Federal Institute of Science and Technology (FISAT)

Internal Quality Assurance Cell

Annual Report

2016-2017

Message From IQAC

The Internal Quality Assurance Cell of FISAT plays a very crucial role in bringing into reality the quality initiatives and quality sustenance measures envisaged to make the institute a Centre of Excellence. IQAC facilitates to initiate, plan and supervise various activities that are necessary to increase the quality of the education imparted in the institution with special emphasis on teaching learning and research activities.

To improve the quality of the institution, it was decided to apply for accreditation by national bodies and the preparation for the same had begun in the previous year. The major focus of IQAC this year was on the preparations for the process of accreditation by National Assessment and Accreditation Council (NAAC).

The IQAC team sincerely thanks the Chairman, Mr Paul Mundadan, Managing Committee members, Principal, Vice Principal, Director, Heads of Departments, teaching and non teaching staff for the tremendous support and encouragement given for the activities of IQAC, especially for the NAAC accreditation process, which resulted in the institution being awarded

Contents

Internal Quality Assurance Cell

The Internal Quality Assurance Cell (IQAC) is an important facet of the Federal Institute of Science and Technology, and it aids the institute in achieving its goals. Its actions fall into two categories: quality enhancement and quality maintenance. Since 2016, when the Institute was granted NAAC accreditation (with an "A" grade) for the first time, the role played by IQAC has becoming increasingly important. The Cell brings together the institute's different initiatives to ensure that the institute's many healthy practices are disseminated among all stakeholders.

- Assisting the Institute with decision-making processes relating to the Institute's operations

- Organizing workshops and seminars on quality-related issues and themes to foster a quality culture across the Institute's many departments and operations.

Vision

To develop a framework of quality sustenance and enhancement measures to enable the institution

to achieve the levels of excellence envisaged in its vision and mission

Mission

- To organize and steer the academic and administrative activities of the institution to achieve academic excellence
- To become a driving force for quality by devising intervention strategies to eliminate shortcomings and enhance quality.

Goals

1. To develop a quality system for conscious, consistent and catalytic programmed action to improve

the academic and administrative performance of the institute

2. To promote measures for institutional functioning towards quality enhancement through

internationalization of quality culture and institutionalization of best practices

Objectives of IQAC

The IQAC in FISAT functions with the following objectives which comply with those envisaged by the National Assessment and Accreditation Council.

- To improve quality, accountability, and transparency by conducting departmental internal and external Academic Audits.
- Develop an organized communication and documentation mechanism to coordinate quality-related operations.
- Creating and maintaining a system for collecting and responding to stakeholder feedback on the Institute's processes and policies.
- Coordinating programs for enhancement of quality culture in the institution
- Integrating the Institutes efforts to ensure that best practices are adopted and disseminated
- AQAR (Annual Quality Assurance Report) preparation and submission in accordance with NAAC criteria

Functions of IQAC

- Developing documentation and internal communication framework to coordinate quality- related operations.
- Integrating the Institutes operations to ensure the dissemination of best practices
- To promote quality, accountability, and openness by spearheading the conduct of internal and external Academic Audits of departments.
- Establishing and sustaining a system of stakeholder feedback on the Institutes processes and policies.
- Initiating and coordinating the Outcome-Based Education.
- Coordinating programmes designed to enhance faculty members career prospects.
- Monitoring of all accreditation and assessment activities.
- Organizing workshops and seminars on quality-related issues and themes to foster a quality culture across the Institutes many departments and operations.
- Establishing and implementing quality benchmarks/parameters for the Institutes different academic and administrative operations
- Assisting in the construction of a learner-centered environment conducive to high-quality education and faculty development in terms of knowledge and technology adoption for participatory teaching and learning;
- Development of the Annual Quality Assurance Report (AQAR) of the Institute based on the quality parameters/assessment criteria
- Development and maintenance of institutional database through MIS for the purpose of maintaining/enhancing the institutional quality.
- Serving as the college's nodal agency for quality-related initiatives, such as the adoption and dissemination of best practices.

- Documentation of the Institutes numerous programs/activities, contributing to quality improvement.
- Sustaining the quality measures already in place

Team IQAC

Mr Paul Mundadan, Chairman

Dr George Isaac, Principal

Dr C Sheela, Vice Principal

Dr KSM Panicker, Director

Dr Sunny Kuriakose A, Dean (Student Affairs)

Dr George V Antony, Director, FBS

Mr Prakash C Chandy, Chief Administrative Officer

Dr Joshua A J, Professor, FBS

Ms Parvathy R, HoD, EEE

Mr Arun S, AP, Physical Education

Ms Jos Cherian, HOD, ME

Ms B Vijayakumar, Administrator

Ms Saly C K, Senior Warden, Ladies Hostel

Mr Jiby Varghese, AP,ECE

Mr Sunderarajan, HoD, EIE

Ms Mini P R,HOD, ECE

Mr Santhosh Kottam, HoD, MCA

Mr Unni Kartha, HoD, CE

Dr Prasad J C, HoD, CSE

Mr Sino Varghese, Librarian

Mr Shinto Sebastian, PRO

Mr Rajan Zacharia, Senior Warden, MH

Mr Varghese John, Manager, Accounts

Mr Jose Chakiath, PTA President

Ms Vinitha V, AP, ECE

Ms Honeymol P Chacko, AP, S&H

Ms Senu Abi, AP, MCA

Mr Sajan S,AP, ME

Mr Jawahar Saud, AP, CE

Ms Rosemin Parakkal, AP, EEE

Ms Sreevidya P, AP, EIE

Ms Reshmi R, AP,CSE

Mr Sajan S, AP, ME

Mr Jaison Joseph, Civil Supervisor

Mr Iteera K M, Estate Supervisor

Nominee from industry

Nominee from local body (ward member)

Representative of Alumni

Representative of students (Council Chairman)

