop and for the winners of best logo, name and caption and poster and brochure design competitions for the expo.



# d) National Science day

The Department of Mechanical Engineering has organized an invited lecture, marking the occasion of National Science Day on 28th February 2018, where Padma Bhushan award recipient Dr. A.S. Pillai, Founder CEO & MD of BrahMos Aerospace was the resource person. This was the 3rd lecture in their Erudite Lecture Series organised every year.Dr. A. S. Pillai, the Founder CEO & MD of BrahMos Aerospace, currently serves as Honorary Distinguished Professor (ISRO), Honorary Professor (IIT Delhi), Visiting Professor(IISc). His contributions to the successful development of SLV-3 and evolution of PSLV configuration for ISRO have been remarkable. His contributions are commendable in the development of Agni, Prithvi, Nag and Akash missiles for DRDO. He authored many books including Revolution in Leadership and Nano Science and Nano Technology for Engineering.



# e) AGNITIO 2k18

AGNITIO 2K18 was conducted on 11th April 2018 at the FISAT Auditorium. The final year students got a chance to exhibit their project. The best three projects were awarded with cash prizes.



# f) AVISHKAR 2K18

Aavishkar'18 was a Project Expo exhibiting all the eighth semester B.Tech projects of Civil Engineering students. The expo provided a platform for the final year students to exhibit their project works to the public with the added perk of the best projects being awarded. The programme was conducted on 10th April 2018.



# g) PRAYAAN 2K18

PRAYAAN 2k18, a two-day National Level IT Fest held on 16th and 17th of February 2018 was an initiative taken by FIESTA. Around 230 students actively participated in all the challenging technical events. The prize amount was worth a total of One Lakh Ten Thousand with placement offers from UST Global exclusively for the winners of the Coding event. Mrs. Eesha Priya IAS, Assistant Collector inaugurated the fest on 15th February 2018. The students were

presented with an array of technical events such as Coding, Web Hunt, IT Quiz, Gaming, Mock CID, Best Gang, Photography and 3D ball game. The events on the first day ended with a Cultural Extravaganza' in which the MCA students showcased their talents through dance & music. M.A college kothamangalam emerged as the overall champions of the fest



# h) MANTRA 2018

The Annual CSE Day- Mantra 2018, was conducted in a grand manner on April 7<sup>th</sup> 2018, in association with THYRA- the association of computer engineering students. Technical Talk, Final Year Project expo, Celestia 2018 by ACM etc were the major events.



# **INITIATIVES FOR STUDENT SUPPORT AND PROGRESSION 2017-18**

FISAT has taken the efforts to provide necessary assistance to students, to acquire meaningful experiences for learning at the campus and to facilitate their holistic development and progression. It also looks into student performance and alumni profiles and the progression of students to higher education and gainful employment. The major measures initiated by the

institution in this head are (i) Student mentoring and support (ii) Student progression (iii) Student participation and activities (iv) Student achievements

# (i) Student Mentoring and Support

IQAC has taken special measures to provide support to the needy students with learning difficulties and emotional issues. FISAT has a well-structured, organized guidance and counselling system in place. Facilitating mechanisms like counselling cell, placement cell, grievance redressal cell and welfare measures are there to support students. Specially designed inputs are provided to the students with learning difficulties. Provision is made for bridge and value-added courses in relevant areas.

Apart from this the institution also provides financial support to the needy students through endowments, merit cum means free ships and scholarships. (Details are given in the annexure)

# (ii) Student Progression

The IQAC of FISAT has taken special care to ensure students' progression to higher studies and/or to employment. A large number of training programmes, workshops and events are carefully planned and implemented to support the students in optimal progression. The institutional provisions facilitate vertical movement of students from one level of education to the next higher level or towards gainful employment. The students are also empowered through the decentralisation practices adopted by the institution by giving them the opportunities to participate in various academic and administrative decision-making processes.

#### (iii) Student participation and activities

The institution has the required infrastructure and promotes active participation of the students in social, cultural and leisure activities. FISAT encourages students' participation in co-curricular and extra – curricular activities to develop various skills and competencies and foster holistic development. One of the unique features of the institution is the presence of a large number of active chapters of professional societies, cells and clubs which coordinate technical, cultural and sports events for students.

