



BITS-N-BYTES

A Bi-Annual Newsletter of
St. Francis Institute of Technology
(July to December 2022)



Developing Entrepreneurs/ Industry Leaders with Integrity

AROUND THE INSTITUTE:

St. Francis Institute of Technology endearingly known as SFIT is a Mumbai's premier engineering college situated in the heart of the city surrounded by plush green campus. Started in 1999 with an aim of imparting quality higher education in various fields of engineering, it has seen unprecedented growth. It is affiliated with the University of Mumbai & administrated by Directorate of Technical Education, Government of Maharashtra.

COURSES OFFERED

Undergraduate Courses (B.E)	Intake	Post Graduate Courses (M.E)	Intake
• Computer Engineering	: 120	• Computer Engineering	18
• Electronics & Telecom Engg.	: 120	• Electronics & Telecom Engg.	18
• Information Technology	: 120	Ph.D. (Technology) –	
• Electrical Engineering	: 60	• Computer Engineering	
• Mechanical Engineering	: 60	• Electronics & Telecom Engineering	

Admission to Engineering is as per DTE norms.

For more information/updates about admissions please register@ <https://tinyurl.com/cu4krhsw>



OUR VISION

To be a chrysalis where bright youngsters are transformed into technological entrepreneurs and innovative leaders of tomorrow's world, consistent with the Franciscan vision of integrity, peace and love.



OUR MISSION

For UG programme:- “To churn highly competent engineering graduates with a commitment to result oriented work, a perennial zest for learning, a quest for excellence, an open mind and the universal values of honesty, dignity and mutual care.”



OUR MISSION

For PG programme:- “To continually improve and progress in the path of developing post graduate scholars who will be competent in exploring, developing and disseminating new knowledge in their areas of specialisation so that the repository of new knowledge and innovation and its dissemination will be enhanced in scope of effectiveness.”





St. Francis Institute of Technology

Approved By AICTE | ISO 9001:2015 Certified | Permanently Affiliated to University of Mumbai
Information Technology and Electronics & Telecommunication Engineering are NBA Accredited

St. Francis Institute of Technology

NAAC Accredited A+

!!! Hearty Congratulations !!!

*Grateful to all members of SFIT Family
including students, alumni, parents & each and
every member who contributed.*



4th International Conference on Communication Systems,
Computing and IT Applications



CSCITA-23

31 March-1 April, 2023

CALL FOR PAPERS



St. Francis Institute of Technology (SFIT) is organizing 4th IEEE International conference on "Communication Systems, Computing and IT Applications 2023" (CSCITA) on April 7-8, 2023. The conference will be conducted in offline mode at the SFIT. CSCITA-23 aims at bringing together academia and industry to foster research and provide a platform for future collaborations. The conference is technically sponsored by IEEE Bombay Section (IEEE Conference Record #55725). The original, unpublished research papers are invited for submission at the CSCITA-23. All accepted and presented papers will be submitted to IEEE Xplore. Best papers in each track will be given cash prize.

IMPORTANT DATES

Last date of paper submission: ~~15/01/2023~~
31/01/2023

Last date of acceptance notification: 26/02/2023

Last date of registration (Early bird): 28/02/2023

Last date of registration: 06/03/2023

Last date of camera-ready paper: 10/03/2023

CONFERENCE TRACKS

Track 1: Communication and Networking

Mobile Ad-hoc Networks, Modulation, Coding and Diversity, Multi-Carrier Communication Systems, Routing Protocols and QoS, Cooperative Communications, Network Security and Cryptography, Space-Time Codes, Antennas, Wave Propagation, RF Design, Microwave Engineering, MIMO and Adaptive Antennas, Wireless Communications, Internet of Things, Sensor Networks, Cognitive Radio, Optical wireless communication

Track 2: Signal Processing

Audio and Speech Signal Processing, Image and Video Signal Processing, Signal Processing for Communications, Sparse Signal Processing, Array Processing, Multi-Dimensional Signal Processing, Wavelets and Filter Banks, VLSI Signal Processing Systems, Non-Linear and Biomedical Signal Processing, Computer Vision and Pattern Recognition, Multimedia Signal Processing, Statistical Signal Processing

Track 3: Software and Process Engineering

Operating Systems, Analysis of Algorithms, Database Systems, Theory of Computation, Algorithmic Information Theory, Computability Theory, Mathematical Logic and Formal Languages, Compilers, Advanced Compiler Design, Programming Languages, Computer Architecture, Distributed Resource Allocation and Scheduling

Track 4: Applied Computing and IT

Artificial intelligence, Machine learning, Big data, Data Warehousing and Mining, Data science, Robotics, Natural language processing, Neural Networks, Soft Computing, Cloud Computing, Distributed Computing, Bioinformatics, Web Technologies, Information Processing, Bioinformatics and Genetic Engineering, Computer graphics and gaming, E-commerce, E-governance, UI/UX designing

Special Track: Smart Cities

Smart infrastructure, Smart grid, Security services for smart cities, Vehicular communication, Smart mobility and transportation, e-governance, Smart traffic management, Disaster management, Waste management, Bio-waste disposal, Smart healthcare systems



CORE COMMITTEE

Bro. Shantilal Kujur, Director, SFIT
 Bro. K.S. Jose, Deputy Director, SFIT
 Dr. Sincy George, Principal, SFIT
 Dr. Prachi Raut, Conference chair, SFIT
 Dr. Ravindra Chaudhari, Conference Co-chair, SFIT
 Dr. Nazneen Ansari, Publication chair, SFIT
 Dr. Anjali Chaudhari, Treasurer, SFIT
 Dr. Santosh Chapaneri, IEEE Branch Counselor, SFIT
 Dr. Gautam Shah, Professor, EXTC, SFIT

Dr. Joanne Gomez, Professor, INFT, SFIT
 Dr. Kavita Sonawane, Professor, HoD CMPN, SFIT
 Mr. Sunil Pansare, Assistant Professor, In-charge HoD, MECH, SFIT
 Ms. Megha Fernandes, Assistant Professor, In-charge HoD ELEC, SFIT
 Dr. Kevin Noronha, Professor, HoD EXTC, SFIT
 Dr. Deepak Jayaswal, Professor, Dean Academics, SFIT
 Dr. C. Hariprasad, Professor, FE Coordinator, SFIT
 Dr. Uday Pandit Khot, Professor, R & D Coordinator, SFIT
 Dr. Poonam Hemvani, Associate Professor, FE, SFIT

TECHNICAL PROGRAM COMMITTEE

Dr. Vivek Agarwal, (TPC Chair), IIT Bombay, Mumbai
 Dr. Sheldon Williamson, Ontario Tech University, Canada
 Dr. S.N. Merchant, IIT Bombay, Mumbai
 Dr. Amir Pourabdollah, Nottingham Trent University, UK
 Dr. Sudh Mungkaat, Sanata Dharma University, Indonesia
 Dr. Faruk Kazi, VJTI, Mumbai
 Dr. Uday Pandit Khot, SFIT, Mumbai

ADVISORY COMMITTEE

Dr. Satyanarayana Bheesette, Chair, IEEE Bombay Section
 Dr. Surya Narayan Doolia, Professor, IIT Bombay
 Dr. Sunil Bhat, Professor, VNIT, Nagpur, IEEE Bombay Section
 Dr. Bernard Menezes, Professor, IIT Bombay
 Mr. R. D. Kulkarni, Head, Reactor Design & Development Group, BARC
 Mr. Kiran Talele, Treasurer, IEEE Bombay Section
 Father (Dr.) John Rose, S.J., Director, XIE, Mumbai
 Dr. Saurabh Mehta, Secretary, IEEE Bombay Section
 Dr. Rekha Labde, Conference Chair, IEEE Bombay Section
 Dr. Sujata Kulkarni, Conference Vice-chair, IEEE Bombay Section

REGISTRATION FEES

Authors	IEEE Member		IEEE Non-member	
	National	International	National	International
On or before 28th February 2023	4700	\$200	6800	\$300
After 28th February 2023	6800	\$350	9900	\$400
Attendees	IEEE Member		IEEE Non-member	
	National	International	National	International
Professionals	4300	675	4300	\$100
Students	4200	825	4200	\$50

*18% GST extra
 **Book charges may apply

PAPER SUBMISSION

The submission of papers and the management of the paper review process will be entirely electronic (MS CMT platform). All papers must be formatted as per IEEE conference templates. All submissions must be made within the deadlines given on the conference website. The papers should not exceed A4 sized 6 pages and should not be shorter than 4 pages of technical content including figures and references. At least one author must register for the conference for presentation and submission to IEEE Xplore®

FOR MORE INFORMATION AND QUERIES



<https://cscita.sfit.ac.in/>



cscita23@sfit.ac.in



Dr. Prachi Raut, Conference Chair: +91 9819339093

Dr. Ravindra Chaudhari, Conference Co-chair : +91 93257 58319

SUBMISSION LINK

<https://cmt3.research.microsoft.com/CSCITA2023>



Activate Windows
Go to Settings to activate Windows

DEPARTMENT OF COMPUTER ENGINEERING



DR. KAVITA VINAY SONAWANE

Head of Department

Ph.D. Computer Engg., M.E Computer Engg., B.E. Computer Engg.

kavitasonawane@sfit.ac.in

Welcome to Department of Computer Engineering at SFIT, Mumbai. With an objective of producing and nurturing the Computer Science professional's, future technological entrepreneurs and early researchers, department started its journey with undergraduate course in Computer Engineering in year 1999 with an intake of 60 seats which now has been reached up to 120 since 2010.

We have also started two postgraduate courses- ME in year 2012 and Ph.D in year 2014 in Computer Engineering with the intake of 18 and 13 respectively. Every year about 25% of the final year students secure admission for higher studies at top and eminent Universities across the globe and reputed institutes in India. Total of 90% + of our eligible students are placed in reputed industries/organization every year. Many of our students are emerging as Entrepreneurs as well. The competent faculties, dynamic students and specialized laboratories are the strengths of our department. We have our own 'CODEX' Student association- a technical platform for motivating and supporting our students to upgrade them with the latest technologies and help them to acquire necessary skill sets as per their requirements and interests. Students at department are always encouraged and supported to participate in various technical and extra curricular activities at regional, National and International level. We have an enthusiastic team of staff and students for co-ordination and execution of the activities throughout the year under Computer Society of India (professional Body). Every year team of young engineers from department exhibit their advanced and technical skills in 'Robocon', 'e-yantra' and Smart India hackathon and many such national or international competitions.

We have experienced and highly competent faculty members with excellent academic credentials and expertise in all core and emerging courses of computer engineering. Faculties are always motivated to upgrade their skills and knowledge through various training and certification programs.

Being Heart of our Institute SFIT, we as department of computer Engineering are giving strength, motivation, ethical values to our young aspiring engineers besides technical and professional skill sets. We always encourage our students to be socially aware, responsible, committed and to become smart citizens of today's era.

In line with our vision, we are constantly striving hard to improve in quality and remain committed to focus on excellence at par with global standards.

I welcome you to join our endeavors to deliver and bring out the best for students at SFIT as a competitive edge. Thank you for visiting us!

Programmes offered in the Department

Bachelor of Engineering (B.E.)

Sanctioned Intake : 120

Lateral Entry : 12

Master of Engineering (M.E.)

Intake : 09

Doctor of Philosophy (Ph.D)

Intake : 12

OUR VISION

The vision of the Computer Engineering program at SFIT is to continuously improve its educational environment to nurture future technological entrepreneurs and researchers, with strong emphasis on ethics and professional code of conduct.

OUR MISSION

To produce quality Computer Engineering professionals nourished by entrepreneurial and industrial skills having a sense of social awareness and responsibility.

To inculcate amongst the graduates a knack of critical thinking, leading to generation of new knowledge and its dissemination.

To imbibe lifelong learning and research aptitude leading to innovative research and development.



**Congratulations to
Team Encryptors!!**
Students of TE CMPN
(A.Y. 2022-2023) - Parth
Barai, Roosevelt Antony,
Parbatsingh Rajpurohit and
Joel Devasia for securing
2nd place in the Hackathon
2022 organized by VCET.

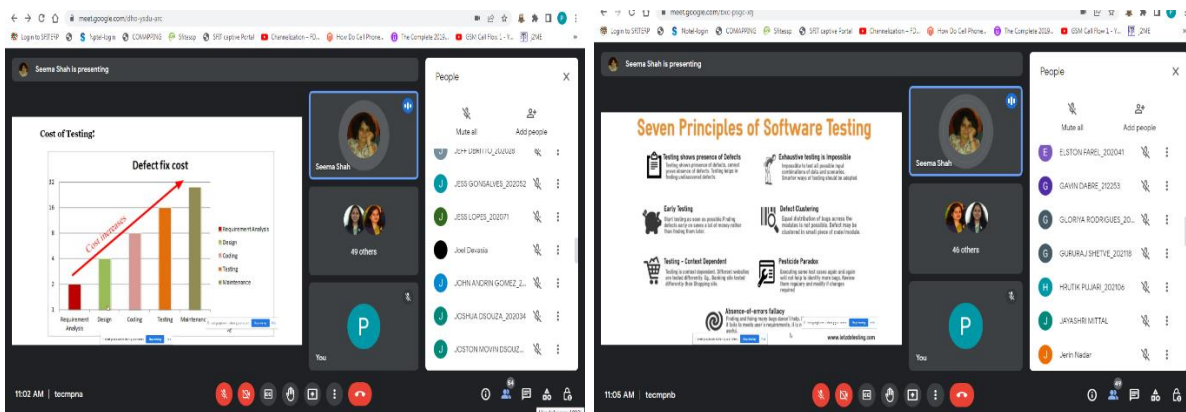
RESEARCH AND DEVELOPMENT ACTIVITIES

Seminar on “Software Testing”

Duration: October 01, 2022 from 10.15 pm to 12.15 pm, online via Google meet.

There were approximately 100 student participants and various faculty participants who attended the seminar. The opening remark was given by Ms. Rhea Pinto where introduced the Speaker, Dr. Seema Shah.