Highlights

UG Programmes	6
PG Programmes	8
UG students admitted	621
PG Students admitted	266
Teaching Staff	215
Non Teaching Staff	109
Teaching Staff with PhD	28
Placement of Students (2017 batch)	261 offers in 21 companies
Faculty publication in National and International Journals	43
Faculty participation in conferences, workshops etc	46
NAAC Peer Team Visit	29th September - 1st October, 2016
Accreditation by NAAC	A grade

Quality Initiatives

Accreditation by National Assessment and Accreditation Council (NAAC)

NAAC peer team lighting the lamp – 30th September 2016

Federal Institute of Science and Technology was accredited for the first time by the National Assessment and Accreditation Council in the academic year 2016-2017. The preparation for the same started in 2014 onwards. The Letter of Intent was submitted in June 2015 and the Self Study Report in December 2015

Planning Sessions for NAAC Peer Team Visit

The hard copies of the SSR were distributed to all HoDs for further perusal. 24 Committees for an exhaustive preparation were formed well in advance of the visit. The Committees met on almost all Thursdays and deliberated on the progress of various

tasks entrusted with them. They worked hard to assure that everything mentioned in the SSR, be it a part of infrastructure or a healthy practice, is available or followed in the College. The entire College community - students, teachers, non-teaching staff, hostel students, PTA, Alumni - were given orientation and given the highlights of the content of SSR. Copies of the College Newsletter 'Impetus' (last two issues) and the first issue of the College Research Journal were made ready. A supplementary report in print form was made incorporating the activities conducted by the Departments since the submission of the SSR.

The NAAC Peer Team visit

The four member NAAC Peer Team consisting of **Prof. Tankeshwar Kumar,** (Vice-Chancellor, GuruJambeshwar University of Science and Technology, Haryana), **Prof. B. P. Singh** (Former Dean, Faculty of Commerce, Delhi School of Economics, University of Delhi, Delhi), **Dr. Vinayak N. Shet** (Principal, Goa Government Engineering College, Goa) and **Dr. G. Pundarika** (Principal, Government Engineering College, Ramangara, Bangalore) visited the College during 29th September - 1st October, 2016 for the inspection and interacted with various stake holders.

They had verified the supplementary report, college handbook and calendar, newsletters, copy of research journal etc. After the initial presentation by the Principal, the team visited all Departments. They reviewed the presentations prepared by the Departments and interacted with the faculty meticulously. They had also met students, PTA, Alumni and had active interactions which them. A cultural presentation by the students was arranged at 6.30 pm in the Auditorium which was followed by dinner. On the second day they concentrated on the Hostels, other facilities and verified the documents.

All the Peer Team members spoke very high about the institution and the facilities in the Exit meeting conducted on the third day. They deeply appreciated the dedication and commitment of the Management. A confidential report of the peer team was handed over to the Principal at the meeting.

NAAC peer team exit meeting

The entire FISAT community actively took part in the accreditation process at all stages. The unflagging support and leadership of the NAAC Coordinator Dr. Sunny Kurakose A, Dean Student Affairs ably supported and guided by Dr. George Issac, (Principal), Dr. C. Sheela, (Vice Principal), Dr.K. S. M. Panicker, (Director Academics) help the institution secure A grade.

Accreditation byNAAC with A grade

Based on the interaction and recommendation of the Peer Team, the NAAC Executive Committee that met on 5th November 2016, awarded 'A' Grade to FISAT.

POST NAAC ACCREDITATION

The internal Quality Assurance Cell (IQAC) has been reconstituted on January 15, 2017 after the successful conduct of the first NAAC accreditation process.

The IQAC meets regularly and discusses the NAAC peer team report systematically. Various quality initiatives and quality sustenance measures are being suggested. It is mandatory that the institution has to submit Annual Quality Assurance Report (AQAR) without fail for the reaccreditation. The first AQAR is getting ready for submission under the leadership of Dr. Sunny Kuriakose A, Dean Student Affairs. The furnishing of the IQAC room is under way.

Academic Affairs

Programs Offered

B Tech

Program	Sanctioned Intake
Computer Science And Engineering	120
Electronics And Communication Engineering	120
Civil Engineering	120
Mechanical Engineering	120
Electrical And Electronics Engineering	60
Electronics And Instrumentation Engineering	60

M Tech

Programs	Sanctioned Intake
Communication Engineering	24
Computer Science & Information Systems	24
Power Electronics And Power Systems	24
Structural Engineering And Construction Management	24
VLSI & Embedded System	24
Computer Integrated Manufacturing	18
MBA - Master Of Business Administration	120
MCA - Master Of Computer Applications (3 year) Lateral Entry to 2nd year direct	60
MCA - Master Of Computer Applications (2 year) 2nd year direct	60

Performance in University Examinations

Sl. No.	Dept.	No. of Students Registered for Final Semester Examination	No. of Students Passed Final Semester Examination	Pass Percentage
1	CE	121	121	100
2	CS	115	110	95.65
3	EE	59	44	74.58
4	EC	119	112	94.11
5	EI	47	43	91.49
6	ME	115	104	90.4
7	MBA	118	106	89.83
8	MCA	114	114	100

| Sl. 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	8	8	100
3	EE/PEPS	15	15	100
4	EC/COEN	5	5	100
5	EC/VLSI&ES	12	12	100
6	ME/CIM	0	0	-

Stakeholder Feedback

Feedback on curriculum was taken from students, teachers, alumni and employers.