# (iv) Tuition Fee Waiver

Total Fee waiver for top entrance rank holders taking admission in FISAT through Govt quota was implemented by the Management. Accordingly, students up to 4000 ranks were given full fee concessions. 5 students are the beneficiaries of the scheme. In addition, as per AICTE scheme, meritorious students hailing from economically backward families were also given full tuition fee waiver, 114 students are the beneficiaries of this scheme.

# **Scholarships**

- MCM Scholarship 235
- Fisheries Scholarships 1
- AICTE Fee Waiver Schemes 89
- M.Tech Scholarship 4
- Central Sector Scholarship 46
- FedBank Hormis Foundation Scholarship -2.
- ➤ GATE Scholarships 4
- Special Fee Waiver Schemes 252
- > FBOAES Scholarship 80
- AICTE Pragati scholarship 2
- P V Mathew Memorial Scholarship 9
- Shaheej Memorial scholarship -1
- KU Joseph Memorial Scholarship 1
- Ambusivadas Memorial Scholarship 1

Meritorious students from the rural village are admitted in the institute on a reservation basis and given scholarships and financial assistance. The Parent Teacher Association includes very active members. Workshops are conducted to empower Grama Panchayath members, Kudumbasree workers and other women organizations. As such FISAT enjoys the good will and support of the village population. Several appreciations and mementos were also received for blood donation campaigns and social service activities.

# **Children of Federal Family Members at FISAT**

We are glad to see that 85 children of FBOA Educational Society members are presently studying in our college for various programs.

#### PLACEMENT TRAINING AND SUPPORT

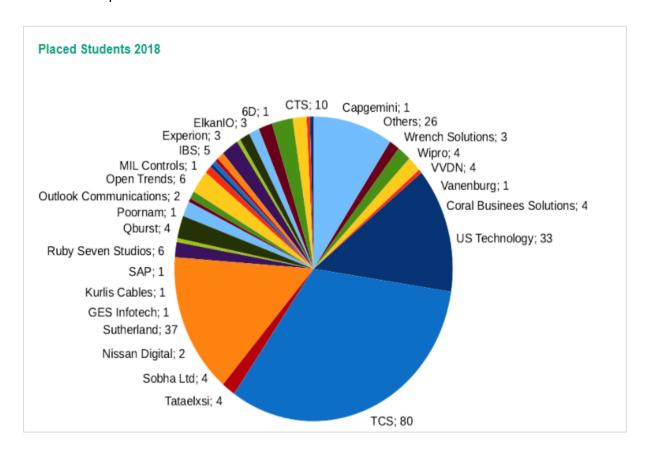
FISAT has a vibrant Placement and Training Cell. The students are groomed according to the requirements of the Industry. The Cell has been successful in placing all the eligible students in MNCs like Microsoft, TCS, IBM, SAP. CTS, L&T, Wipro, UST Global, IBS, Core companies like MRF, Sobha Ltd, VVDN, Tata Elxsi, Nissan, Defence Services, Civil Services, Kalkitech, Govt. and Public sector companies like BARC, ONGC, Power grid, Indian Railways and commercial banks like Federal Bank, Standard Chartered Bank and South Indian Bank, to name a few. For placement and training we haves signed MoUs with ICT Academy for knowledge sharing and also entered in academic partnership with Keltron, TELK, TCS, HMT, UST Global, Open Trends (Barcelona) and Texas Industries for internship/remote industry training

# **Highlights**

- Two students placed in Nissan Digital 9 lakhs per annum
- > One offer in SAP- 8.6 Lakhs per annum
- 80 offers in TCS, 4 offers from Sobha Ltd.
- Major Companies TCS, Nissan Digital, Sobha Ltd, TATA Elxsi, SAP, UST Global, Cognizant, Infosys, IBS, Wipro, Ruby Seven, Qburst, Wrench Solutions, VVDN, Digital Core Technologies, Open Trends, Experion, MIL Control, Poornam Infovision
- Conducted training programs for 10 days in total for all students and 6 days Company specific trainings for final year students
- Conducted 4 Online practice tests
- Three day soft skill workshop for second year students