Further, the speaker took over the session and started off by diving right into the topic ‘Software Testing’. She started by emphasizing the importance of Software testing. She mentioned the ill effects of not testing the software being made. She explained the evolution of testing. She mentioned the Seven Principles of Testing. She then went on to explain the different types of Testing used in the industry like white box, black box, etc.

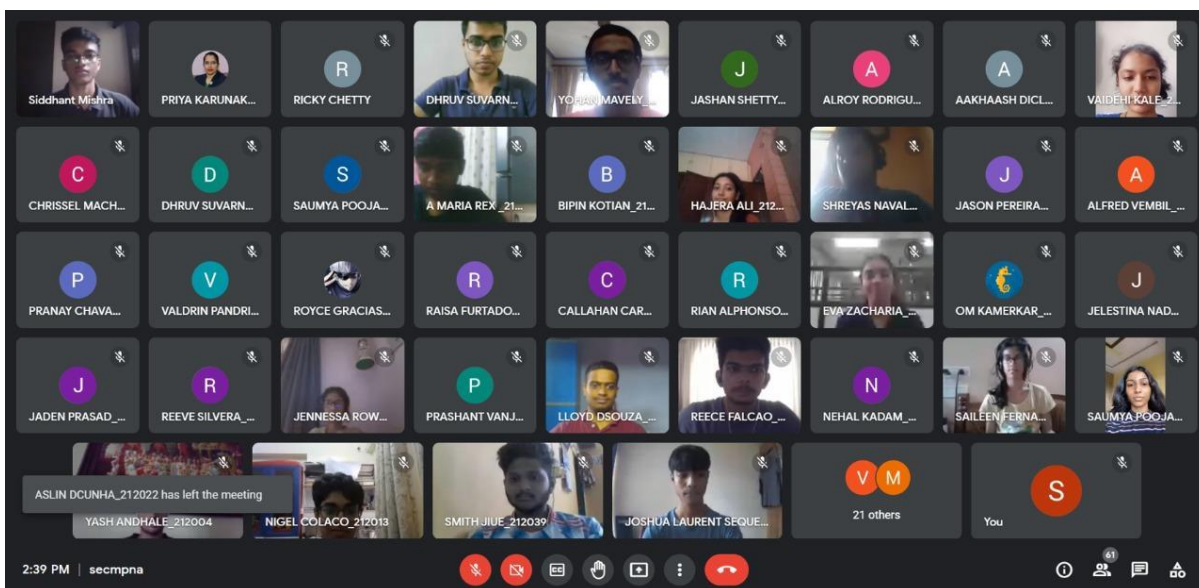


Application Building using JavaFX and JDBC

Duration: 1st October 2022, 2 sessions of 3 Hrs each.

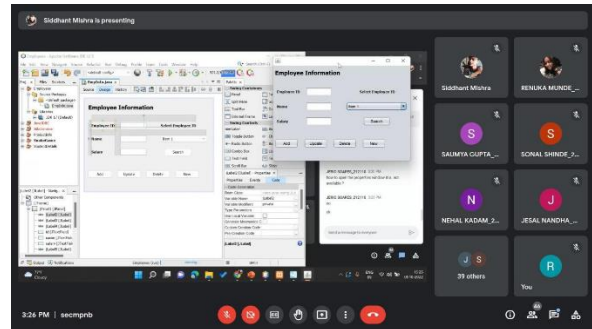
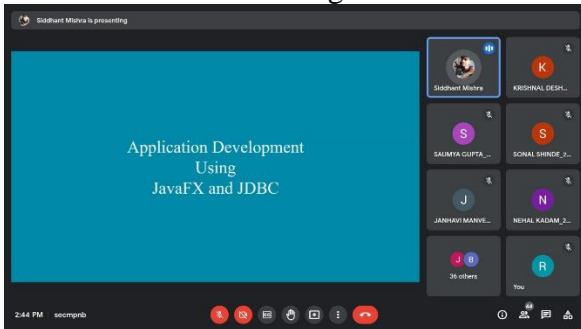
Name of the resource person: Mr. Siddhant Mishra, Senior Software Engineer, Capgemini Technology Services India Limited.

No. of participants: 116



Contents of the Workshop:

- Installation of MySQL and Netbeans
- Basic commands of SQL
- Using NetBeans to build a student form
- Connecting to Database

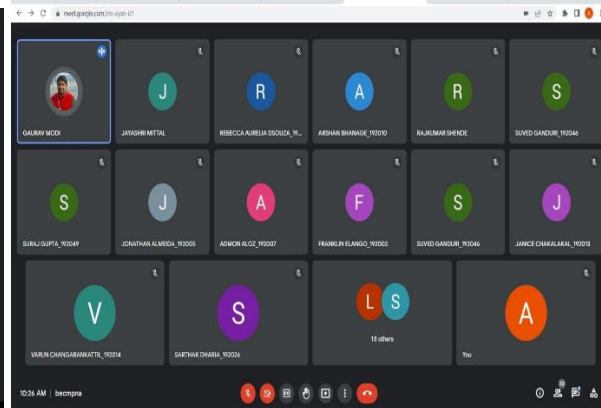
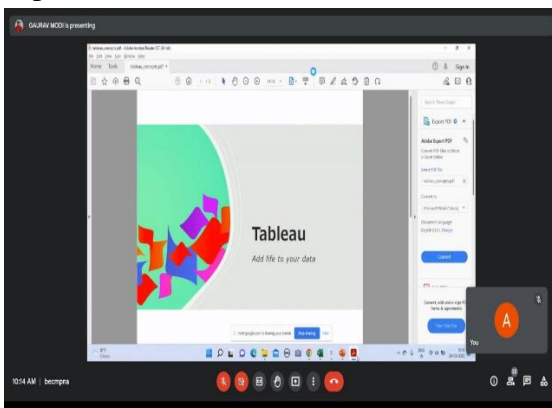


Seminar on "Tableau"

Duration: September 24, 2022, from 10.00 am to 12.00 pm, online via Google meet.

There were approximately 60 student participants and 2 faculty participants who attended the seminar. The opening remark was given by Ms. Rebecca Dsouza where she introduced the Speaker of the day, Mr. Gaurav Modi.

Further, the speaker took over the session and started off by diving right into the installation of the data visualization tool called Tableau Public. He emphasized that Tableau Public is free to use, while both Tableau Server and Tableau Desktop come with a 14 days fully functional free trial period, after which the user must pay for the software. He also provided us with a Sample-superstore dataset in excel sheet for visualization.

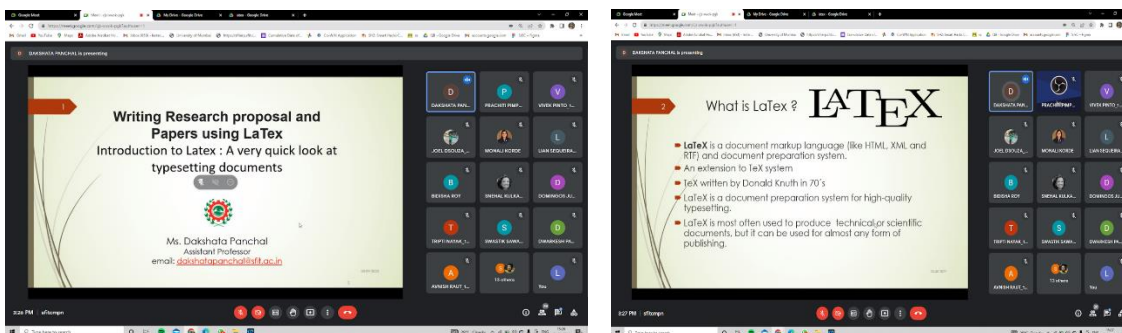


Hands on LaTeX Workshop

An introductory workshop on LaTeX was arranged for the students of BE CMPN A and B by the Computer Engineering Department. The workshop was scheduled at 3:00pm in the lab 406. Prof. Dakshata Panchal was the resource person for the same. The workshop was attended by 30 - 35 students & teachers from the computer engineering department.

Prof. Dakshata first began by introducing the topic LaTeX and addressing the questions: what is it? why was it created? when was it created? She compared LaTeX and the traditional Word software which we use. She emphasized on the fact that LaTeX separates content from the style whereas in word what we see is what we get. She also told us about the mechanisms of TeXing and the procedure to installing LaTeX.

We began the hands-on session by logging in on Overleaf. Overleaf is a collaborative cloud-based LaTeX editor used for writing, editing and publishing scientific documents. We understood the layout of the editor.



“How to Write a Research Paper”

A seminar on “How to write a Research paper” was scheduled for BE CMPN students. Dr. Kavita Sonawane started the seminar by making students understand that the efforts which they are putting to complete their final year project should be recognized.

In order to get the workshop started, the resource person – Dr. Kavita Sonawane questioned the participants about the requirements for writing the paper. Why is it necessary to write a technical paper? Many pupils offered a range of responses, including problem-solving, creating new innovations, etc. After talking with the students, she herself gave an explanation of why a technical paper was necessary. It was an interactive session where most of the teachers also showed up. Additionally, she discussed the several practices that, if used when writing a technical paper, may cause us issues. The drafting of a technical paper was separated into 8 points by the Resource Person as Title, Abstract, Objective, Introduction, Literature Review, Experimental Design and Figures, Findings, Conclusion, References



CODEX ACTIVITIES

Description of Events:

- The first event conducted by team CODEX for the academic year 2022-23 “Seminar on Study Abroad and Career Options” was conducted on 26 August 2022n with Mr. Nitin Lathe being the resource person. It was received with unmatched enthusiasm and an overwhelming participation of 361 students.
- In order to help build problem solving skills and introduce the participants to competitive programming, team CODEX conducted a seminar on the topic “Ultimate Guide to CP and DSA” on 08 October 2022. The speaker for the session was Mr. Carl Mascarenhas.74 participants registered for the seminar.

- Alpha Protocol was the technical event conducted for MOSAIC 2022 on 16th September 2022 and 19th September 2022



Event: Study Abroad Seminar



Event: Ultimate Guide to CP and DSA



TEACHING FACULTY ACHIEVEMENTS

Workshop/Seminar/STTP/TEQIP Attended by faculty

Sr. No.	Name of the Person	Name of the Workshop/Seminar/STTP	Date	No. of days	Professional Body associated (if any)	Venue Details
1	K. Priya Karunakaran	FDP on ML Basics to Advanced	1st July 2022 to 7th July 2022	7 days	IEEE	SFIT
2	Ankita R Karia	FDP on ML Basics to Advanced	1st July 2022 to 7th July 2022	7 days	IEEE	SFIT
3	Jayashri Mittal	FDP on ML Basics to Advanced	1st July 2022 to 7th July 2022	7 days	IEEE	SFIT
4	Pradnya Sawant	FDP on ML Basics to Advanced	1st July 2022 to 7th July 2023	8 days	IEEE	SFIT
5	Sachin More	FIP -2022	16 July 2022- 22 July 2022	7 days	IQAC	SFIT
6	Aditi Malkar	FIP -2022	18 July 2022- 22 July 2022	5 days	IQAC	SFIT
7	Monali R Korde	FIP -2022	18 July 2022- 22 July 2022	5 days	IQAC	SFIT
8	Prachiti Pimple	FIP -2022	18 July 2022- 22 July 2022	5 days	IQAC	SFIT
9	Reshma George	FIP - 2022	18 July 2022- 22 July 2022	5 days	IQAC	SFIT
10	Prachiti Pimple	Faculty Development Program On "Amazon Web Services"	22 August 2022 - 27 August 2022	1 Week	BRAINOVISION SOLUTIONS INDIA PVT.LTD & ALL INDIA COUNCIL FOR TECHNICAL EDUCATION - AICTE	Aditya College of Engineering & Technology, Surampalem

11	Prachiti Pimple	FDP on "Machine Learning"	7th Dec 2022 to 11th Dec. 2022	5 days		Sinhgad Institute of Technology, Lonavala
12	Varsha Nagpurkar	FDP on ML Basics to Advanced	1st July 2022 to 7th July 2022	7 days	IEEE	SFIT

Workshop/Seminar/STTP/TEQIP Conducted by faculty

Sr. No.	Name of the faculty	STTP/ Workshop/ Seminar Conducted	Topic	Conducted for	Date
1	Varsha Nagpurkar	Value Added Course	"Web Designing with React"	TE Students	27th June to 1st July-2022

Online Courses Completed

Sr. No	Name of Faculty	Course title	Organizing Body (NPTEL/Coursera etc)	Duration	From Date	To Date
1	Prachiti Pimple	A online course on "Deep Learning Fundamentals"	Cognitiveclass.Ai Powered By IBM Developer Skills Network.	1 day	July 4, 2022	July 4, 2022

DEPARTMENTAL RESEARCH ACTIVITIES

Sr. No	Name of the Faculty	Name of Project	Status of Completion in %
1	Ms. Ankita Karia, Ms. K. Priya	Stock management system	40%
2	Mr. Shamsudin Khan, Ms. Nidhi Gaur	Automation of Exam Result Generation	50%

PRODUCT DEVELOPMENT/ OUTHOUSE PROJECTS

Sr. No.	Product / Project Title	Name of Faculty	Name of Students
1	Smart Sustainable Construction Lifecycle Management	Varsha Nagpurkar	Prajwal Bawankule, Sarthak Dharia, Jason Dsouza, Avnish Raut
2	Smart Living Solution	Nidhi Gaur	Dwarkesh Patel, Ekta Masrani, Medha

			Khatri,Esha Martis
3	Smart Sustainable Construction Lifecycle Management	Varsha Nagpurkar	Avnish Raut,Prajwal Bawankule,Jason Dsouza, Sarthak Dharia
4	Precision Agriculture	Dr. Kavita Sonawane	Admon Aroz,Jaden Butelho, Orvil D'silva,Basil Koli,Nigel Lobo
5	SOLCON-Automated tool for auditing smart contracts in solidity	Rupesh Mishra	Karthik Menon, Ryan Nayak, Siddharth P, Prachit Tupe
6	Smart Mobility Solution	Shamsuddin Khan	Somnath Pratik, Domingos Julio Pinto, Lester Gregory Rodrigues, Joel Dsouza
7	Fund Chain	Dr. Kavita Sonawane	Yogesh Singh Nayal, Harshit Shetty, Vivek Pinto, Durgesh Palekar