Students:

The feedback from students was taken on the following matters:

Q 1: Ability to apply fundamental subject knowledge to new problems.
Q 2: Ability to analyse complex engineering problems.
Q 3: Ability to design creative, original and cost effective solutions for   engineering problems.
Q 4: Ability to innovate solutions for complex engineering problems.
Q 5: Ability to use computers and software as an analytical tool.
Q 6: Ability to provide engineering solutions to societal problems.
Q 7: Sensitivity to environment and sustainability in engineering practice.
Q 8: Ability to cope with complex moral and ethical issues in professional life.
Q 9: Ability to work in a team and as a leader.
Q 10: Ability to manage projects in multidisciplinary environments.
Q 11: Ability to write well and effectively communicate orally.
Q 12: Ability to participate in career advancement program

On an average 90% of the students are satisfied with the curriculum with more than 50% of the students giving a very good rating that the curriculum caters to all these aspects. Samples of the analysis from students of a few departments is shown below:
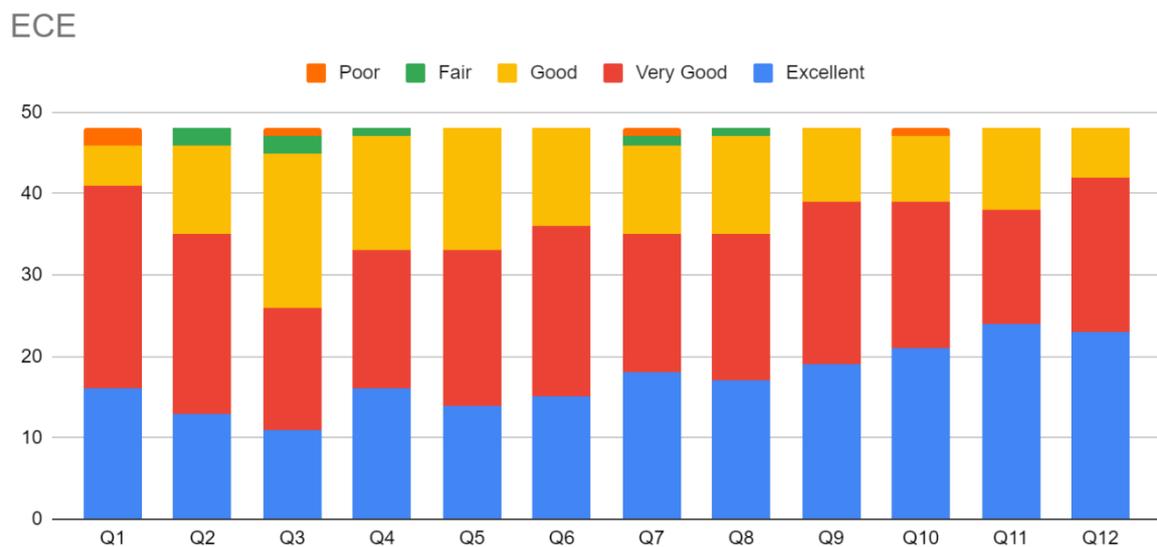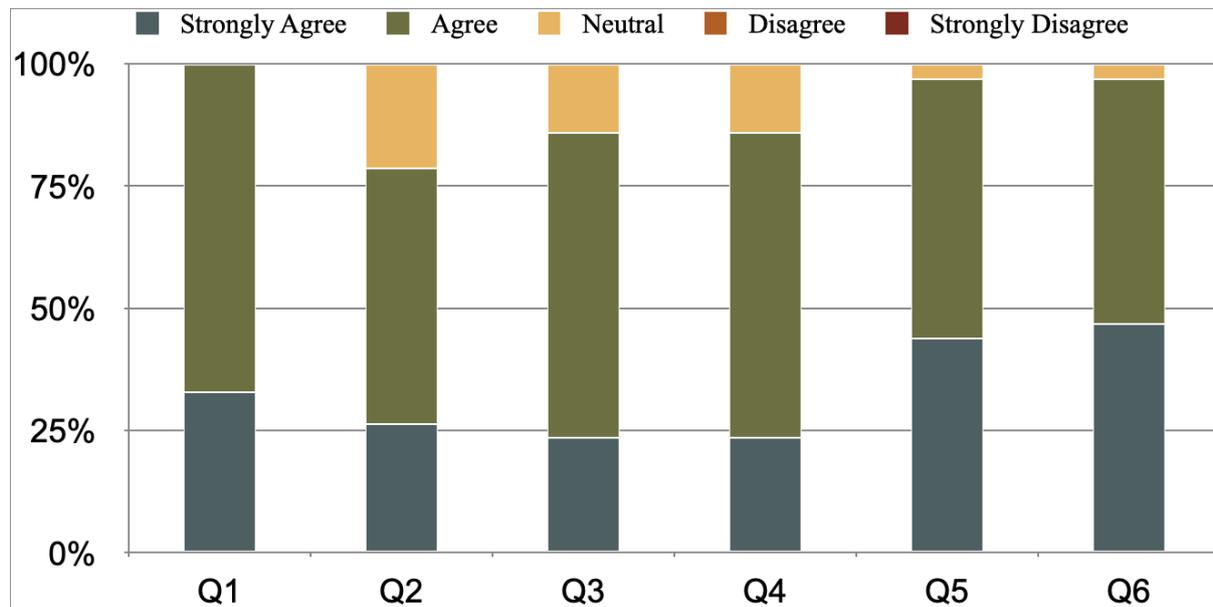
Faculty Feedback

The faculty evaluated the curriculum on:

1. Design and promotion of learning experience
2. Course objectives and outcomes
3. Relevance to industry
4. Balance between theory and application
5. Books recommended
6. Improvement in knowledge and expertise of the teacher

2015 Curriculum

Alumni feedback

Q1: Ability to apply fundamental subject knowledge to new problems.

Q2:Ability to analyse complex engineering problems.

Q3:Ability to design creative, original and cost effective solutions for   engineering problems.

Q4:Ability to innovate solutions for complex engineering problems.

Q5:Ability to use computers and software as an analytical tool.

Q6:Ability to provide engineering solutions to societal problems.

Q7:Sensitivity to environment and sustainability in engineering practice.

Q8:Ability to cope with complex moral and ethical issues in professional life.

**Q9**:Ability to work in a team and as a leader.

Q10: Ability to manage projects in multidisciplinary environments.

Q11:Ability to write well and effectively communicate orally.

Q12:Ability to participate in career advancement programs.