#### Statistics 2018

Number of offers: 248Companies recruited: 46



# **Major Recruiters:**

Civil Services

Govt. services

Defense services

> TCS

> Federal Bank

➤ IBM

Sobha Ltd

> Wipro

Speridian

> SAP

AMAZON INDIA

Nissan digital

> IVTL INFOSYSTEMS

➤ GES INFOTECH

Open Trends

Ruby Seven Studios

➤ RAZORTHINK

Digital Core Technologies

MIL CONTROLS

> VVDN

WELD CRAFT

Tataelxsi

#### **IEEE CELL**

- ➤ AVANZAR- 3rd August 2017(Participants 60): It is an event which is focused on helping and conveying the benefits of WIE members. It was a session which mainly highlighted the benefits and the paths in which these members can utilize it. The feedbacks from the session proved that such an event was really necessary.
- ➤ WYBO 16th August 2017(Participants 48): A technical aptitude test which was conducted as a part of the Kochi Hub's major event WYBO. It gave students the opportunity to test their aptitude skills and their general awareness of what's happening in the world. Students enjoyed their first experience and felt it was a great guide to understand their strengths and weaknesses in aptitude skills.
- ➤ **C Programming workshop** 19th August 2017(Participants -30) It was a workshop organized for the IEEE members to learn the programming language. It was handled by the senior students and was a very successful event in terms of the response. The students got a chance to learn and understand their capabilities in programming.
- Arise 3.0 (Participants- 73) A one day event in which both technical and managerial sessions were provided along with a hands-on workshop on Arduino Programming.
- Photoshop workshop (Participants- 106) A designing workshop using Adobe Photoshop was conducted by the student branch on 25th and 26th September 2017. It was a one hour evening workshop for students from all years. Students were taught the art of graphic designing from the very basics itself.
- SHE 2017, 20<sup>th</sup> to 22<sup>nd</sup> October 2017(Participants-180)- SHE 2017- The Kochi Hub WIE Congress was hosted by FISAT SB which witnessed participation across the colleges from the Kochi Hub. The goal was to facilitate women in technical fields for which the three day events was really a successful one. The event included 4 Workshops which were in the fields of IOT, AWS, Arduino based programming and managerial. Event was inaugurated by Ms. Sujatha Madhav Chandran. Students were given a chance for presenting projects and winners were given cash prizes as well as an incubation facility in maker village. An Idea presentation competition was conducted which provided a platform for the students to showcase their ideas in the field of "Efficient energy management". Almost 90 students got the opportunity to volunteer so that they could know the various aspects of organising an event.

#### **➢ IMPULSE - IEEE**

In connection with IEEE Seminar Ms Nishanthini IPS, DCP KOCHI, Inaugurated the function. Dr. K.S.M Panicker Academic Director, Dr. C Sheela Vice Principal, Prof Bijoy Varghese, Program Coordinator and other dignitaries were also seen



#### **CENTRE EXCELLENCE IN ROBOTIC**

- > Two-day Faculty Development Program on e-Yantra IIT-B: A two day FDP was organised by 'CER' in the month of December. Headed by Ms.Krishna Lala,IIT-B a team of resource people handled the session on Robotics and Firebird V. The session was attended by about 40 faculties from all over Kerala.
- Faculty Development Program: Four faculties Mr.Mahesh C, Mr.Bijoy Varghese, Mr.Muhammed Noufal C, Mr.Shinto Sebastian attended faculty development program organised by IIT-B from January-March.
- ➤ One FDP in Robotics in association with Eyantra Project IIT B .First prize in All India Robotics Competition conducted by IIT Bombay. 16 Senior students and 32 Junior students being mentored under Center for Excellence in Robotics set up in association with IIT Mumbai. 3 students selected for summer internship conducted by IIT Mumbai.