FACULTY PUBLICATIONS

Sr. No	Name of Faculty	Details of Publication	Date of publication	Journal/ Conference
1	Snehal Kulkarni	"CUSTOMER SEGMENTATION USING BIG DATA ANALYTICS"	August 22	JOURNAL OF ENGINEERING, COMPUTING & ARCHITECTURE,ISSN NO:1934-7197, UGC CARE APPROVED -GROUP-II Category Journal
2	Dr. Kavita Sonawane	"A Review of High Utility Itemset Mining for Transactional Database"	September 2022	<u>Lecture Notes in Electrical Engineering</u> book series (LNEE,volume 888), <u>Pattern Recognition and Data Analysis with Applications</u> pp 15–27 , Springer
3	Dr. Kavita Sonawane	COVID-19 and Malaria Parasite Detection and Classification by Bins Approach with Statistical Moments using Machine Learning	October 2022	International Journal of Image, Graphics and Signal Processing(IJIGSP), MECS Press,
4	Varsha Nagpurkar	Identification ,Mapping and Recommendation of Internships and Hackathons for Engineering students	September 2022	JOURNAL OF ENGINEERING, COMPUTING & ARCHITECTURE,ISSN NO:1934-7197, UGC CARE APPROVED -GROUP-II Category Journal
5	Bidisha Roy	A Modified Discrete Teaching Learning Based Optimization Algorithm for the Resource Constrained	August 2022	Journal of Emerging Technologies and Innovative Research

		Project Scheduling Problem		
--	--	----------------------------	--	--

STUDENT ACHIEVEMENTS

Workshops/Technical Events/Competition/Project Competition/Exhibition-Attended

Sr . No	Event Date	Title of workshop /Event name	Name of the student	Class	Venue	Achievement/ Participated	Professional Body associated
1	September 10, 2022	Git & GitHub Webinar	SALONI SURYAKANT MHADGUT	COM P Third Year B	SFIT	Participated	IEEE SFIT
2	September 10, 2022	Git & GitHub Webinar	POORNA NINAD DANI	COM P Second Year B	SFIT	Participated	IEEE SFIT
3	September 14, 2022	Portrait Drawing Competition	POORNA NINAD DANI	COM P Second Year B	SFIT	Winner 2nd Prize	Literary and Social media committee, SFIT
4	September 10, 2022	Git & GitHub Webinar	SIMONE SAVIO GRACIAS	COM P Third Year A	SFIT	Participated	IEEE SFIT
5	August 26, 2022 - September 2, 2022	DevTown Front-end Botcamp	ADITI SACHIN BHOIR	COM P Third Year A	SFIT	Participated	Microsoft
6	September 10, 2022	Git & GitHub Webinar	ADITI SACHIN BHOIR	COM P Third Year A	SFIT	Participated	IEEE SFIT
7	September 10, 2022	Git & GitHub Webinar	SUZANNE RICHIE CORDA	COM P	SFIT	Participated	IEEE SFIT

				Third Year A			
8	August 26, 2022 - September 2, 2022	DevTown Front-end Botcamp	SUZANNE RICHIE CORDA	COM P Third Year A	SFIT	Participated	Microsoft
9	September 24, 2022 -	Kickstart to Python	RIDDHI RAJESH GUPTA	COM P Second Year B	SFIT	Participated	SFIT
10	September 10, 2022	Git & GitHub Webinar	JANHAVI RAJESH MANVE	COM P Third Year A	SFIT	Participated	IEEE SFIT
11	June 27, 2022 - July 1, 2022	Web Designing With Reach- 30 hr VAC	SIDDESH SHYAMSUNDAR MISHRA	COM P Third Year B	SFIT	Obtained Grade "A"	SDC, SFIT
12	August 8, 2022 - August 12, 2022	JavaScript Programming Essentials Bootcamp	SAMSON JOEL KUMARASAMY NADAR	COM P Third Year B	Online	Completed	NSDC, ITM, Lets Upgrade
13	September 10, 2022	Git & GitHub Webinar	CALLAHAN CLAPSON CARVALHO	COM P Third Year A	SFIT	Participated	IEEE SFIT
14	September 10, 2022	Git & GitHub Webinar	GLANCY PRIMAN DSA	COM P Second Year A	SFIT	Participated	IEEE SFIT
15	September 10, 2022	Git & GitHub Webinar	SHRUTIMADHURI SAMIRAN PAL	COM P Second Year A	SFIT	Participated	IEEE SFIT

16	September 10, 2022	Git & GitHub Webinar	JANVI YUGESH PAKHMODE	COM P Second Year A	SFIT	Participated	IEEE SFIT
17	August 25, 2022 - August 26, 2022	SMART INDIA HACKATHON -2022	MEDHASHAKTI OM PRAKASH KHATRI	COM P Final Year A	SFIT	Participated	MoE Innovation Cell, Govt. of India
18	September 10, 2022	Git & GitHub Webinar	RIAN ROGER ALPHONSO	COM P Second Year A	SFIT	Participated	IEEE SFIT
19	September 10, 2022	Git & GitHub Webinar	A MARIA REX AROCKIYASWAMY	COM P Second Year A	SFIT	Participated	IEEE SFIT
20	September 10, 2022	Git & GitHub Webinar	JANET MARIO REBELLO	COM P Second Year A	SFIT	Participated	IEEE SFIT
21	August 27, 2022	IEEE Xplore Webinar	JANET MARIO REBELLO	COM P Second Year A	SFIT	Participated	IEEE , EBSCO
22	January 6, 2023 - Sunday, January 8, 2023	Shebuilds Hackathon	NISHA GULAB BHARDWAJ	COM P Third Year B	Online	Participated	Shebuilds
23	November 22, 2022 - November 26, 2022	DSA Bootcamp	MANAV PRADEEP SHARMA	COM P Second Year B	Online	Participated	NSDC
24	September 1, 2022 - September 3, 2022	SAE Aero Design Challenge	MANAV PRADEEP SHARMA	COM P Second Year B	SRM Institute of Science and Technology, Chennai	FIRST place for BEST DESIGN REPORT under REGULAR CLASS	SAEINDIA Southern section

25	September 30, 2022 - October 2, 2022	Creative Fusion Workshop	BHUMIKA ROSHAN PIMPLE	COM P Second Year B	SFIT	Participated	TECHESS and IEEE Bombay
----	--------------------------------------	--------------------------	-----------------------	------------------------	------	--------------	-------------------------

ONLINE COURSES COMPLETED

Sr. No	Date	Title of Course	Name of the student	Class	Venue	Achievement/ Participated	Professional Body associated
1	September 22, 2022 - October 3, 2022	Machine Learning bootcamp	POORNA NINAD DANI	COMP Second Year B	Online Course	Completed	GDSC KIIT
2	July 26, 2022 - August 14, 2022	Building Web Applications in PHP	AARON ADRIAN PEREIRA	COMP Third Year B	Online Course	Completed	Coursera- University of Michigan
3	July 31, 2022 - August 21, 2022	Introduction to Front-End Development	AARON ADRIAN PEREIRA	COMP Third Year B	Online Course	Completed	Coursera- Meta
4	September 22, 2022 - October 3, 2022	Machine Learning bootcamp	SIMONE SAVIO GRACIAS	COMP Third Year A	Online Course	Completed	GDSC KIIT
5	August 1, 2022 - September 3, 2022	Foundations of User Experience (UX) Design	SIMONE SAVIO GRACIAS	COMP Third Year A	Online Course	Completed	Coursera- Google
6	September 26, 2022 - October 28, 2022	Introduction to Imagemaking	SIDDESH SHYAMSUNDAR MISHRA	COMP Third Year B	Online Course	Completed	Coursera- Calarts
7	September 22, 2022 - October 3, 2022	Machine Learning bootcamp	YASH SHIRISH ANDHALE	COMP Third Year A	Online Course	Completed	GDSC KIIT
8	March 6, 2022 - July 7, 2022	HTML, CSS, and Javascript for Web Developers	DOMINGOS JULIO JOSEPH PINTO	COMP Final Year B	Online Course	Completed	Coursera- John Hopkins
9	June 7, 2022 -	Statistical Inference	LIPIKA NETAI BASUDEV	COMP Third	Online Course	Completed	Infosys, Springboard

	July 7, 2022	using Python		Year A			
10	June 15, 2022 - Thursday, July 28, 2022	Java Programming and Software Engineering Fundamentals Specialization	JOYSTON JAMES BRITTO	COMP Final Year A	Online Course	Completed	Coursera-Duke University
11	June 1, 2022 - September 27, 2022	Html and css for beginners with html5	NISHA GULAB BHARDWAJ	COMP Third Year B	Online Course	Completed	Infosys, Springboard
12	October 15, 2022 - Sunday, November 27, 2022	Adobe premier-Pro CC-Essentials Course	MANAV PRADEEP SHARMA	COMP Second Year B	Online Course	Completed	Udemy
13	October 1, 2022 - November 24, 2022	Gouvernement Exam Certificate in C programming	A MARIA REX AROCKIYASWAMY	COMP Second Year A	Online Course	Secured A+ Grade	MBTB

STUDENTS PUBLICATIONS

Sr. No	Author's Name	Paper Title	Publication details	Date of publication	Class
1	Medhashakti Om Prakash Khatri	Classification of Job Domain to acquire interview insights for job seekers	Journal of Engineering, Computer and Architecture, vol 12, issue 8, issn no 1934-7197 (UGC Care approved, Group-II journal)	August 8, 2022	COMP Final Year A
2	Rebecca Dsouza	Identification, Mapping and Recommendation of Internships and Hackathons for Engineering students	JOURNAL OF ENGINEERING, COMPUTING & ARCHITECTURE, ISSN NO:1934-7197, (UGC Care approved, Group-II journal)	September 2022	COMP Final Year A
3	Shaun Figueiro				
4	Alwyn Fernandes				
5	Sai Mhatre	"CUSTOMER SEGMENTATION USING BIG DATA ANALYTICS"	JOURNAL OF ENGINEERING, COMPUTING & ARCHITECTURE, ISSN NO:1934-7197, (UGC Care approved, Group-II journal)	August 22	COMP Final Year A
6	Vishwa Mhatre				
7	Yash Mirajkar				

8	Riddhi Sansare				
---	----------------	--	--	--	--

INTERNSHIPS COMPLETED

Sr. No	Student's Name	Class	Internship details	Duration	Status
1	RENOY CHARLES DSOUZA	COMP Third Year A	Software Engineer Intern organised by Upstox	June 1, 2022 - July 31, 2022	Completed
2	PRANAV PANDURANG YADAV	COMP Final Year B	Software Engineer Intern @Dashlabs.ai	June 1, 2022 - July 31, 2022	Completed
3	ALEX MALBIN MK VICTOR	COMP Final Year B	Data Science Internship organised by Exposys Data Labs	October 6, 2022 - Monday, November 7, 2022	Completed
4	SUZANNE RICHIE CORDA	COMP Third Year A	Graduate Rotational Internship Program organized by The Sparks Foundation	September 1, 2022 - September 30, 2022	Completed
5	CIMMONA COSTAND PEREIRA	COMP Third Year B	e Finlatics Business Analyst Experience Certification, organized by Finlatics	December 8, 2022 - January 27, 2023	Completed



ST. FRANCIS INSTITUTE OF TECHNOLOGY
MOUNT POINSUR, S.V.P. ROAD, BORIVLI-(WEST), MUMBAI - 400103



**DEPARTMENT OF COMPUTER ENGINEERING
ORGANIZES**

5TH INTER COLLEGE FINAL YEAR PROJECT COMPETITION

PRAKALP 2023

REVOLUTIONIZE THE WORLD WITH YOUR INNOVATION

2nd PRIZE

₹3500

1st PRIZE

₹4500

3rd PRIZE

₹2500

2 CONSOLATION PRIZES OF ₹1000

PROJECT CATEGORIES

- INTELLIGENT SYSTEMS
- KNOWLEDGE DISCOVERY & DATA MINING
- NETWORK & INFORMATION SECURITY
- IMAGE PROCESSING & APPLICATIONS
- EMBEDDED SYSTEM & UBIQUITOUS COMPUTING (IoT)
- COMMUNICATIONS NETWORK & DISTRIBUTED SYSTEMS
- ADVANCED TECHNOLOGIES & SOFTWARE ENGINEERING

INSTRUCTIONS:

- Only Final Year projects will be accepted.
- Projects of EXTC, IT, ELECTRICAL & MECHANICAL can also participate under suitable categories.
- Group Size: 2 - 4 members

For further details contact:

Mr. Shamsuddin Khan: 9892610746
Ms. Ankita Karia: 9594318210

REGISTRATION DETAILS

 Last Date of Registration:
2nd April 2023

 Date of Competition :
11th April 2023

Student Registration:

Internal: Rs. 200/- per group
External: Rs. 250/- per group

Scan to Register



www.sfit.ac.in/Prakalp2023.php

CONVENER

Dr. Kavita Sonawane
Professor
Head of Department
Dept. of Computer Engineering

CO-CONVENER

Mr. Shamsuddin Khan
Ms. Ankita Karia
Project Coordinators
Dept. of Computer Engineering

ADVISORY COMMITTEE

Bro. Shantilal Kujur
Director
Dr. Sincy George
Principal

DEPARTMENT OF INFORMATION TECHNOLOGY



DR. PRACHI RAUT

Head of Department

PhD (Technology), M.E. (Electronics), B.E. (Electronics)

prachiraut@sfit.ac.in

The progression of Information and Communication Technology is outpacing the expectations of humankind. Proliferation in the developments of Apps (Applications) and Robotics is astounding. E-Commerce is flourishing and growing at an astonishing rate. As a result, the academic institutes in the country are facing the challenge to produce qualitative engineers capable of delivering effective solutions in the above areas. Taking into account the needs of the industry and our institute's constant endeavor to produce entrepreneurs and employable IT engineers of high quality, the department continues to play an active role to achieve these objectives. In view of the above developments, the Information Technology Department imparts training to students through its well-equipped laboratories and infrastructure to make them competent to be able to devise innovative ideas to serve the society. In addition to imparting technical knowledge, the department also focuses on inculcating ethical values in students.