Q13:The ability to implement, analyze and develop algorithms based on computational theory in the fields computer science for productive and effective design of computer-based systems.

Q14:The ability to apply standard engineering practices for the development and management of software and hardware projects, using open source programming environments.

Percentage of positive responses(CSE-2016-17)
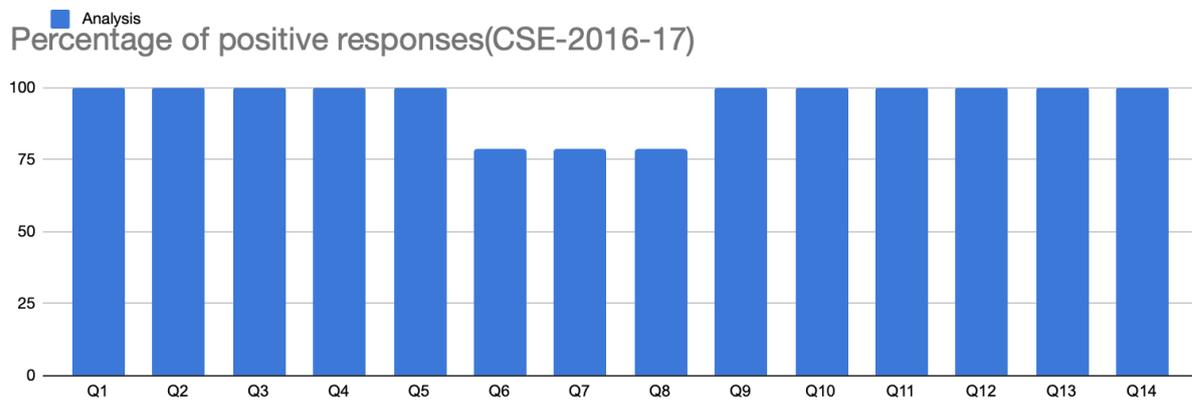
Employer feedback

1. Fundamental knowledge in Science and Mathematics
2. Fundamental knowledge in Engineering
3. Understanding of global engineering standards
4. Ability to analyse and interpret data
5. Ability to design new systems within realistic constraints
6. Ability to identify, formulate and solve technical problems
7. Practice of professional and ethical responsibility
8. Communication and presentation skills
9. Ability to understand the impact of Engineering solutions in various contests
10. Knowledge of current developments in Engineering field
11. Ability to use modern engineering tools for professional practice
12. Leadership and management skills

EMPLOYER FEEDBACK ANALYSIS 2016-17

Legend: ■ Can do better ■ Fair ■ Good ■ Very good ■ Excellent

2016-17
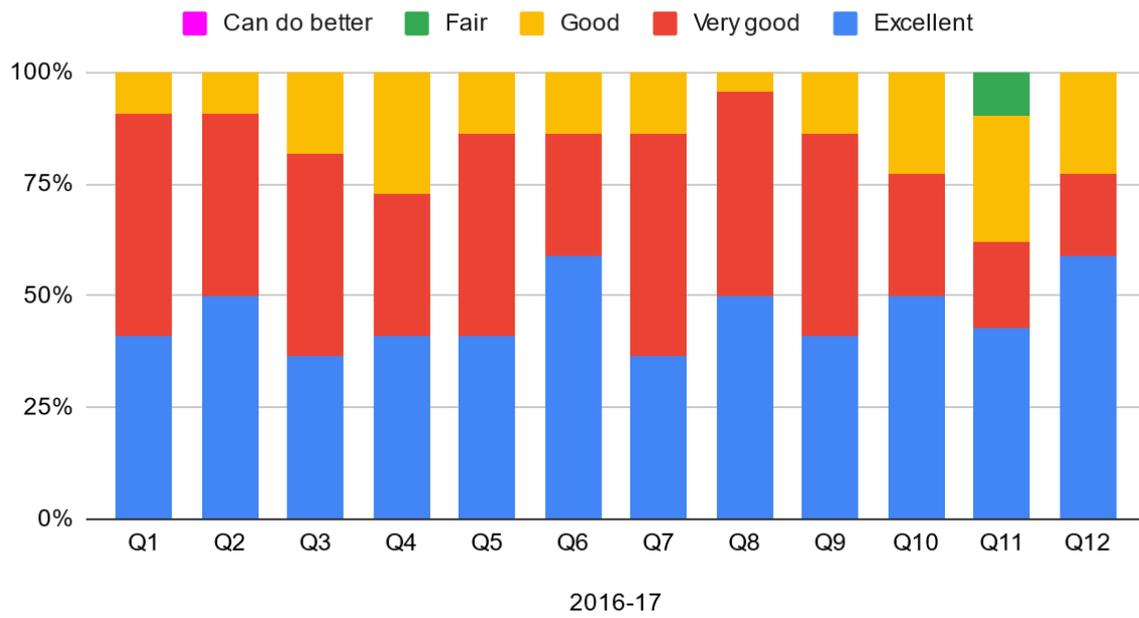
Faculty Enrichment

Publications in Journals

SL. NO	Title of Paper	Name of Author/s	Dept.	Name of Journal
1	An Efficient Adaptive Denoising and Dehazing Technique	Dr. Arunkumar M N	CSE	International Journal of Advanced Research in Computer Science
2	Content - Based Image Retrieval using Feature Extraction and K - Means Clustering	Dr. Arunkumar M N	CSE	International Journal for Innovative Research in Science & Technology
3	Efficient Road Patch Detection based on Active Contour Segmentation	Dr. Arunkumar M N	CSE	International Journal for Innovative Research in Science & Technology
4	An Initial Occupancy Based Router Policy Ensuring Better QoS for Real Time Data Transfers	Dr. Jyothish K John	CSE	International Journal of Soft Computing
5	A Quality of Service Based Queuing Policy Ensuring Fairness to Real-Time Data Transfers in Internet	Dr. Jyothish K John	CSE	Journal of Computational and Theoritical Nanoscience,
6	Priority Queuing Technique Promoting Deadline Sensitive Data Transfers in Router based Heterogeneous Networks	Dr. Jyothish K John	CSE	International Journal of Applied Engineering Research
7	A Survey on Role of Graph Theory in Various Approaches	Dr. Paul P Mathai	CSE	Journal of Computer and Mathematical Sciences
8	Customer Churn Prediction:A Survey	Dr. Paul P Mathai	CSE	International Journal of Advanced Research in Computer Science
9	Proxy Re-encryption Schemes for Secure Cloud Data and Applications: A Survey	Dr. Paul P Mathai	CSE	International Journal of Computer Applications
10	An Efficient Approach for Item Set Mining Using Both Utility and Frequency Based Methods	Dr. Paul P Mathai	CSE	International Journal of Applied Engineering Research
11	An Efficient Data Mining Algorithm Based on Item Sets Frequency and Priority Using Distribution Model	Dr. Paul P Mathai	CSE	Journal of Computational and Theoretical Nanoscience