INAUGURATION OF FISAT OPEN AGRICULTURAL INITITATIVES

22.02.18



In co ordination with IIT Mumbai FISAT Engineering College launched the new initiative of FISAT OPEN AGRICULTURAL INITIATIVES. Mr Muhammad Hanish IAS, Chairman, Metro Rail Kochi inaugurated the function. Paul Mundadan Chairman, Dr. George Issac, Principal, Dr. C Sheela Vice Principal, Dr. K S M Panickar Academic Director, Prof Bejoy Varghese coordinator E Yentra Project also participated in the event

#### LIBRARY AND INFORMATION CENTRE

- ➤ A fully digitalized most modern Library having 71918 volume of books, 267 national and international journals and 10000 online journals available with state -of -the art facilities with 65 computers. Every year Library science students are coming from other universities to complete their P G Project based on FISAT library. This year around 3 students are doing their M.LISc project based on our Central Library.
- ➤ Library orientation programmes are conducted for first year Engineering, MBA, MCA, students, to equip them with the efficient use of library resources.
- ➤ Every year library conducts a book exhibition in association with renowned publishers. This year around 10000 books were displayed from 7th November to 11th November 2017
- ➤ A team of our Mechanical Engineering students designed and implemented an automated escalator in the college Central Library for moving books within different

- levels (sections). A trolley with a platform was designed for the easy transportation of books. The project was guided jointly by Mr. Anoob Jose, Asst. Professor, ME and Mr. Sino Varghese, Librarian. The students in the team included Abdulla Aslam, Afan T Mohammed, Anujith Sabari and Arjun A Pradeep of S6 MEA
- ➤ Every year Library science graduates students are coming from other universities to complete their P G Project based on FI SAT library. This year around 5 students are doing their MLISc project based on our Central Library.
- ➤ Being a modem library, we provide free professional training to two library science students from Rajagiri College Kalamassery in a year for a period of one month. Libraries also extend training for a period of one year for a few library science graduates during which, they are given a monthly stipend also. During this academic year, four library science graduates were given training in the library.

#### **NSS TECHNICAL CELL**

- ➤ Civil Service Orientation programme on 14th August 2017- An orientation programme was conducted for civil service aspirants in FISAT main hall on 14th August 2017. FISAT NSS technical cell and skill excellence centre jointly organized .The Ernakulam district panchayath president Shri P.T. Paul inaugurated the programme. Ms. Chandini Chandran, 415th rank holder, civil service examination 2016 handled the session.
- ➤ A Day To Remember ' held on 7th October 2017: The day to remember programme was conducted by FISAT NSS technical cell in association with stallions and special school staff association at Aeli hills, Aluva on 7th October 2017. Five students from each special school were invited and total of 119 students attended the programme. A total of 40 NSS volunteers together coordinated the programme and made it a successful event. Mr. Jiby Varghese and Mr. Tom Anto NSS Programme officer led the programme.
- ➤ Orientation session on Anti Narcotics on 17th August 2017- FISAT NSS Technical Cell in association with Kerala Kaumady and Angamaly Block Panchayath has organized an orientation session on Anti Narcotics. Shri P. Vijayan IPS, I.G., Cochin range inaugurated and gave a session on the same topic
- ➤ Panel discussion on "Privacy A Fundamental Right" on 3rd November 2017- FISAT NSS Technical Cell has organized a panel discussion on the topic" Privacy A Fundamental Right" at FISAT Main hall on 3rd November 2017. DR. Dileep Kumar, Ex Vice Chancellor, Sanskrit University, Kalady, Smt. Chandara Vadhana K, Entrepreneur-Trainer- Voice artist, Shri Paul Mundadan, Chairman FISAT, Dr. George Issac, principal, FISAT and two student representatives were took part in the discussion. Shri. Jiby Varghese was the moderator for the panel discussion.

- Asset Recreation at PHC -March 18th Various asset (equipment, beds etc) as well as walls of the Primary Health Centre (PHC) at Thuravoor was painted by NSS volunteers. Volunteers recreated an asset of Rs. 4 Lakh
- Awareness Class on Substance abuse 5<sup>th</sup> April 2018: Deputy Excise Commissioner of Ernakulum gave a talk on substance abuse to students.
- ➤ World Environment Day 5<sup>th</sup> June 2018: As part of environment day NSS FISAT supplied different verities of plants to the 10 nearby Schools and then official inauguration was held at St. Joseph's HS Kidangoor. NSS volunteers and program officers took part in the function.