The department is one among very few to have its own students' association, ITSA (Information Technology Students' Association) with a broader objective of providing freedom to students so that they grow professionally in the technological environment. This has further encouraged them to organize and undergo training in the latest technologies.

Since its inception the IT Department holds the record of being one of the best Information Technology Departments in the University of Mumbai.

Programmes offered in the Department

Bachelor of Engineering (B.E.)

Sanctioned Intake : 120

Lateral Entry : 12

OUR VISION

To create a conducive instrument for transforming the enrolled potential fresher into competent Information Technology professional or entrepreneur with integrity and ethical value.

OUR MISSION

To become unit of excellence in teaching, training, research, innovative application and extension work in IT in co-operation with various other departments.

To make knowledge and expertise accessible with various dissemination strategies, including networking with research unit, colleges, government and industry along with the motivation for self-learning.

To integrate teaching, research and practice along with higher education for generation and application of knowledge in line with emerging needs of industry, technical quality with market driven professional pursuits, programs, courses, collaboration.

To develop entrepreneur skills along with ethical and professional values among the students.

SHORT TERM COURSES ATTENDED BY FACULTY

Date	Duration	Emp. Name	Title of Workshop / course/ Seminar / Conference	Organizing Body
25/07/2022 to 22/08/2022	4 Week (online)	Dr. Minal Lopes	Introduction to Quantum computing: Quantum Algorithms and Qiskit	AICTE approved FDP organized by NPTEL
1st to 6th July 2022	one week	Ms. Aruna Pavate	Recent trends in Deep Learning and Machine Learning-Basics to Advanced	SFIT in collaboration with XIE
22nd August 2022 to 27th August 2022	one week	Ms. Aruna Pavate	AMAZON WEB SERVICES.	Rajiv Gandhi University of Knowledge Technologies - Basar in collaboration with BRAINOVISION SOLUTION INDIA PVT.LTD & ALL INDIA COUNCIL FOR TECHNICAL EDUCATION - AICTE
1st to 6th July 2022	one week	Ms. Priya Chaudhari	Recent trends in Deep Learning and Machine Learning-Basics to Advanced	SFIT in collaboration with XIE
6th June 2022 to 11th June 2022	One week	Ms. Vijayalakshmi B	Cyber security and artificial intelligence	Thakur college of engg in collaboration with Pristine InfoSolutions Pvt. Ltd. India
18th July 2022 to 22nd July 2022	One week	Ms. Vijayalakshmi B	Faculty Induction Program	SFIT
18th July 2022 to 22nd July 2022	One week	Ms. Garima Singh	Faculty Induction Program	SFIT
1 July 2022- 7 July 2022	One week	Ms. Vandana Patil	Machine Learning - Basics to Advanced	St. Francis Institute of Technology, Borivali W), Mumbai
18th July 2022 to 22nd July 2022	One week	Ms. Priyanka Patil	Faculty Induction Program	SFIT
18th July 2022 to 22nd July 2022	One week	Ms. Aaysha Shaikh	Faculty Induction Program	SFIT
18th July 2022 to 22nd July 2022	One week	Ms. Jesleena Gonsalves	Faculty Induction Program	SFIT
18th July 2022 to 22 July 2022	6 Days	Ms. Sonali Suryawanshi	Faculty Induction Program-2022	SFIT, BORIVALI
18th July 2022 to 22 July 2022	6 Days	Ms. Pratibha S. Rane	Faculty Induction Program-2022	SFIT, BORIVALI
1/7/2022 to 7/7/2022	One week	Ms. Amrita Mathur	Machine Learning - Basics to Advanced	SFIT, BORIVALI
27th June to 8th	two	Ms. Amrita	Artificial Intelligence	VCET

July 2022	weeks	Mathur	towards data science applications	
1st July 2022-7th July 2022	One week	Ms. Alvina Alphonso	Machine Learning - Basics to Advanced	
1/7/2022 to 7/7/2022	One week	Dr. Vaishali P. Jadhav	Machine Learning - Basics to Advanced	SFIT, BORIVALI
27th June to 8th July	two weeks	Ms. Amrita Mathur	Artificial Intelligence towards data science applications	VCET
27/6/2022 to 8/7/2022	Two weeks	Dr. Vaishali P. Jadhav	Artificial Intelligence towards data science applications	VCET
12/12/2022 to 17/12/2022	One week	Dr.Prachi Raut	Data Analytics and Visualisation	TSEC
19/12/2022 to 23/12/2022	5 Day	Sonali Suryawanshi	Inculcating human values in technical education	AICTE
2 Jan 2023 to 7th Jan 2023	6 Days	Sonali Suryawanshi	Building solutions with no code AI and machine learning	Thakur College
26 Dec 2023 to 31 Dec 2023	6 Days	Sonali Suryawanshi	Research and Innovation Report writing using Latex	K J Somaiya Institute of Technology in association with IIT Bombay – Spoken Tutorial
2 Jan 2023 to 7th Jan 2023	6 Days	Vijayalakshmi B	Building solutions with no code AI and machine learning	Thakur college of Engineering
2 Jan 2023 to 7th Jan 2023	6 Days	Pratibha Rane	Building solutions with no code AI and machine learning	TCET, Kandivali
07/11/2022 to 11/11/2022	5 Day	Pratibha Rane	Inculcating human values in technical education	AICTE
07/11/2022 to 11/11/2022	1 Week	Aruna Pavate	Building solutions with no code AI and machine learning	TCET, Kandivali
22nd August 2022 to 27th August 2022	1 Week	Aruna Pavate	Amazon Web Services	Dr. D. Y. Patil Institute of Engineering, Management & Research, Akurdi-Pune
10th - 11th Dec 2022	2 DAYS	Aruna Pavate	Machine Learning Operations (MLOps) using the AWS cloud platform,	Psitron Technologies Pvt. Ltd.
19/12/2022 to 23/12/2022	5 Day	Nitika Rai	Inculcating human values in technical education	AICTE

WORKSHOPS / SEMINARS CONDUCTED BY INFT DEPARTMENT

Emp. Name	Date	Duration	Title of Workshop / course/ Seminar / Conference	Organizing Body
Aruna Pavate	23rd September 2022	1 Day	"Modern Machine learning with adversarial examples"	Shree L R Tiwari college of engineering Mira road thane
Aruna Pavate	31st July 2022	1 Day	"CUET 2023 - Ace Your Exams".	Testbook.com
Aruna Pavate	29th September, 2022.	2 hrs	How to write and publish a research paper	Atharva college of engineering Malad west Mumbai
Amrita Mathur	17th September 2022	2 hrs	Reference Manager : Mendeley	LIRC: SFIT
Grinal Tuscano	04TH OCT 2022	3 hrs	"LATEX for Document Preparation"	Skill Development cell, SFIT
Ms. Shree Jaswal	18th October 2022	2 hrs	Introduction to DevOps	R&D, SFIT
Nitika Rai	19th July 2022	2 hours	Familiarisation with IQAC	FIP-SFIT

FACULTY PUBLICATIONS

1. Pavate Aruna , Rajesh Bansode, "Evolutionary Algorithm With Self-Learning Strategy for Generation of Adversarial Samples", *International Journal of Ambient Computing and Intelligence (IJACI)*, 13(1), pp. 1-21, December 2022.
2. Sujata Kadam, Joanne Gomes, "Comparative Analysis of Quantization Schemes for Physical Layer Key generation", *5th International Conference on Advances in Science and Technology (ICAST)*, 2022, 548-553, December 2022.
3. Balaraju Vijaya Lakshmi, aruna pavate, "Analysis Of Cloud Performance Using Cloud Simulators For Multi-Scale Applications", *Futuristic Trends in Computing Technologies and Data Sciences*, Volume 2 Book 18, Part 1, PP. 57-71, November 2022.
4. Ignatius Almeida, Gladstone D'souza, Amit Kumar Yadav, Siddhart Sandu, Aruna Pavate, "Sports Predictor Using Machine Learning Algorithm ", *Futuristic Trends in Computing Technologies and Data Sciences*, *Futuristic Trends in Computing Technologies and Data Sciences*, Volume 2, NOV 2022, Book 18, Part 1, Chapter 7,, pp. 72-82, November 2022.
5. Shruti Gupta, Sneh Modi, Aruna Pavate, Jovita D'lima, Mrinmoyee Mukherjee, Abhishek Sunkale, "Automated Cricket Instructor", *Futuristic Trends in Computing Technologies and Data Sciences*, Volume 2, NOV 2022, Book 18, Part 1, Chapter 8, pp. 83-93, November 2022.
6. R. Fargose, S. Gaonkar, P. Jadhav, H. Jadiya and M. Lopes, "Browser Extension For A Safe Browsing Experience", *International Conference on Computing, Communication, Security and Intelligent Systems (IC3SIS)*, IEEE conference held at Kochi, India, DOI: 10.1109/IC3SIS54991.2022.9885551, pp. 1-6, September 2022.

7. Nikhil Pujari, Rohit Choudhari, Rahul Shirolkar, Dr. Minal Lopes, "Distributed Workspace Using Cloud Technology and Version Controlling", *International Journal of Innovative Science and Research Technology*, ISSN No:-2456-2165, Volume 7 - 2022, Issue 8 - August, DOI : <https://doi.org/10.5281/zenodo.7073464>, pp.1432-1438, September 2022.
8. Hrutik Naik; Shrumi Dedhia; Ashwini Dubbewar; Meet Joshi; Vandana Patil, "Myers Briggs Type Indicator (MBTI) - Personality Prediction using Deep Learning", *2nd Asian Conference on Innovation in Technology (ASIANCON)*, 10.1109/ASIANCON55314.2022.9909077, 1-6, August 2022.
9. MRINMOYEE MUKHERJEE, Dr. Kevin Noronha, "Experimental analysis of received power for OOK?NRZ visible light communication system using of?the?shelf components", *International journal of information technology*, 14, 2839–2853, August 2022.
10. Aruna pavate, Dr. Rajesh Bansode, "Design and Analysis of Adversarial samples in safety-critical environment : Disease Prediction System", *Second International Symposium on Computer Vision and Machine Intelligence in Medical Image Analysis 2021 Part of the Lecture Notes in Computational Vision and Biomechanics book series (LNCVB, volume 37)*, vol 37, pp 349–361, July 2022.
11. Vandana A Patil, Santosh V Chapaneri, Deepak J Jayaswal, "Kernel-Based Matrix Factorization With Weighted Regularization for Context-Aware Recommender Systems", *IEEE Access*, vol.10, 75581-75595, July 2022.
12. Leafia Dias, Ketaki Keluskar, Anviksha Dixit, Krunal Doshi, Mrinmoyee Mukherjee, Joanne Gomes, "SignEnd: An Indian Sign Language Assistant", *IEEE Region 10 Symposium (TENSYMP)* page:1-6, doi: 10.1109/TENSYMP54529.2022.9864405, 2022, 1-6, July 2022.
13. A. Gupta, R. Rodrigues, A. Tripathi, R. Coutinho and J. Gomes, "Blockchain for EHR: an off-chain based approach", *IEEE Region 10 Symposium (TENSYMP)* page:1-6, doi: 10.1109/TENSYMP54529.2022.9864405, 2022, 7-12, July 2022.

Congratulations Dheeraj Naik (TE INFT) for winning second prize in Aero Design Challenge – SAEINDIA Southern Section (Chennai) organized by SRM University on 1st September 2022.




ST. FRANCIS INSTITUTE OF TECHNOLOGY
(ENGINEERING COLLEGE)

Mt. Painsur, S.V.P. Road, Borivli (West), Mumbai - 400103

(Approved by AICTE & Govt. of Maharashtra with permanent Affiliation to University of Mumbai, ISO 9001: 2015 Certified NAAC 'A' Accredited)

CERTIFICATE OF APPRECIATION

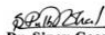
Awarded to Mr./Ms. DHEERAJ NAIK a student of Third Year Semester 5 in the Department of Information Technology for representing "Team SFIT Tejas" in the 7th Aero Design Challenge organized by SAEINDIA at National Level from September 1, 2022 to September 3, 2022 and securing the **1st place** in the Design Report category and **11th place** for the overall competition.


Mr. Magesh Nadar

SFIT Tejas Coordinator


Mr. Sunit Pansare

HOD, Dept of Mech Engg.


Dr. Sincy George

Principal

DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING



DR. KEVIN PRATHAP NORONHA

Head of Department

PhD, M.Tech(Digital Electronics and Advanced Communication),
BE (Electronics and Communication)

kevinnoronha@sfit.ac.in

The department was established in 1999, with a sanctioned intake of 60 for the undergraduate Bachelors programme. Over the years, we have been striving hard pursuing our vision to become a centre of excellence, by upgrading the qualifications of the faculty, promoting research and developing the infrastructure. In 2010 the sanctioned intake was increased to 120 for the undergraduate Bachelors programme. Slowly but steadily we have grown by introducing the postgraduate Masters programme in 2012 and Doctoral programme in 2015. The UG programme was provisionally accredited for a period of two years from August 2012. The University of Mumbai has granted the institute permanent affiliation in 2015. We are placed amongst the top six institutes in the University as far as the results of first year of engineering are concerned.

Our teaching faculty is constantly climbing the academic ladder and over the years, three of the four professors in the department have been sponsored by the institute and completed their doctoral programmes successfully. They regularly interact with the university, government organizations, other universities and institutes. Five faculty members are currently pursuing their doctoral programme, and five faculty members have successfully completed their masters' programme sponsored by the institute.