SL. NO	Title of Paper	Name of Author/s	Dept.	Name of Journal
12	A Survey on Camera Shake Removal Techniques	Dr. Paul P Mathai	CSE	Global Research and Development Journal for Engineering
13	A Survey on Retinal Area Detector for Classifying Retinal Disorders from SLO Images	Dr. Paul P Mathai	CSE	Global Research and Development Journal for Engineering
14	Retinal Area Detector for Classifying Retinal Disorders from SLO Images	Dr. Paul P Mathai	CSE	International Journal for Innovative Research in Science & Technology
15	A New Approach Towards Item Set Mining Using Distribution Model	Dr. Paul P Mathai	CSE	International Journal of Soft Computing
16	Sentiment Analysis of Tweets for inferring popularity of mobile phones	Hema Krishnan	CSE	International Journal of Computer Applications
17	Function Approximation with Deep Neural Network for Image Classification in Fuzzy Domain	Dr.Arun kumar M N	CSE	Applied Mathematics & Information Sciences
18	A New Approach for Information Mining of Item sets Using Utility and Frequency Methods	Dr. Paul P Mathai	CSE	International Journal of Engineering Technology Science and Research
19	Emotion detection of tweets using Naïve Bayes Classifier	Hema Krishnan	CSE	International Journal of Engineering Technology Science and Research
20	Noisy Image Edge Detection Using Morphological Operators On Hypergraphs	Dr. Jestin Joy	CSE	Global Journal of Pure and Applied Mathematics
21	Tracking Illicit Drug Dealing and Abuse on Social Media Using Multimodal Analysis	Dr. Prasad J C	CSE	International Research Journal of Engineering and Management Studies (IRJEMS)
22	Computer Aided Detection of Clustered Microclalcification: A Survey	Dr.Arun Kumar M N	CSE	Current Medical Imaging Reviews
23	Taming of RESULT Prediction Based on IQ and EQ	Dr. Paul P Mathai	CSE	International Journal of Current Engineering & Scientific Research
24	Dual Sentiment analysis using Convolutional Neural Network	Hema Krishnan	CSE	Journal of Advanced Research in Dynamical & Control Systems

SL. NO	Title of Paper	Name of Author/s	Dept.	Name of Journal
25	A Comparative Analysis of Image Encryption Techniques Using Chaotic Maps and DNA Cryptography	Siyamol Chirakkarottu	CSE	Journal of Advanced Research in Dynamical & Control Systems
26	Developing a bilingual mobile dictionary for Indian Sign Language and gathering users experience with SignDict	Dr. Jestin Joy	CSE	Assistive Technology
27	SignQuiz: A Quiz based tool for learning fingerspelled signs in Indian Sign Language using Automatic Sign Language Recognition	Dr. Jestin Joy	CSE	IEEE Access
28	Terrain Generation From User Text using Cellular Automata	Dr.Arun kumar M N	CSE	International Journal of Recent Technology and Engineering
29	Ocean Surface Features Extraction using Morphological Techniques from Sentinel-1A Data	Dr.Arun kumar M N	CSE	Journal of Remote Sensing & GIS
30	Machine Learning Approaches Used For Prediction in Diverse Fields	Dr. Paul P Mathai	CSE	International Journal of Recent Technology and Engineering
31	SasyaSneha – An Approach for Plant Leaf Disease Detection	Dr. Paul P Mathai	CSE	International Journal of Advanced Trends in Computer Science and Engineering
32	An enhanced fusion based region selection for Co-Salient detection	Dr. Paul P Mathai	CSE	International Journal of Advance Research and Innovative Ideas
33	A novel encryption method for medical images using 2D Zaslavski map and DNA cryptography	Siyamol Chirakkarottu	CSE	Springer SNAS
34	A novel secure and robust encryption scheme for medical images	Siyamol Chirakkarottu	CSE	Current Medical imaging reviews
35	SiLearn: an intelligent sign vocabulary learning tool	Dr. Jestin Joy	CSE	Journal of Enabling Technologies
36	Terrain Generation From User Text using Cellular Automata	Pankaj Kumar G	CSE	International Journal of Recent Technology and Engineering
37	Load prediction using (DoG–ALMS) for resource allocation	Dr. Reshmi R	CSE	Soft Computing

SL. NO	Title of Paper	Name of Author/s	Dept.	Name of Journal
	based on IFP soft computing approach in cloud computing			
38	Comparative analysis of Machine Learning approaches for early stage Cervical Spondylosis detection	Dr. Jestin Joy	CSE	Journal of King Saud University - Computer and Information Sciences
39	Sentiment analysis of product reviews using weighted distance-based whale optimization assisted deep belief network	Hema Krishnan	CSE	International journal of business information systems (inderscience)
40	A New Approach for Developing SMART DEPARTMENT	Dr. Paul P Mathai	CSE	International Journal of Research in Engineering and Science (IJRES)
41	A machine learning based framework for assisting pathologists in grading and counting of breast cancer cells	Dr. Jestin Joy	CSE	ICT Express
42	SignText: a web-based tool for providing accessible text book contents for Deaf learners	Dr. Jestin Joy	CSE	Universal Access in the Information Society
43	Optimization Assisted Convolutional Neural Network for Sentiment Analysis with Weighted Holoentropy-based Features	Hema Krishnan	CSE	International Journal of Information Technology & Decision Making