# > NSS INITITATIVE FOR CARING THE PALIATIVE

Paul Mundadan Chairman FISAT inaugurated the NSS event organized for caring palliative people in Thuravoor Public Health Centre.



#### **GREEN CAMPUS**

SWAN (Sanguine Workers and Admirers of Nature) is a dedicated group of staff and students who involve in various agricultural activities and sustainable development in the campus. Precision farming, where thrust is given to produce maximum with minimum depletion of natural resources is practiced in the Institute. Minimizing the use of pesticides, focus is given to organic farming. Seasonal plants like cabbage and cauliflower are cultivated by the Club. The treated waste water from treatment plant working inside the campus is used for watering the plants. This is a good example of water conservation and eco friendly farming.

The Nature Club SWAN aims at creating a new generation of youth, which recognizes the importance of preserving nature and creates eco friendly and green solutions. A high Tech Green House farming project with central and state subsidies is implemented in the campus to inculcate and propagate the modern pollution and chemical free agriculture in society.

#### Activities involved under the SWAN are

- Aqua culture farming
- Planting seasonal vegetation like spinach cabbage, Snake Guard, Peanut, etc.
- Aqua phonics
- Playhouse farming
- Root products like tapioca, Guam, etc.
- Maintenance of college garden
- Orchid farming
- Maintain the campus green
- Students involvement in campus vegetation
- Marinating the animal farm
- Cow dung is used as manure to the campus greenery
- ➤ Energy conservation —clean energy: From solar power system we are producing more than 50 kilowatt power.
- Sewage Treatment Plant

#### Recognitions

- People's forum for Sustainable Development (PFSD) recognized our institute as the best Educational Institution who has made significant contributions to propagation and practice of energy efficiency, conservation, environmental protection, sustainable development philanthropic services. And we are selected for PFSD Sustainable Development Award 2016.
- Our institute has been awarded as the "Best Institute for Sustainable practices" at district level constituted by State Horticulture Mission for sustainable agricultural practices. Vegetables like tomato, green chili, ladies finger etc are cultivated in a Poly house utilizing concept of Aquaponics where fish waste is utilized for cultivation, also accounting for fish haul of not less than 500 kg of fish every year.

- College swan team has won the Special Jury Mention for Green Initiatives Implemented by FISAT instituted by Kerala Management Association (KMA)
- College swan team has won the Best Private Institution Award For Project Based Cultivation by the Department of Agriculture, Govt. of Kerala



# **WOMEN CELL ACTIVITIES**

FISAT always promote and work for the upliftment of women population. College's women cell is very active and conducts different training and awareness program for the staff and students of our college.



Seminar on Six Sigma Methodology in Indian Software companies

# Inter-Department Mathematics Quiz Competition for P.V. Mathew Memorial Trophy





INAUGURATION

OF MOBILE FAB LAB

on 6th November 2017

The honorable Vice Chairman of AICTE Dr. M.P. Poonia handing over the key of FISAT Mobile Fab Lab to the Jiby Varghese Nodal officer IEDC, Dr. George Issac Principal, Anthony Johnson Vice Chairman, Paul Mundadan Chairman, Roji M. John MLA, P. I. Bose Treasurer, Dr. Ramesh U. Director AICTE, Dr. C. Sheela Vice Principal, Dr. KSM Panickar, Director Academics, Dr. Sunny Kuriakose Dean Student Affairs, Dr. George V. Antony Dean MBA were also seen.

# Workshop on "DIGITAL FABRICATION TECHNIQUES"





FISAT FABLAB has organized hands on workshop titled "Digital fabrication techniques" for teaching and non teaching staff of FISAT. 15 staff participated in the 1st edition of workshop. Second Workshop on "DIGITAL FABRICATION TECHNIQUES" Edition 2 on 25, 26 August 2017. 12 staff members participated in the 2nd edition of workshop. Workshop on "DIGITAL FABRICATION TECHNIQUES" Edition 3 was conducted on 15, 16 September 2017.



# CULTURAL FEST "ARANGU"

Arangu is the intra-collage cultural fest of FISAT conducted every year to boost the cultural talents of the students. Arangu'18 splurged its colors over FISAT on 29th and 30th of January 2018. Every year, Arangu is the most unforgettable days of the life at FISAT.