We are updating our knowledge by attending workshops, training programs conducted by premier institutes like IITs, NITs and IISCs. Our institute is a remote centre for programmes conducted by IITs under the National Mission on Education through ICT. Faculty experts are taking up the responsibilities of the workshop coordinator and course coordinators for these programs. Faculty members have delivered invited talks in conferences and other institutes. We are presenting and publishing our research work in national/international conferences/journals like NCC, INDICON, TENCON, Elsevier and Springer. We have received research grants from and are involved in setting up of syllabus for the Electronics & Telecommunication branch in the University of Mumbai. The department was headed by Dr. T. S. Rathore a retired professor from IIT, Bombay from 2006 to 2012. He has been a constant source of guidance to the department. The institute academic advisory committee consisting of eminent academicians like Dr. S. N. Merchant and Dr. S. Biswas, professors from IIT Bombay, Dr. B. K. Lande, retired professor from VJTI, has always been advising the department for academic improvements. We have had invited talks from eminent personalities of IIT Bombay.

Programmes offered in the Department

Bachelor of Engineering (B.E.)

Sanctioned Intake : 120

Lateral Entry : 12

Master of Engineering (M.E.)

Intake : 18

Doctor of Philosophy (Ph.D)

Intake : 15

OUR VISION

To become a centre of excellence globally in the field of Electronics and Telecommunication where teamwork, innovation, and research are encouraged to nurture and develop graduates and post graduates with strong academic foundation and an all-round personality with ethical values.

OUR MISSION

To impart quality technical education and expose students to state-of-the-art technologies in the field of Electronics and Telecommunication Engineering.

To imbibe ethical and professional values, inculcate the quest for higher learning and an aptitude for research and global competency.

To develop entrepreneurial skills amongst students to cater to the challenges of industry and society.

To motivate students towards research, leading to multidisciplinary innovative projects.



Workshop/Seminar/Conference Attended

S r. N o.	Name of the Faculty	Title of the Workshop/Seminar/C onference	Organizing Body
1.	Gautam Abhaychand Shah	Stratergic Leadership & Decision Making	SFIMAR, 17th December 2022

2.	Ms Savita Kulkarni	12 Weeks NPTEL Course:Digital image Processing Jul-Oct 2022 by IIT Khargpur.	NPTEL, IIT Khargpur.
3.	Ms Savita Kulkarni	IEEE Sponsored one week FDP on Machine Learning: Basic to Advanced 01/07/2022 to 07/07/2022.	SFIT
4.	Ms Monika Cheema	Attended IEEE Sponsored one week FDP on Machine Learning: Basic to Advanced 01/07/2022 to 07/07/2022	SFIT
5.	Ms Monika Cheema	Attended Skill Development Programme conducted by IIT kurnool (TiHAN Foundation) on "Global satellite Navigation Systems from 25July-29th July, 2022	IIT kurnool
6.	Ms. Shilpa Chaman	MOSAIC-2022: IETE : Among Us! 16/09/2022	137 participants.
7.	Dr. Shailaja Mohite	AICTE ,New delhi	Participated in one week Faculty Development Programme(FDP-2022) Inculacating Universal Human Values in Technical Education by AICTE,New DelhiSFIT Borivali , from 17th

			oct-21 oct, 2022
8.	Dr. Shailaja Mohite	D Y Patil ,Nerul,Navi Mumbai	Participated in one week STTP Signal Processing using Machine Learning Algorithm with A grade approved by IETE by D Y. Patil, Nerul,Navi Mumbai jan 2-7 jan 2023
9.	Ms.Prerana Kushe	AICTE ,New delhi	Participated in one week Faculty Development Programme(FDP-2022) Inculacating Universal Human Values in Technical Education by AICTE,New DelhiSFIT Borivali , from 17th oct-21 oct, 2022

Faculty Publications

No	Author's Name	Paper Title	Publication details
1.	Mrinmoyee Mukherjee, Kevin Noronha	Experimental analysis of received power for OOK-NRZ visible light communication system using off-the-shelf components	International Journal of Information Technology,14, pages2839–2853 (2022)
	Amol Patil, Gautam Shah	Consensus in Multi-Agent system with Switching Topology	International Conference on Applications in Computational Engineering & Sciences, October 2022

	Savita Kulkarni, Kunal Ghagre , Shreyash Gavad , Sankalp Hegde	Smart Parking System	UGC Care Group II Journal, GIS Science Journal, Scopus Active Journal & UGC Approved, Page No: 911-915, Volume 9 Issue 11 Nov 2022,
4.	Allen Xavier, Urvashi Dhingra, Valentina Rani Basker	Patient Monitoring and Assisting: A Real Life Unity3D Application	International Conference on Computational Science and Technology



Invited talk

Sr. No.	Name of the Faculty	Title of Workshop/Seminar/Conference	Organizing Body
1.	Ms Savita Kulkarni	"Embedded Development Boards" in 30Hrs Value added course on "Bridging the Educational Gap in Embedded Systems" 27th Jun-1st July 2022	EXTC Dept. , SFIT

2.	Ms. Shilpa Chaman	30Hrs Value added course on "Bridging the Educational Gap in Embedded Systems"	EXTC, Skill development Cell, SFIT
3.	Dr. Kevin Noronha	Invited talk on "Exam reforms' at Faculty Induction Programme 2022,SFIT"	FE

CONGRATULATIONS





Dr. Anjali Chaudhari



Dr. Vaqar Ansari



Dr. Santosh Chapaneri



Dr. Jayasudha Koti



Dr. Shailaja Mohite



St. Francis Institute of Technology

Approved by AICTE | ISO 9001: 2015 Certified
 Permanently affiliated to University of Mumbai
www.sfit.ac.in | sfedu@sfit.ac.in | 022-28928585

CONCEPTION

Intercollege Poster Presentation Competition
 Organized by
Electronics and Telecommunication Engineering Department
 for EXTC Students

11th April 2023

Domain Names:

1. Communication Systems and Networking
2. Embedded Systems
3. RF, Antenna & Microwave Engineering
4. Signal Processing

Registration Fees ₹ 300/-
 Last date of Registration: 1st April 2023

Cash Prizes

Contact Details
9325758319
 (Dr. R. Chaudhari)

9209807906
 (Ms. S. Kulkarni.)



Dr. Kevin Noronha
(Convener)

Dr. Ravindra Chaudhari
(Coordinator)

Dr. Jayasudha Koti
(Coordinator)

Dr. Anjali Chaudhari
(Coordinator)

Ms. Savita Kulkarni
(Coordinator)

Registration Link: <https://sfiterp.sfit.co.in:98/SfitEventRegForm.asp?event=18>

Website: www.sfit.ac.in

Email: conception2022@sfit.ac.in

DEPARTMENT OF MECHANICAL ENGINEERING



MR. SUNIL PANSARE

Head of Department

sunilpansare@sfit.ac.in

It gives me immense pleasure in welcoming all the stakeholders, especially, the students and their parents, to this webpage of newly formed Mechanical Engineering Department (MED) of SFIT.

We at SFIT are, for last 20 years, imparting the quality education to all our students. We have always provided our students with state of art facilities and infrastructure the fruits of which can be seen in our performance! We are always in top five in the Results of FE Semester I and II of Mumbai University. Our BE results, with few exceptions, are always 100%. Most of our eligible students get placement in their final year. This number of eligible students has increased every year! A considerable number of our students go for MS in countries like US, Canada, Germany and Australia. They perform exceptionally well there too. Great number of our students has started their own companies, many a times even before leaving shores of SFIT!

With such a brilliant background, I believe our students of Mechanical Engineering have a strong foundation available at SFIT for launching their careers. We are just one year old department, we are in a developing stage. Experts say that teachers are the backbone of any educational institute. Our department have the presence of both experienced and young teachers. We are from different core fields like Mechanical Design, Manufacturing, Thermal Engineering and CAD/CAM. Most of us are actively involved in research too. I am sure this will benefit our students in their academics and research related activities.

Various labs are being developed. We are putting lot of efforts in providing students with best of Equipment, Machines, Instruments and Tools! I am sure that our Labs are going to be one of the best in the business. In these labs students will get first hand experience on the latest technology. For example, they will be trained on CNC Lathe Machine available in our Machine Shop. In order to provide hands on experience, we have started a program called "Introduction to Automotive Technology" for our SE students. This course helps them understand the current technology trends in Automobile industry. Probably, they also will understand how the trends are likely to change in the future.

In order to give them exposure to "real word", we also have plans in place for industrial/field visits. Lectures, seminars and workshops by eminent personalities and industry experts in the field Mechanical Engineering are also being planned. We have Mechanical Engineering Students' Association (MESA). MESA will actively be involved in all these activities. Under the umbrella of MESA, students will be able to take part in various other activities like Professional/Expert Level Certification programmes in CAD/CAM conducted by various industries, Product Design Contests at national and international levels, Formula 1/Solar/Electric car making competitions and many more. Such activities, I am sure, will bring out the real potential of the students and they will realize the importance of working in a team.

Our Training and Placement Cell already have started sessions, on weekly basis, with our students. These sessions impart skill sets which will boost employability of our students. MESA, in collaboration with our alumni, will also arrange seminars where useful information related to career opportunities and higher education, in India and or abroad, can be shared with students. The departments like CMPN or IT are helping us in conducting sessions for our students to improve their programming/coding skills. Sessions to enhance managerial skills are also in the pipeline!

It is observed that, in addition to domain specific knowledge, industries prefer candidates who demonstrate LEADERSHIP qualities. We are very sure that during the four years in the department, after going through the rigour of activities mentioned, most of our students will get transformed into Leaders of future. These LEADERS, we hope, will not only serve their workplaces to best of their abilities but they will use their skills to create jobs for others too. We also expect them to spread the Franciscan values of Integrity, Peace and Love wherever they go.

Our journey to be pioneers in the field of Mechanical Engineering has just began. I am hopeful that our students' team, ably backed by our teachers, is capable of creating wonderful things and achieving great success in the near future not only for themselves, but for the society and the country too. Thank you!

Programmes offered in the Department

Bachelor of Engineering (B.E.)

Sanctioned Intake : 60

Lateral Entry : 6

OUR VISION

To be a globally renowned brand for mechanical engineers where interdisciplinary activities would churn out industry ready professionals with universal human values, thirst for new knowledge and entrepreneurial skills.

OUR MISSION

M1: To be a hub with conducive learning environment and modern facilities where aspiring youngsters would be transformed into skilled and motivated mechanical engineers.

M2: To encourage the students to participate in multidisciplinary and innovative projects addressing techno-social concerns.

M3: To foster the research aptitude in students to pursue higher studies and to take up jobs in research organizations.

M4: To promote activities to instill universal human values and entrepreneurial skills in the students.

R&D Lecture Series: Lecture on “Effect of length variation between condenser and evaporator units on the performance of split air conditioner”

August 6, 2022 at 11.00 am to 12.30 pm

No. of Attendees: 13

Name of Coordinators: Mr. Bysani Malakondaiah

Resource Person: Mr. Bysani Malakondaiah

Event Description:

R&D lecture aims to elaboration and clarification associated with some scientific terms such as research, development science, technology, and engineering also. Research is vital part of any organization. It is described as the systematic approach to create new knowledge. In fact, research may involve both new science and the use of old science to fabricate a new product. Research is a continuous process of inquiry in which a detailed examination aimed at the discovery of facts, review of conventional theory, or application of these theories is conducted. To fulfil the objectives Mr. Bysani Malakondaiah has taken R & D lecture on “Effect of length variation between condenser and evaporator units on the performance of split air conditioner.”

9th Go Kart Design Challenge organized by ISNEE Motorsports at National Level

August 22, 2022 – August 25, 2022

No. of Students: 23

Organized by: **ISNEE Motorsports (Go-Kart Design Challenge Competition)**

Faculty Advisor: Mr. Yunus Dalal

Achievement: **1st Place in Business Plan Category, 2nd Place in Cost Report Category and 10th Place in Overall Competition at National Level**

Event Description:

Go Kart Design Challenge formerly known as National Go Kart Championship is a competition initiated by ISNEE to offer teams the maximum design flexibility and the freedom to express their creativity and imaginations with very few restrictions on the overall kart design. The challenge to teams is to develop a kart (CV and EV) that can successfully compete in all the events described in the GKDC Rulebook.

Team Gatee SFIT is the official Go-karting team of St. Francis Institute of Technology under MESA. Team Gatee was formed in the year 2019 and our team consist of young and enthusiastic budding engineering students from various streams working towards the design and manufacturing of Go-Karts to participate in National Level Competition.



Sr. no	Name of Student	Designation
1.	Mr. Anish Gorhe	Team Captain
2.	Mr. Jay Ghosalkar	Team Vice Captain
3.	Mr. Maitrik Patel	Team Manager
4.	Mr. Jay Raut	Design Head
5.	Mr. Aditya Kanse	Manufacturing Head
6.	Ms. Dhruvika Solanki	Marketing Head
7.	Mr. Chaitanya Shirodkar	Publicity Head
8.	Mr. Adarsh Aare	Testing Head
9.	Akash Patil	Team Member
10.	Amey Ghadigaonkar	Team Member

11.	Ceabron Andrades	Team Member
12.	Darryl D'Souza	Team Member
13.	Isha Lagad	Team Member
14.	Krish Solanki	Team Member
15.	Leon Lopes	Team Member
16.	Prathamesh Kadam	Team Member
17.	Swaraj Khade	Team Member
18.	Utkarsh Kankaria	Team Member
19.	Varun Rane	Team Member
20.	Siddhesh Maurya	Team Member
21.	Adarsh Zingade	Team Member
22.	Adnan Patel	Team Member
23.	Anish Karbhari	Team Member

9th Go Kart Design Challenge organized by ISNEE Motorsports at National Level

Event Date: September 1, 2022 - September 3, 2022

Venue: SRM University, Chennai

No. of Students: 7

Organized by: SAEISS

Faculty Advisor: Mr. Magesh Nadar

Achievement: **1st Place in Design Report Category and 11th Place in Overall Competition**

Event Description:

SFIT Tejas is a team of aspiring engineers that design, manufacture and analyse Remote-Control Aircrafts. Our Team was incorporated in March 2020 and we were able to successfully build our First Aircraft in February 2022 for SAE East Aero Design Competition held in Texas. With continuous effort of the Team, a Second Aircraft was developed in August 2022 to participate in SAEISS 7th Aero Design Challenge held in Chennai.