Books and Chapters published

Sl. No.	Name of the teacher	Title of the book/chapters published	Title of the paper	Title of the proceedings of the conference	Name of the conference	National / International	Year of publication
1	Dr Arun kumar M N	-	A mathematical model of neuro-fuzzy approximation in image classification	Numerical Analysis and Applied Mathematics	ICNAAM 2015	International	June 2016
2	Vidya T P	Engineering Physics	-	-	-	-	August 2016

3	Dr Palson TI	Engineering Physics	-	-	-	-	August 2016
4	Unni Kartha G	-	Shake Table studies on embankments on liquefiable soil	Proceedings of the Annual Conference of IGS, IGC 2016	Annual Conference of IGS, IGC 2016	International	December 2016
5	Surya Susan Alex	-	Reduced Order Extended Kalman Filter for State Estiamtion of Brushless DC Motors	IEEE International Symbosium on Embedded Computing and System Design (ISED)	Sixth International Symposium on Embedded Computing and System Design (ISED)	International	December 2016
6	Dr C Sheela	-	A mathematical model of neuro-fuzzy approximation in image classification	International conference of Numerical Analysis and Applied Mathematics(ICNAAM)	ICNAAM 2015	International	June 2016

FDPS attended

Sl Number	Name of teacher who attended	Title of the program
1	Asha Joseph	Computational Fluid Dynamics
2	Keerthi Sabu	Makers workshop
3	Neeraja N	Makers workshop
4	Panjami K	Computational Fluid Dynamics
5	Preethi M	Health Monitoring of RCC/ Steel Structures
6	Chethna Joy	Maker's Workshop
7	Dr. jyothish K John	Theory of Computation
8	Hema Krishnan	Machine learning tools & techniques
9	Jestin joy	Theory of Computation
10	Meera Treasa Mathews	Maker's Workshop
11	Remya R	Maker's Workshop

Sl Number	Name of teacher who attended	Title of the program
12	Simi Stephen	Maker's Workshop
13	Sruthy Suresh	Advanced Trends in Web Technologies
14	RAKHEE.R	Maker Workshop
15	Dr. Parvathy R	Programming for Everybody (Getting Started with Python)
16	DEEPA. K	Maker workshop
17	Muhamed Noufal C	Programming for Everybody (Getting Started with Python)
18	Rosemin Parackal	Maker workshop
19	AMBILI A R	2 Week ISTE STTP on CMOS, Mixed Signal & Radio frequency VLSI Design
20	Anoop E G	2 Week ISTE STTP on CMOS, Mixed Signal & Radio frequency VLSI Design
21	Benoy Abraham	2 Week ISTE STTP on CMOS, Mixed Signal & Radio frequency VLSI Design
22	Bini V K	2 Week ISTE STTP on CMOS, Mixed Signal & Radio frequency VLSI Design
23	Christy Jose	2 Week ISTE STTP on CMOS, Mixed Signal & Radio frequency VLSI Design
24	Deepa N R	2 Week ISTE STTP on CMOS, Mixed Signal & Radio frequency VLSI Design
25	Dhanya S.	2 Week ISTE STTP on CMOS, Mixed Signal & Radio frequency VLSI Design
26	Elza George	2 Week ISTE STTP on CMOS, Mixed Signal & Radio frequency VLSI Design
27	Minu Kuriakose	STTP on Speech Processing
28	Nimmy M Philip	2 Week ISTE STTP on CMOS, Mixed Signal & Radio frequency VLSI Design
29	Nisha R	2 Week ISTE STTP on CMOS, Mixed Signal & Radio frequency VLSI Design
30	Noble G	2 Week ISTE STTP on CMOS, Mixed Signal & Radio frequency VLSI Design
31	Sheelu Susan Mathews	2 Week ISTE STTP on CMOS, Mixed Signal & Radio frequency VLSI Design
32	Sreelekshmy S	2 Week ISTE STTP on CMOS, Mixed Signal & Radio frequency VLSI Design
33	Subha Thomas	STTP on Speech Processing
34	Vinitha V	I2P Makers Workshop

| Sl Number	Name of teacher who attended	Title of the program
35	Ambily John	I2P MAKER
36	Anila Mathew	Two week ISTE STTP `on CMOS, mixed signal and RF VLSI Design
37	Honey Devassy	Two week ISTE STTP `on CMOS, mixed signal and RF VLSI Design
38	Lakshmi Nandaumar	Two week ISTE STTP `on CMOS, mixed signal and RF VLSI Design
39	Raji P	I2P MAKER
40	Renu G	I2P MAKER
41	Sheffy Thomas	I2P MAKER
42	Shruthi Bhaskaran	Two week ISTE STTP `on CMOS, mixed signal and RF VLSI Design
43	Ms. Deepa Mary Mathews	Data Analytics,Mining and Machine Learning using R
44	Dr. Sreeraj M	STTP on Graph Algorithms and Computational Geometry
45	Raju M D	Mentoring and counselling skills for psychological change
46	Dr.Midhun Paul	Faculty Development Programme in Entrepreneurship