The main objective of the SAEISS Aero Design Challenge is to promote and develop Indian expertise and experience in unmanned systems technologies at the university and college levels.

SAEISS Aero Design Challenge features two classes of competition - Regular and Micro. Regular Class continues to be the class with the purpose to develop the fundamental understanding of flight and the goal is to lift as much payload as possible. Micro Class teams are required to make trades between two potentially conflicting requirements, carrying the highest payload fraction possible, while simultaneously pursuing the lowest empty weight possible.



Sr. no	Name of Student	Designation
--------	-----------------	-------------

1.	Siddhesh Lele	Team Captain
2.	Omkar Parab	Manufacturing Head
3.	Khushi Rathod	Team Member
4.	Meet Patel	Team Member
5.	Divya Sutar	Team Member
6.	Dheeraj Naik	Team Member
7.	Manav Sharma	Team Member

Webinar on Professional Ethics: How to give constructive feedback and finding strength and area to work upon goal setting exercise

October 1, 2022 at 09.15 am to 12.45 pm

Venue: Auditorium (Room No. 113)

No. of Participants: 48 (SE, TE & BE Mechanical students)

Resource Person: Prof. Tapas Das (MA, PGDM, XIMB)

Coordinators: Dr. Ravindra Garmode, Mrs. Neha Valse

Event Description:

The resource person and our chief guest for the event was Prof. Tapas Das [MA, PGDM (XIMB)]. The seminar had two major objectives one was to highlight the importance of an effective and conclusive Feedback reply. The second objective was to educate our attendees the importance of having a goal in life and how hard does one need to work in order to achieve the targeted goal. With the knowledge of these objectives, the SE, TE & BE student mechanical engineering will be able to build a strong career in the field of mechanical engineering. The seminar aimed at giving the students a brief idea about the professional requirements in various sectors as a mechanical engineer.

The following topics were covered during the session:

1. How to develop good habits for success.
2. Field and opportunities for Mechanical Engineers.
3. What is Personality Development?
4. Opportunities for Mechanical Engineers in Government sectors.
5. Which exams should a mechanical engineer focus on?
6. Strategies to crack various exams.

A short question and answer session by the audience followed the session towards the end of the webinar. The session was a big success, as all the participants had shown keen interest in knowing about the skills in demand and necessary personal developments to be brought into action to build a strong career. The Resource persons delivered an excellent session giving insights of how to develop oneself as an engineer and become capable for the industry.



Webinar on Product design lifecycle using CAD & CAE products

September 07, 2022 at 3:00pm to 5:00pm

Venue: TPO Hall (Room No. 113)

No. of Registered Students: 90 (MECH SE, TE & BE)

Name of Coordinators: Dr. Ravindra Garmode

Resource Person: Mr. John Matthew (Managing Director CADD Centre)

Ms. Namrata Ghag (Business Head CADD Centre)

Mr. Sandeep Nair (General Manager CADD Centre)

Event Description:

The resource person for the event was Mr. John Matthew, Managing Director at CADD Centre. The major objective of the session was to introduce the attendees with the available options to them, post Bachelor in Mechanical Engineering to build a strong career and also help them understand new concepts in CAD designing which is a major subject in the study of mechanical engineering. The seminar aimed at giving the students a brief idea about the job profiles in the Private and Government sector as a mechanical engineer.

The following topics were covered during the session:

1. Field and opportunities for Mechanical Engineers.
2. Opportunities for Mechanical Engineers in Government sectors.
3. Opportunities for Mechanical Engineers in Private sectors.
4. Quality and Standard requirements in various applications in the industry, post BE.
5. Use of Solidworks and AutoCad in the industry.
6. Technology driving Mechanical design.

A short question and answer session by the audience followed the session towards the end of the seminar. The session was a big success, as all the participants had shown keen interest in knowing about the skills in demand and necessary personal developments to be brought into action to build a strong career. The resource persons delivered an excellent session giving insights of how to develop one as an engineer and become capable for the industry. The response and feedback from the participants, about the session was magnificent and as per the feedbacks, they would want to attend more sessions like this in future.



Industrial Visit: Adani Dahanu Thermal Power Station, ADTPS

Event Details:

September 24, 2022 and October 08, 2022 at 6.00 am to 9:00 pm

Venue: Thermal Power Plant, Dahanu Road, Palghar District, Near Dahanu Railway Station, Dahanu, Maharashtra 401608

No. of Registered Students: 140 (TE & BE Mech)

Name of Coordinators: Mr. Bysani Malakondaiah, Mrs. Neha Valse, Mr. Saurabh Vichare

Resource Person: Adani Dahanu Thermal Power Station, ADTPS

Event Description:

The industrial visit was organized for students to learn about different sections of a thermal power plant and practically observe the concepts they have learnt in theory. Adani - Dahanu Thermal Power Station (ADTPS), consisting two units of 250 MW, is one of the best power generation plants in the country, which commenced its commercial operations in January 1996. Recognized with innumerable awards, this power plant is known for its distinctive features that set it apart from others in terms of technological innovation, superior performance and continuous sustainability for a longer period. Adani - Dahanu Thermal Power Station has implemented integrated management systems (IMS) in its processes and is certified for quality management, environment management, occupational health and safety assessment studies, social accountability management, information security management, energy management and accreditation for ADTPS coal testing laboratory.

Students observed and understood all the details of a Thermal power plant structure and working. They visited different sections like Imported Coal Section, Quality Checking of Coal, Actual Operation of Power Plant, Turbines, Exciter, Boiler, ash handling plant, Coal Handling Plant, Conveyor Belt, and 220MV Distribution etc. The plant is equipped with the highest chimney in Asia. Students also observed different Control panels and the control section.





Poster Competition

October 29, 2022 and November 09, 2022 10:00 am to 1:00 pm

No. of Participants: 167 (SE/TE/BE Mech)

Name of Coordinators: Faculties of Mech Department



Event Description:

Department of Mechanical Engineering organized an offline project poster competition for SE, TE and BE Mechanical Engineering students. The objective behind of poster making competition is to bring out the creative expression of students and to gauge their knowledge and awareness of various trends in technology. The aim of the Poster Making Competition is not just to judge the students based on their creative aspects but also to trigger thought process among the students towards recent trends in the field of technology. The students were evaluated

based on the problem statement, proposed solution, methodology, quality of work and presentation skills.

All the faculty members of the department evaluated the students and 3 groups with better ideas and execution were awarded with certificates.



Teaching Faculty achievements

Courses Completed

Name of Faculty	Course Title	Duration	Organized by
Bysani Malakondaiah	Machine Learning Basic to Advance	1 week	SFIT and SXIE Mumbai
Sanjay Ghaskatta	Machine Learning Basic to Advance	1 week	SFIT and SXIE Mumbai
Yunus Dalal	Machine Learning Basic to Advance	1 week	SFIT and SXIE Mumbai

Faculty Development Programme (FDP)/Workshop Attended

Name of Faculty	Course Title	Duration	Organized by
Ravindra Garmode	Introduction to Composites	12 weeks	NPTEL, IIT Kanpur
Bysani Malakondaiah	Solar Energy Engineering and Technology	12 weeks	NPTEL, IIT Guwahati
Bysani Malakondaiah	Battery Technology for E-Mobility	1 week	GIAN, IIT Bombay
Ravindra Garmode	Data Sciences : Tools and Research	1 week	VIT, Pune
Ravindra Garmode	Battery Technology for E-Mobility	1 week	GIAN, IIT Bombay
Sanjay Ghaskatta	Trends in Mechatronics & Manufacturing	1 Week	NITTTR, Chennai
Yunus Dalal	Research and Innovation Report writing using Latex	1 Week	Department of I T - K J Somaiya Inst. Of Tech.
Saurabh Vichare	Industry 4.0	1 Week	IET and IQAC of LRTC OE
Saurabh Vichare	Research and Innovation Report writing using Latex	1 Week	Department of IT - K J Somaiya Inst. Of Tech.

Magesh Nadar	Solid Modelling and Motion Studies For Research and Industrial Applications	1 Week	Department of Mechanical Engineering - NIT Rourkela
--------------	--	--------	---

Faculty Development Programme (FDP)/Workshop Attended

1. **Ravindra K. Garmode**, Vivek R. Gaval, Sachin G. Solanke and Sanjay D. Nikhade, "Mechanical Properties Evaluation for Cotton/Glass/Epoxy Hybrid Composite", ASM Science Journal, vol. 17, pp. 1-9, October, 2022.
2. **Ravindra K. Garmode**, Mohammed H. Rady, Mahendra Gooroochurn, Sandip A. Kale, "Effect of Blade Root Dimensions on Physical and Mechanical Characteristics of a Small Wind Turbine Blade", International Journal of Renewable Energy Research, Vol. 12, No.3, pp. 1339-1346, September, 2022.
3. Sagar N. Thakre, **Sunil R. Pansare**, Sachin S. Naik and Hemant N. Warhatkar, "Estimation of Natural Frequencies of Cantilever Beam with Open Inclined Edge Crack", International Review of Mechanical Engineering, Vol. 16, No.9, 2022.

Student achievements

Internships Completed

Name of Student	Organization	Class	Date	Specialization
Arjun Bedi	Mars exploration PVT. LTD, LinkedIn	TE	October 3, 2022	Computational Fluid Dynamics
Arjun Bedi	Simulation Labs, LinkedIn	TE	December 14, 2022	Electric Vehicles Internship: (BTMS) using Nanofluids for Electric Vehicles
Rishab Nair	Sai Hundai	SE	December 09, 2022	Hands on experience
Harshil Mody	Sai Hundai	SE	December 09, 2022	Hands on experience
Neel Kanchan	Sai Hundai	SE	December 09, 2022	Hands on experience
Yash Kadam	Sai Hundai	SE	December 09, 2022	Hands on experience
Sibony Saldanha	Sai Hundai	SE	December 09, 2022	Hands on experience
Sakshi Marchande	Sigma packaging solutions	TE	December 23, 2022	Hands on experience
Kusal Yadav	Sigma packaging solutions	TE	December 23, 2022	Hands on experience
Madhav Bhavsar	Sigma packaging solutions	TE	December 23, 2022	Hands on experience
Atul sharma	Sigma packaging solutions	TE	December 23, 2022	Hands on experience
Ryan Colaco	Sigma packaging solutions	TE	December 23, 2022	Hands on experience
Darryl Pinto	Sigma packaging	TE	December 23,	Hands on experience

	solutions		2022	
Satyam Pathak	Western Railway	TE	January 08, 2023	Passenger Carriage Maintenance

Course/Training/Certification Completed

Name of Student	Organization	Class	Date	Specialization
Vishal Chotaliya	Addonix Technologies Pvt. Ltd.	TE	July 3, 2022	Certified SolidWorks Associate (CSWA)
Bharat Choudhary	Addonix Technologies Pvt. Ltd.	TE	July 8 , 2022	Certified SolidWorks Associate (CSWA)
Saahhiel Saawaant	Addonix Technologies Pvt. Ltd.	BE	July 16, 2022	Certified SolidWorks Associate (CSWA)
Saahhiel Saawaant	Addonix Technologies Pvt. Ltd.	BE	September 16,2022	Certified SolidWorks Professional (CSWP)
Ashton Quadros	Addonix Technologies Pvt. Ltd.	TE	July 8 , 2022	Certified Solidworks Associate (CSWA)
Arjun Bedi	Internshala	TE	August 28, 2022	Ansys
Vishal Chotaliya	Dr. Goteti Satyanarayana	TE	September 1, 2022	Fundamentals of Rocket Propulsion
Neel Bhalani	N.S.D.C, Lets Upgrade	TE	September 10, 2022	Python & Data Science Essentials Bootcamp
Neel Bhalani	N.S.D.C, Lets Upgrade	TE	September 23, 2022	Javascript and Node.js Bootcamp
Neel Bhalani	N.S.D.C, Lets Upgrade	TE	September 17, 2022	Python & Machine Learning Bootcamp
Neel Bhalani	N.S.D.C, Lets Upgrade	TE	September 16, 2022	Javascript and React.js Bootcamp
Arjun Bedi	Intershala	TE	December 3, 2022	Fusion 360
Arjun Bedi	Udemy	TE	December 5, 2022	Computational Fluid Dynamics
Kusal Yadav	Intershala	TE	December 5, 2022	Digital marketing
Akash Patil	CEMS	BE	December 20,2022	Learning CAD and CAE using Siemens NX(CEMS)
Ronan Tauro	CEMS	TE	December 12,2022	Learning CAD and PLM using Siemens NX(CEMS)
Neel Bhalani	N.S.D.C, Lets Upgrade	TE	October 28, 2022	MySQL Essentials Bootcamp
Neel Bhalani	N.S.D.C, Lets Upgrade	TE	October 29,	DSA Essentials Bootcamp

			2022	
Neel Bhalani	N.S.D.C, Lets Upgrade	TE	October 30, 2022	Flutter Programming Essentials Bootcamp
Neel Bhalani	N.S.D.C, Lets Upgrade	TE	October 24, 2022	Java Programming Essentials Bootcamp
Neel Bhalani	N.S.D.C, Lets Upgrade	TE	November 20, 2022	C++ Programming Essentials Bootcamp
Neel Bhalani	N.S.D.C, Lets Upgrade	TE	November 19, 2022	Netflix insiders using React
Neel Bhalani	N.S.D.C, Lets Upgrade	TE	November 11, 2022	Javascript Programming Bootcamp
Neel Bhalani	Bolt IoT	TE	December 22, 2022	Web Development Training
Siddhant Rebello	CEMS	TE	December 12, 2022	Learning CAD and PLM using Siemens NX(CEMS)

Activities Conducted by Department

STTP/Competition/Webinar/Workshop/ Orientation

Sr. No.	Type of Activity	Name of Activity	Beneficiaries	Date
1.	Webinar	R&D Lecture	SFIT Staff	August 6, 2022
2.	Go-Kart Design Challenge	9th Go Kart Design Challenge	Gatee SFIT	August 22, 2022 - August 25, 2022
3.	Aero Design Challenge	7th Aero Design Challenge	Tejas SFIT	September 1, 2022 -September 3, 2022
4.	Webinar	How to give constructive feedback and finding strength and area to work upon goal setting exercise	SE, TE and BE Students	October 1, 2022
5.	Webinar	Product design lifecycle using CAD & CAE products	SE, TE and BE Students	September 7, 2022
6.	Industrial Visit	Adani Dahanu Thermal Power Station, ADTPS	B.E. students	September 24, 2022
		Adani Dahanu Thermal Power Station, ADTPS	T.E. students	October 8, 2022
7.	Poster competition	S.E. Mini project	S.E. student	October 29, 2022
		T.E. Mini project	T.E. student	October 29, 2022
		B.E. project	B.E. student	November 9, 2022

DEPARTMENT OF ELECTRICAL ENGINEERING



MS. MEGHA FERNANDES

Head of Department

M.E.(Power Electronics and Drives), B.E (Electrical Engineering)

meghafernandes@sfit.ac.in

It gives an immense pleasure to welcome you all to Electrical Engineering Department, SFIT, the chrysalis where students are transformed into technological entrepreneurs and innovative leaders.

The prime motto of the department is to provide quality education through the student-centred teaching methodology. The excellent infrastructure, experienced and dynamic faculties guided by the college Principal, Dr.Sincy George, who has done her research in 'Power Electronics and Power System' are the strengths of the department. The students are given a strong foundation in Electrical Engineering along with the problem-solving techniques which will be helpful in clearing competitive exams like GATE, which is a qualified test for government jobs. The department encourages our students to develop new project ideas, which would be useful in the day to day life. They are also encouraged to undergo winter/summer internship in companies related to electrical stream. In a nutshell, the department is a motivation to the Electrical Engineering students in shaping up their destiny by keeping high aims of global competitive technocrats. The universal human value education and social outreach programmes in the college mould our students as good Samaritans of our country. Various seminars, industrial visits and guest lectures are arranged in the department to bridge the gap between the academics and industry. We train our students to excel in various fields with the help of all modern teaching methods and advanced laboratory facilities developed by the faculties of electrical department.

Programmes offered in the Department

Bachelor of Engineering (B.E.)

Sanctioned Intake : 60

Lateral Entry : 6

OUR VISION

To produce electrical engineers that are globally competent for providing service to mankind with the inculcated modern technical education.

OUR MISSION

M1: To provide comprehensive proficiency in the field of electrical engineering along with the blend of multi-disciplinary learning.

M2: To create a conducive environment for integrating research and teaching practices leading to the development of entrepreneurial skills among learners which will help to cater to the challenges of society and industry.

M3: To collaborate with industries, renowned teaching and research institutes, and alumni, for contributing to international and national development accompanied with life-long learning.

M4: To motivate learners for participating and organizing curricular and co-curricular activities for improving creativity, innovating, and leadership quality in the learners.

Activities organized by the department for students.

➤ Seminars

Topic: Electric vehicle and Grid Technology

Resource Persons: Mr George Sebastian
Rtd. Associate Director,
Nuclear Power Corporation, Mumbai

Dr Sushil Thale
Professor and Dean (R&D)
Dept Of Electrical Engineering
Fr.C. Rodrigues Institute of Technology, Vashi

Date: 7th October 2022



Topic: Orientation for GATE Exam

Date: 13/07/2022

Resource person: Ms Varsha Thandassary



Topic: How to search reseach Papers effectively

Date: 21/07/2022

Resource person: Dr Mohd Adil Sheikh



➤ Workshops

Topic:PCB designing and Signal Integrity workshop

Date: 24/09/2022

Resource person: Team Abhiyantra



Topic: 30 Hrs value added course on Application of Power Electronics in Electrical Engineering
Date : 12/12/2022 to 17/12/2022

Resource Persons:

Dr Sincy George

Ms Megha Fernandes, SFIT

Mr Pratik Rahate, SFIT

Dr Mini Rajiv, FCRIT

Dr Mini N, FCRIT

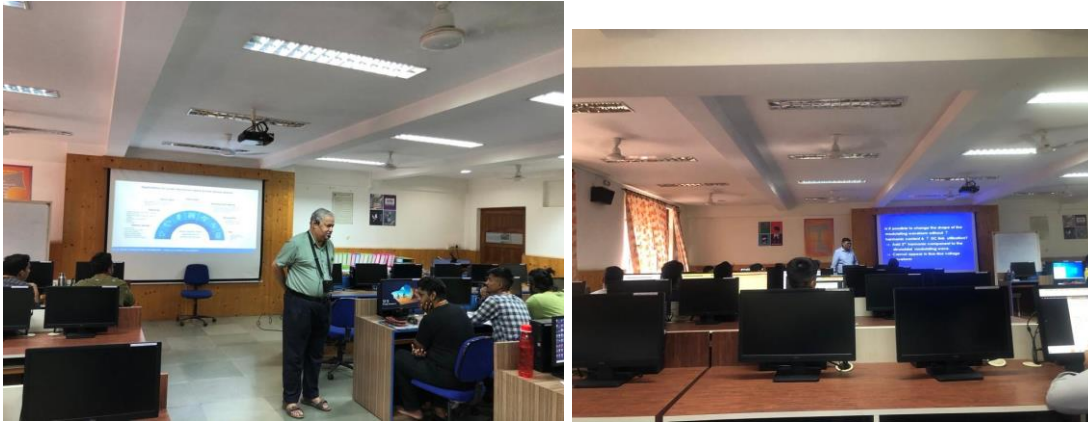
Mr Rahul rane, L& T

Dr B B Pimple, SPCE

Mr Bhuvnesh Nemade, Hind Rectifiers

Mr Tanishq Date, IIT, Mumbai





Activities organized by the department for staff

➤ **R & D lecture series**

Speaker: Dr Mohd Adil Sheikh

Topic: How to read research paper effectively

Date: Saturday, 19 November 2022

Speaker: Dr Sincy George

Topic: PWM Rectifier

Date: Friday, 25 November 2022

TEQIP/STTPs attended by staff –

Sr. No.	Name of the Workshop/Seminar/STTP	Date	No. of days	Name. of participants	Resource Person details	Venue Details
1.	STTP on Power Electronics and Drives	31/10/2022 TO 04/11/2022	5	Ms Josna Jose, Mr Pratik Rahate Ms Shyma KV	Fr.C Rodrigues Institute of Technology	Online

2.	Machine Learning: Basics to Advanced	01/07/22 to 07/07/22	6	Dr. Adil Sheikh	Dr. Thomas Schrawz (Marquette University), Dr. Santosh Chapaneri (SFIT)	SFIT
3.	Emerging trends in Power, Energy and control	22/08/2022-27/08/2022	6	Ms. Varsha Thandasarry	Dr.Sindhu Thampatty, Prof.Vivek Agarwal (IITB), Mr.Debanand Singdeo (MathWorks),Dr. Janaína Gonçalves de Oliveira(Uppsala University,Sweden) Dr.Shihabudeen K.V (NITC), Mr.Muhammed Akmal (Siemens India Ltd)	Online(Google meet)
4.	Faculty Induction Program (FIP)	18/07/22 to 22/07/22		Ms Shyma K V Ms Kalyani Soni Ms Ekta Desai Mr Kannan K Ms Mohoni Kher	Dr. Deepak Jayaswal, Dr. Joanne Gomes, Mr. Paul Fernandes,Ms. Preethi Colaco, Dr. Nitika Rai,Mr. Francis Dsouza, Dr. Santosh Chapaneri, Ms. Deepa Panakkal, Dr. Kevin Noronha, Dr. C. Hariprasad, Dr. Merle Coutinho, Dr. Sincy George	SFIT Borivali(W) Mumbai

5.	FDP on Futuristic Electrical Power System	10/11/22 to 16 11/2022	7	Ms Shyma K V	Fr.C Rodrigues Institute of Technology	Online
6.	“Designing and Modelling of IoT, AI & ML Systems	1/8/22 to 5/8/22	5	Ms Ekta Desai	All India Council for Technical Education (AICTE), Arm Education, STMicroelectronics	online(Zoom)

Student activities

Sr. No	Event Date	Title of Workshop/ Event Name	Name of the Student	Class/ Sem/ Div	Venue	No. of students attend ed the works hop	Conduct ed/ Attende d/ Particip ated	Professi onal Body Associat ed
1	2/9/2022-3/9/2022	SAE AeroDesign Challenge	Divya Sutar	TE ELEC / 5th	SRM Institute Chennai	1	Participated & Attended	Team SFIT-TEJAS
2	5/10/2022 & 6/10/2022	Zypher	Raj Mirani	TE ELEC / 5th	Thakur college event		Participated & Attended	
3	16/09/2022,19/09/2022	Battle X battle(MOSAIC 2022)		TE ELEC/ BE EELEC /SE ELEC	SFIT	43	Participated & Attended	EESA

4	13/06/2022-17/06/2022	VAC ON “PROBLEM SOLVING WITH C PROGRAMMING AND PYTHON”		BE ELEC	GOOGLE MEET	66	Attended	Electrical department
5	24/09/2022	PCB designing and Signal Integrity workshop	Prachi Manadkar	SE elec	SFIT	30	Attended	Team Abhiyantara

Extra curricular activities

Sr. No.	Student's Name	Event Name	Class/Sem/Div	Achievement	College Name
1	Zaheen Jethwa	Intercollege volleyball	TE Elec/Sem V/A	First prize	Atharva College of Engineering

List of research papers published by students and faculty in AY 2021-2022

Note: SFIT students name are in Italic and Faculty name in Bold

1. *A. Vedant, A. Yadav, S. Sharma, O. Thite*, and **A. Sheikh**. “A Practical Byzantine Fault Tolerance Blockchain for Securing Vehicle-to-Grid Energy Trading.” In *2022 Global Energy Conference (GEC)*, Turkey, pp. 288-293. IEEE, 2022.
2. *A. Vedant, A. Yadav, S. Sharma, O. Thite*, and **A. Sheikh**. “Detecting Cyber Attacks in a Cyber-physical Power System: A Machine Learning Based Approach.” In *2022 Global Energy Conference (GEC)*, Turkey, pp. 272-277. IEEE, 2022.
3. *I. Sheikh, A. Vedant*, and **A. Sheikh**. “A Machine Learning Approach to Transformer Oil Temperature Monitoring Using Load Analysis.” In *2022 Global Energy Conference (GEC)*, Turkey, pp. 306-311. IEEE, 2022.

CSI-SFIT Mosaic Event : Murder Mystery

The event focused on the following key points:

1. The event was called “Murder Mystery” in which the participants had to find the murderer in only 20 minutes of time.
2. The participants who came in groups of 3-4 were asked to complete stages of the game to get to the end.
3. In the 1st stage, the participants had to complete a jigsaw puzzle which had a clue hidden for the next clue
4. The next stage was a crossword puzzle which gave the list of suspects in the game.
5. The next clue was hidden in VR footage which was encrypted using an Enigma machine.
6. The decrypted text was used to unlock a file found in a pen drive
7. The file in the pen drive narrowed down the suspects
8. The final stage was a mix of Geography and Chemistry clues to find the murderer.

Photos clicked during the event



Magazine Launch:

The student members of CSI-SFIT chapter work round the year with the vision of taking the student branch to greater heights. In addition to the numerous achievements of the CSI-SFIT, CSI-Annual Magazine “*PARADIGM*” is another milestone in their activities. Its content includes reports of various activities conducted round the year, technical articles by the students, quizzes, information on upcoming technology and gadgets. In today’s world, WEB 3.0 is a big buzz word in the world of

technology. Understanding the importance of this technology, the theme of our CSI Annual Magazine - 2021-2022 (5th Edition) was chosen as “Web 3.0”.



IEEE STUDENT CHAPTER

Creative Fusion

Event Date: 2nd October 2022

Time: 10.00 AM-4.45 PM

Venue: SFIT

Number of Registered Students: 92

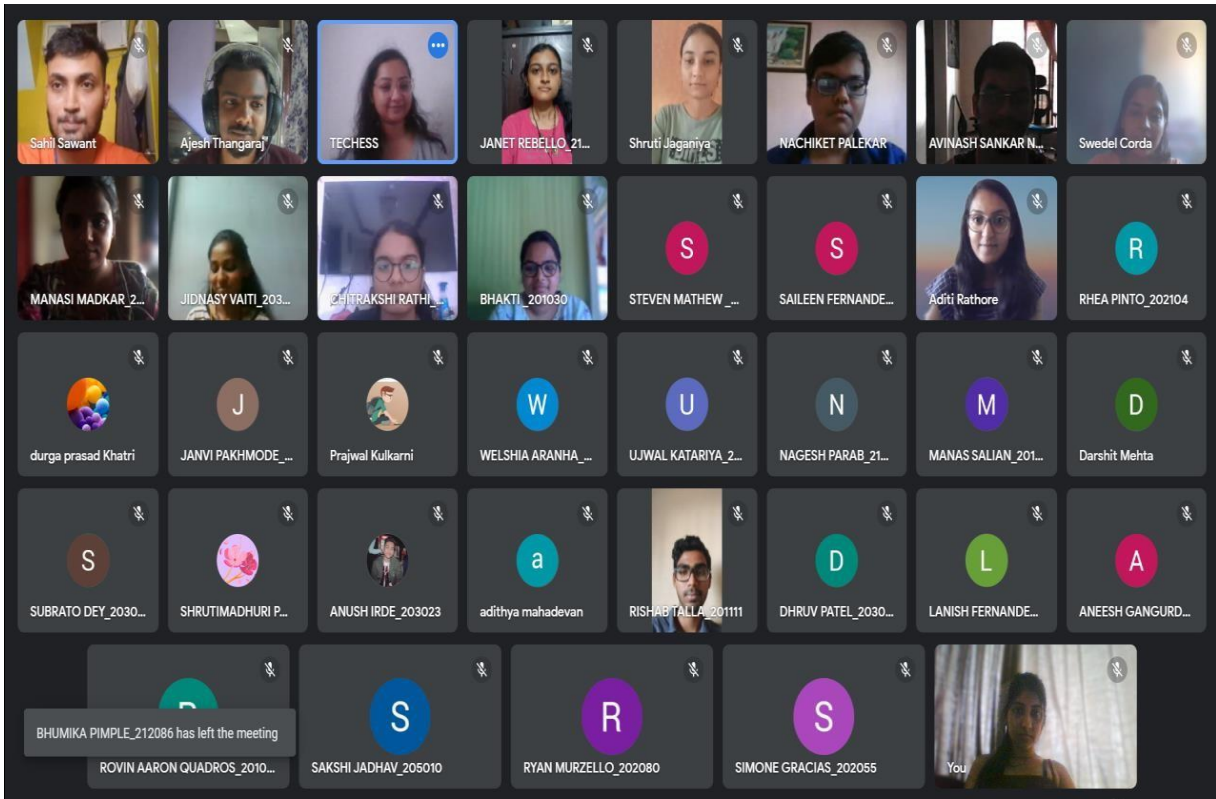
Resource Person: Mr. Sahil Sawant, Ms. Divya Kathoke, Mr. Ajesh Nadar