FDPs organized

Sl Number	Dates (from-to) (DD-MM-YYYY)	Title of the professional development program organised for teaching staff	Title of the administrative training program organised for non-teaching staff
1	02-05-2016 to 10-07-2016	Use Of ICT In Education For Online And Blended Learning	-
2	22-07-2016 to 22-07-2016	Intercollegiate FDP on NS-2 in association with ISTE	-
3	14-12-2016 t0 15-12-2016	2 day training program on arduino board and robotics	-
4	21-09-2016 to 22-09- 2016	FDP on Open source technologies	-
5	28-06-2017 to 30-06-2017	FDP on mentoring and counselling skill for psychological change	-
6	11-07-2016 to 15-07-2016	3 Day FDP on advanced Labview applications and programming of Beaglebone Black	-
7	18-07-2016 to 22-07-2016	Workshop on " Process Automation and lab view	-

		software" for polytechnic teachers	
8	08-04-2017 to 08-04-2017		A session on "My life - A review and a forecast".for non-Teaching staff
9	10-05-2017 to 10-05-2017	Data Analytics	-
10	20-07-2016 to 30-07-2016	Makers workshop	-

Placement

2017 Batch, 261 offers, 21 Companies
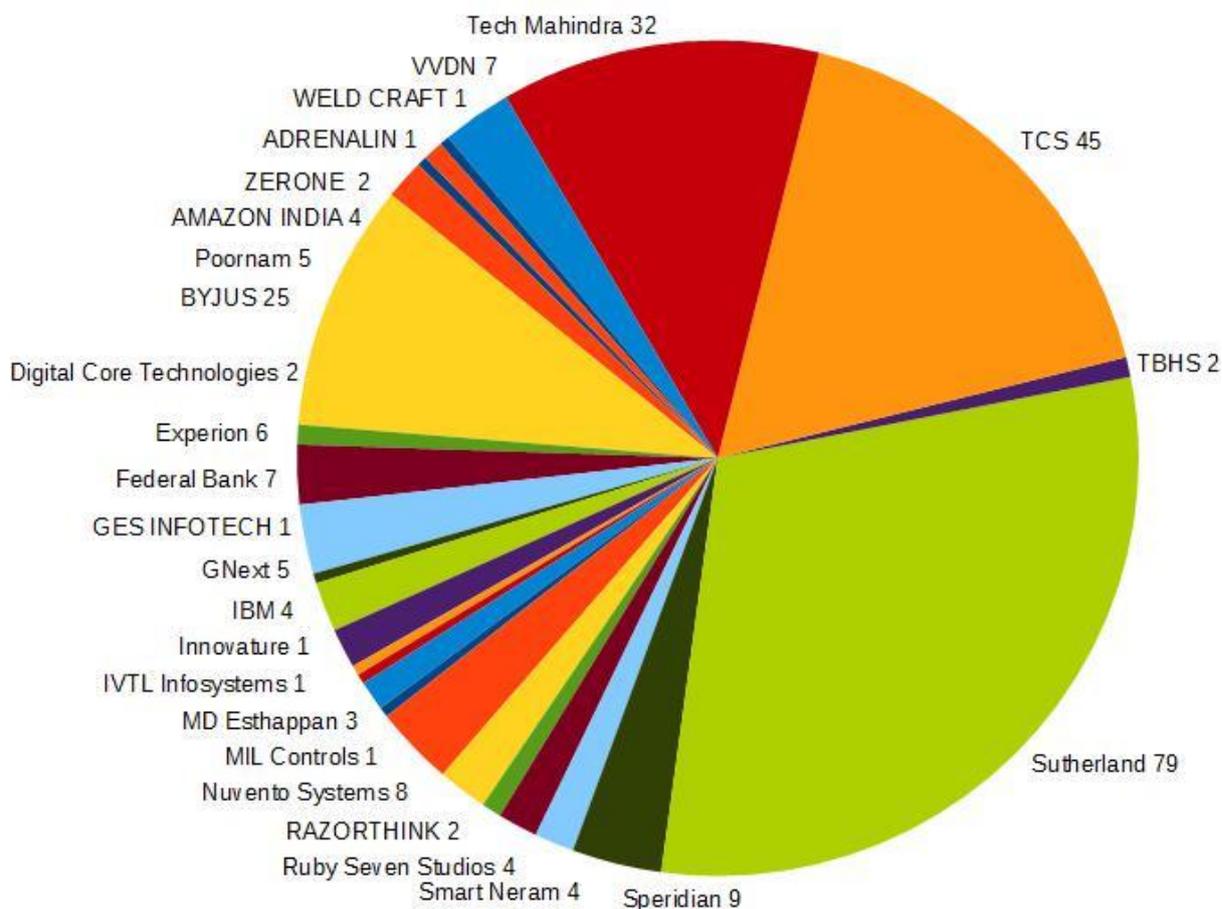
ACADEMIC PERFORMANCE MONITORING COMMITTEE (APMC)

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 class-wise meetings with the poor performers and the respective teachers.

ISO 9001:2015 CERTIFIED INSTITUTION

It is a remarkable moment that the institution has successfully completed the ISO Certification Audit 9001:2015 in the recent upgradation of the ISO certification process held on 29th and 30th November 2016. FISAT may be one of the first educational institutions in the country to upgrade the new standard of the ISO Certification.

Dr. A.J Joshua professor, FBS, Coordinator ISO 9001:2015 Certification, took an active role in this process. . Part of this program training has been given to the faculty as social auditors and they have conducted the audit before the actual ISO Audit.

It is a creditable achievement that FISAT has received ISO certification in 2004 itself and has ensured that its Quality Policy is up to global standards. In subsequent audits also, no Non-Conformance was reported. The certificate ISO 9001:2008 was renewed to a further period up to April 2018 and is now going to be upgraded to ISO 9001:2015.

Activities

IQAC facilitates the conduct of technical activities like seminars, workshops, conferences etc for improving the teachers and students of the institution. General programs for the administrative employees are also conducted periodically. Activities are organized by individual departments and various cells and clubs.