Chapter: IEEE-TECHESS

A. Description:

St. Francis Institute of Technology (SFIT) has launched its first-ever female-centric technical community '**TECHESS**'. This community aims to give an ocean of opportunities to female engineers and inspire and help them achieve their goals. The IEEE TECHESS in collaboration with IEEE Bombay Section SAC organized the first event of the academic year 2022-2023 on the topic of graphic designing. The 6-hour hands-on workshop covered 3 topics/software: Canva, Adobe Photoshop, and Adobe Premiere Pro, in two sessions i.e. from 10 am – 1 pm & 2 pm – 4.45 pm. The session was conducted by Mr. Sahil Sawant, design lead of SAC along with his team Ms. Divya Kathoke and Mr. Ajesh Nadar. The event was held on Sunday, 2nd October 2022 on the video conferencing platform Google Meet. The speaker addressed a crowd of 68 participants from majorly St. Francis Institute of Technology, Mumbai.

There was also a poster making competition held for the participants to implement what they learnt during the session. The topics for the competition were 'A man in a cave' or 'Burger Café' for which they were given a week to prepare. Out of the entries received, two winners Mr. Ujwal Kataria and Mr. Kunal Zambare were chosen and were given cash prizes of Rs 750 & Rs.1000 respectively along with E-certificates, thus successfully ending the event.



GitOlogy

Event Date: 10th September 2022

Time: 6.00 PM-8.00 PM

Venue: SFIT

Number of Registered Students: 218

Resource Person: Ms. Sarita Acharya

Chapter: IEEE

A. Description:

IEEE SFIT Student Branch (ISSB) in association with SFIT Alumni Association organized an online session on 'GitOlogy' by Ms. Sarita Acharya, a web developer held on 10th September 2022 at 6.00pm on the online video conferencing platform Google Meet. The speaker addressed a crowd of 147 participants from St. Francis Institute of Technology, Mumbai. The event was held in two different meets with the speaker presenting her screen simultaneously in both of them.

The seminar started at 18.00 hours with an introductory speech from Mr. Steven Mathew, Vice Chairperson - ISSB. The session began with Ms. Acharya introducing herself and Git & GitHub briefly to the crowd of participants. She then shared the contents that was to be covered in the session followed by Mr. Ashlyn D'Silva, Technical Head - ISSB presenting his screen and Ms. Acharya helping the participants to install Git through him. Then she moved on to explain how to set up a new repository and how to clone an existing repository through her presentation. The speaker then explained how to collaborate with other contributors in the domain and educated everyone on basic Git commands. Ms. Acharya ended her teaching session with giving the participants an insight on where and how to practice Git, how to explore this open source platform and how to master in the same.

This was followed by the Q & A session handled by Mr. Steven Mathew wherein the participants put their queries in the chatbox and Ms. Acharya cleared them one by one. It was followed by a fun photo session and the vote of thanks which was offered by Mr.

Mathew. Feedback of participants was taken and the session turned out to be a success.

Jibbles Pictionary

The event focused on the following key points:

1. The event basically was focused on analytical thinking of recollecting the basics of technology and programming stuff.
2. The first round was based on analytical thinking skills of the participant and finding the correct words matching with the riddle inside the grid.
3. The second round was focused on how much basic the participants have learnt in programming and technology.
4. The third round was a tricky round of thinking and imagination skills wherein the participants had to visualize the picture and get to the exact word, letter by letter.



Total Number of Participants: 11

ISTE STUDENT CHAPTER

Event Title	BombSquad
Committee Name	ISTE
Faculty Coordinator	BYSANI MALAKONDAIAH
Lab Assistant	-
Event Time	9:00am to 5:00pm
Venue	234(storeroom)

The event focused on the following key points:

1. There were two teams (a) Diffusers and (b) Defenders during the beginning of the initial round a toss was done to select their side.
(a)Diffusers: The diffusing team has to solve a technical quiz , if they answered correctly 3 random codes were given and if they didn't answer 4 random codes were given.
(b)Defenders: The defending team has to defend the bomb from being diffused by constantly attacking and distracting the opposite team.

Photographs clicked during the event



LEARNING AND INFORMATION RESOURCE CENTRE

LIRC AT A GLANCE AS ON 31/12/2022

<p>Name of Library Software: Koha Version 22.05 Name of Institute Repository Software: DSpace Name of Plagiarism Check Software: Ouriginal (Urkund)</p>	
<p>U.G. BOOKS Total Titles: 10804 Total Volumes: 29431 Editions : 383 Ref.Books : 3755 (UG= 3459 PG=296)</p>	<p>P.G. BOOKS Total Titles: 296 Total Volumes: 1195 Editions : 02</p>
<p>SFIT BOOK BANK: 1495 UNIVERSITY OF MUMBAI BOOK BANK = 6</p>	<p>E-Books : 27 and e books from NDLI</p>
<p>Doctoral Theses : 15 Project Reports: 1947 e Project Reports: 255</p>	<p>CDs: 3171 VIDEO DVD: 64</p>
<p>PERIODICALS</p> <p>Total Journals for UG = 36 UG Courses: 36 (National)</p> <p>Total Subscribed Magazines: 19 Technical : 08 Non-Technical Magazines: 11</p> <p>Total Gratis Magazines: 4 Technical : 01 Non-Technical Magazines: 03</p>	<p>E-PACKAGES : IEEE-ASPP:</p> <p>1)192 online IEEE Society-sponsored journals, magazines, and transactions 2)Unlimited, full-text access to more than 250,000 articles 3)Featuring content from Nokia's Bell Labs Technical Journal Early access to articles accepted for future publication 4)Backfile access till 2017</p> <p>IEEE-POP The core collection of IEEE conference proceedings from approximately 100 of IEEE's most important conferences. Full text access with a backfile to 2017.</p>
<p>Membership of: National Digital Library and IIT Bombay Library</p>	
<p>Area: 797.46 Sq. meters</p>	<p>Seating Capacity: 260</p>

ACTIVITIES / EVENTS CONDUCTED BY LIRC

Sr. No	Event Name	Month	Books	Total Beneficiaries
1	Reading Day Pledge	July 2022		206
2	Spin the Book Wheel	July 2022		53
3	Libray Orientation / Information Literacy Session for new faculty Members for the A.Y.2022-2023	July 2022		4
4	Robotics and Embedded Systems	July 2022	22	
5	Resources for Electrical Engineering	July 2022	52	
6	Data Science and AI	July 2022	13	
7	Data Science and AI - ebooks	July 2022	9	
8	Quiz 1 on National Education Policy	July 2022		107
9	Quiz 2 on Basic Robotics	July 2022		24
10	Quiz 3 on Mobile and Adhoc Networks	July 2022		25
11	Quiz 4 on Internet Programming	August 2022		40
12	Quiz 5 on Azadi Ka Amrit Mahotsav	August 2022		78
13	Sports	August 2022	36	
14	World Sanskrit Day - ebooks	August 2022	9	
15	Develop your learning and research skills using IEEE Xplore Digital Library.	August 2022		
16	Survey on Access to GATE Software	August 2022		
17	Awareness of Resources for Mini Projects	August 2022		22
18	Awareness of IEEE Xplore DL Resources for Mini Projects	August 2022		21
19	Computer Engineering Pre-requisite for All Subject	September 2022		74
20	Thematic Display of Books aon Teaching and Padogogy	September 2022	12	
21	Portrait Drawing and Painting and Essay Contests	September 2022		11
22	E- Workshop on Mendeley Reference Management Software	September 2022		25
23	Reading Inspiration Day :Exhibition of books (Take Away Of Donated Books)	October 2022	425	107
24	Slogan writing on theme I Love Reading Because	October 2022		20
25	Launch of Books Talks Initiative	October 2022		
26	Display of Books in children and Young Fiction Library	October 2022	137	107

27	Literacy sessions for Prem Sangh boys and House Keeping staff of SFIT (In collaboration with NSS cell)	October 2022	108	71
28	Library Orientation / Information Literacy Session for Students 2022-2023	November 2022		222
29	Library Orientation / Information Literacy Session for Students 2022-2023	November 2022		75
30	Reading the Preamble on the Occasion of Constitution Day Online	November 2022		159
31	Reading of the Preamble offline	November 2022		858
32	Quiz on India - the Mother of Democracy	November 2022		49
33	Quiz on Constitution of India	November 2022		80
34	Armchair Travels! Top 9 Classic Travelogues	November 2022	9	
35	National Education Day	November 2022		31
36	Tome-Talk The Audio Bookshelf	December 2022	9	
37	Python	December 2022		90
38	Advances in Web Technology	December 2022		21
39	Industry Oriented Training for Computer Engineering Concepts	December 2022		28

SFIT has received Rs. 2800/- as funds from University of Mumbai for the Book Bank Scheme for SC/ST/DT/NT. This is the first time we have applied for the grant! Following students were the beneficiaries:

Details of the Purchased Books
FUNDAMENTALS OF ELECTRICAL DRIVES BY DUBEY/ GOPAL K.
FUNDAMENTALS OF ELECTRICAL DRIVES
MACHINE LEARNING IN ACTION BY HARRINGTON/ PETER
ELECTRIC MACHINES BY HUSAIN/ ASHFAQ/ ASHFAQ/ HAROON
MODERN POWER SYSTEM ANALYSIS BY KOTHARI/ D.P./ NAGRATH/ I.J./ SAKET/ R.K.

MODERN DIGITAL ELECTRONICS BY JAIN/ R.P./ SARAWADEKAR/ KISHOR

Sr.No.	Name of the Staff	Title of the Workshop/Seminar	Date	Organizing Body
1	Sucheta Prabhudesai	Online Training/Webinar on "IEEE XPLORE"	29th August 2022	St.Francis Institute of Technology
2	Sucheta Prabhudesai	Webinar on "Future of Libraries and Role of Technology"	15th September 2022	Knimbus
3	Sr.Bhavya	Webinar on "Future of Libraries and Role of Technology"	15th September 2022	Knimbus
4	Chinmayee Bhange	Webinar on "Web Tools for Research and Researchers"	16th September 2022	Balani Infotech Pvt.Ltd & Methodist College of Engineering and Technology
5	Chinmayee Bhange	Webinar on "Making your Library Truly Ubiquitous: Illustrated with Real-Word Library Cases"	8th October 2022	Deccan Education Society's, Navinchandra M ehta Institute of Technology and Development , Mumbai
6	Sucheta Prabhudesai	Webinar on "Making your Library Truly Ubiquitous: Illustrated with Real-Word Library Cases"	8th October 2022	Deccan Education Society's, Navinchandra M ehta Institute of Technology and Development , Mumbai

7	Chinmayee Bhange	NACLIN 2022 – 25 th National Convention on Knowledge, Library	14 th – 16 th December 2022	DELNET (Developing Library Network)
---	------------------	--	---	-------------------------------------

Sr.No	Name of the Staff	Title of the Workshop/Seminar	Date	Organizing Body
		and Information Networking		
8	Sucheta Prabhudesai	National Workshop on Implementation of National Digital Library Club for College Libraries	20th December 2022	Shri Swami Vivekanand Shikshan Sanstha's Smt. Akkatai Ramgonda Patil Kanya Mahavidyalaya, Ichalkaranji in association with Bhogawati Shikshan Prasarak Mandal's Bhogawati College, Kurukali
9	Sr.Bhavya	National Workshop on Implementation of National Digital Library Club for College Libraries	20th December 2022	Shri Swami Vivekanand Shikshan Sanstha's Smt. Akkatai Ramgonda Patil Kanya Mahavidyalaya, Ichalkaranji in association with Bhogawati Shikshan Prasarak Mandal's Bhogawati College, Kurukali
10	Chinmayee Bhange	National Workshop on "Implementation of User Footfall Tracking Module in Libraries Using Koha"	22 nd December 2022	Bhogawati.Mahavidyalaya Kurukali

11	Sucheta Prabhudesai	National Workshop on "Implementation of User Footfall Tracking Module in Libraries Using Koha"	22nd December 2022	Bhogawati.Mahavidyalaya Kurukali
12	Sr.Bhavya	National Workshop on "Implementation of User Footfall Tracking Module in Libraries Using Koha"	22nd December 2022	Bhogawati.Mahavidyalaya Kurukali

Inputs for the above data received from:

Ms. Chinmayee Bhangе – Librarian, LIRC

Ms. Sucheta Prabhudesai – Asst. Librarian, LIRC

Ms. Priya Karunakaran – Asst. Prof., CMPN

Ms. Priyanka Patil – Asst. Prof., INFT

Ms. Renia Lopes – Asst. Prof., ExTC

Mr. Yunus Dalal – Asst. Prof., MECH

Ms. Varsha Thandasarry – Asst. Prof., ELEC

Compiled by:

Mr. Osama Ansari – Student, TE ELEC