A Seminar on Consumer Protection Act

A Seminar on Consumer Protection Act was Inaugurated by FISAT Chairman Paul Mundadan. On 30th August 2016. The Key note address was delivered by Mr Prince Thekkan, State President of the Consumer Protection Council

Workshop on LabView

A three day Faculty development program was conducted on Advanced LabVIEW applications and Programming on BeagleBone Black by the department of Electronics and Instrumentation on 11th ,12th, and 15th July 2016. The FDP was inaugurated by Er.Baby Sebastian, Division head , Avionics, VSSC and presided by Mr. Paul Mundadan, Chairman, FISAT Governing body. Industrial experts like Er.Baby Sebastian, Er.Deepu Jacob,(certified LabVIEW programmer) Captronics systems, Er.Vigneswaran, Trident TechLab (Field engineer Texas Instruments) took classes in different sessions. More than 30 faculties from various engineering colleges attended the FDP.The FDP was coordinated by Mr. Shinto Sebastian and Mrs.Sreevidya P

Faculty Development Programme by Mechanical Dept

8th   June   2016

Department of Mechanical Engineering in association with Institution of Engineers held a three day faculty development programme on "Challenges and Opportunities in Research". Mr. P I Bose, Treasurer, FISAT Governing body inaugurated the programme. Dr. George Issac,

Principal presided. Dr. G Madhu, Principal, CUSAT School of Engineering delivered the keynote address. Dr. A Suresh A Kartha, IIT, Gauhati, Dr. Sunny Kuriakose, Dr. K S M Panicker, Dr. Jose K Cherian and Mr. C R Rejeesh spoke on the occasion.

"Federal Bank Labz" Launched

The Induction ceremony of first year B. Tech batch - 2016 on 28th July 2016 was more colourful with the announcement of launching of "Federal Labz". an advisory centre for Start Ups, initiated jointly by FISAT and Federal Bank launch pad by Mr. K P Sunny, Additional General Manager, Federal Bank Launch pad. Mr. Paul Mundadan, Chairman, FISAT Governing body presided. Mr. Anthony Johnson, Vice Chairman, Mr. P I Bose, Treasurer, Mr. M P Abdul Nazar, Associate Secretary, Dr. George Issac, Principal, Dr. C Sheela, Vice Principal, Dr. K S M Panicker, Director, Academics, Dr. Sunny Kuriakose, Dean, Adv. Jose V Chakiath and Mr. Jibi Varghese spoke on the occasion. A large number of parents and newly admitted students attended the program.

ICEFOSS 16 National Seminar

Dr. Achuthsankar Nair, Director of Quality Assurance, Kerala University inaugurated the national seminar on 19th August 2016. Department of Computer Science Engineering and

FISAT Free Software Cell hosted the function. Various expert talks and workshops were conducted as part of the conference.

INAUGURATION OF MAKERS WORKSHOP II EDITION

The second edition of Makers Workshop was inaugurated at Federal Institute Of Science And Technology by Dr. Kuncheriya P Issac Vice Chancellor, KTU on 5th October 2016. Chairman Paul Mundadan preside over the function. This second edition of Makers Workshop was sponsored by Kerala Technological University.

Faculty Development Programme for Polytechnic Teachers

A five day faculty development programme was conducted by the Department of Electronics and Instrumentation Engineering (EIE) Department from 18-07-16 to 22-07-16 for Kerala Government Polytechnic College faculty members. Mr. Shamsudeen V A, Deputy Director, SITTTR inaugurated the faculty development programme. Dr. George Issac, Principal, FISAT

chaired the function. Mr. Abdul Nazar, Associate Secretary, FBOAES, Dr. K S M Panicker, Director, Academics; Dr. C Sheela, Vice Principal FISAT; felicitated the gathering of faculty members from several Govt. Polytechnic Colleges in Kerala.The sessions were conducted by the faculty members of Electronics and Instrumentation Engineering headed by Mr. S Sundararajan. Ms. Sheffy Thomas, Ms. Honey Devassy, Mr. Shinto Sebastian and Mr. Anish Mathew K. Mr. Biju Peter, Project Officer presided the valedictory function of the programme. Ms. Smitha I S, HOS Instrumentation, Govt. Polytechnic College, Koratty was the coordinator of the programme. The faculty programme was funded by State Institute of Technical Teachers Training and Research (SITTTR), Kalamassery

Indywood Award

10.03.17

Mr. Paul Mundadan Chairman FISAT received the award for Institute for Excellence in Engineering Education' instituted by INDYWOOD KERALA CHAPTER with Veteran FILM Directors, Siby Malayil, I. V Sasi, and Sohan Roy on 10.3.2017. Dr.George Issac, Principal also joined the function. Indywood is a Film Carnival that recognize the prodigious efforts and contributions of entrepreneurs, educationists and institutions, technocrats, academicians, organizations to their industry through their ideas, concepts and innovations.

Federal Institute of Science and Technology (FISAT)
Internal Quality Assessment Cell (IQAC)

Action Taken Report (2016-2017)

Date of Meeting	Decisions	Action Taken
01.03.2017	• Expand the IQAC as per the IQAC guidelines of the NAAC • Circulate the peer team reports	• The IQAC is expanded as per the IQAC guidelines of the NAAC • The period of present IQAC is fixed as 2 years • Circulated the peer team reports to all members present.
06.03.2017	• Form sub committees in connection with the activities of NAAC in each dept	• Sub committee were formed
28.03.2017	• Identify the activities to be done based on the discussion on sec. 2.1 & 2.2 of the peer team report	• Extended the academic performance monitoring cell activities to MCA, M.Tech and MBA programs. • Departments are instructed to offer addon programs • Conducted the bridge courses • Each department is instructed to conduct at least two invited lectures in each semester in accordance with the latest trends in the discipline. • All feedback forms are modified to include the comments • Update the college website • Entry level test to identify slow learners • Orientation to new comers is to be done • Orientation program for the entire staff to be conducted before the commencement of the next semester.
25.04.2017	• Identify the activities to be done based on the discussion on sec. 2.3 & 2.4 of the peer team report	• Promote research activities by giving financial assistance to faculty for work undertaken. • The faculty members were encouraged to apply for financial assistance to various funding agencies

		- Enhanced the bandwidth of the internet connectivity - Sharing of library resources with nearby colleges - Include maintenance expenditure in the annual budget. - Make MoU more productive

.